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An investigation into communication apprehension and self-efficacy of first year accountancy students

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**An Investigation into Communication
Apprehension and Self-efficacy of
First Year Accountancy Students.**

By: Martin Roberts

A Doctoral Thesis.

**Submitted in partial fulfilment of the requirement
for the award of Doctor of Philosophy.**

June 2017

Declaration

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Martin Roberts

Martin Roberts

June 2017

Abstract

It has been identified by research as early as 1986 (AAA's Bedford Report) that the business community requires accountants to display a wide range of vocational skills beyond the traditional requirement of just being good at the numbers. Denna et al. in 1993 identified that due to the increasing influence of Information Technology, accountants needed to possess a strong understanding of business, have significant interpersonal skills and leadership skills. The key vocational skill needed for this new philosophy that enables businesses to continually respond to a constantly changing world is communication (Stout and DaCrema 2004), but it has been noted that this skill is particularly lacking amongst accountants in either a written or verbal manner (Dagget and Liu 1997, Hirsch and Collins 1988, Borzi and Mills 2001, O'Connell 2015, Ireland 2016).

The testing and results for one-hundred and thirty-one first year undergraduate accounting students indicate that many students possess high levels of communication apprehension (as first defined by McCroskey 1970). McCroskey's intervention to help reduce communication apprehension is too expensive both in terms of time and resources required. Therefore this thesis investigates the use of self-efficacy techniques (as advocated by Bandura 1977, 1986, 2006) in the first year accounting pedagogy at Sheffield Hallam University.

The investigation into communication self-efficacy techniques may be limited to Sheffield Hallam University's first year undergraduate accounting and business studies students but it does indicate that different pedagogical interventions must be created to help male and female accounting students.

Both male and female accounting students indicated that the technique which had the strongest influence on their communication self-efficacy was that of personal mastery (practice). Male accounting students went on to suggest that support by their class colleagues and their tutor acting as a mentor had a significant influence.

For female accounting students what has come through strongly is the need for more female accounting role models. There is a call for female professional accountants to get involved with universities. This involvement needs to be in the form of influencing the curriculum and giving guest lectures. This involvement will hopefully allow the female students to vicariously experience (observe) and gain inspiration to be the next future generation of female professional accountants.

<u>Table of Contents</u>	Page
Declaration	2
Acknowledgements	3
Abstract	4
List of abbreviations	13
<u>Chapter 1: Introduction</u>	
1.1 Introduction	15
1.2 Aims of the study	16
1.3 Research questions	17
1.4 Research objectives	18
1.5 Structure and rationale for the study	18
1.6 Time-line	22
1.7 Delimitation of scope	24
1.8 Chapter structure of the study	24
<u>Chapter 2: Accounting Profession and Education Literature Review</u>	
2.1 Introduction	27
2.2 The history of accounting	28
2.3 The Industrial Revolution	29
2.4 The development of accounting history after the Industrial Revolution	31
2.5 Accounting in the Twenty-first Century	33
2.6 The history of accounting education	36
2.7 Problems in perceptions of accounting education from 1950s onwards	37
2.8 Accounting Education's major studies in the 1980s	39
2.9 Calls for change in accounting education in the Twenty-First Century	41
2.10 Communication Skills	47

2.11	Future professional accountants	49
2.12	Future accounting course design	52
2.13	Conclusion	59

Chapter 3: Communication Apprehension/ Self-Efficacy literature review

3.1	Introduction	61
3.2	Communication and communication apprehension	61
3.3	Possible causes of communication apprehension	64
3.4	Consequences of communication apprehension	67
3.5	Controlling or treating communication apprehension	69
3.6	Studies carried out amongst accounting students	73
3.7	Communication apprehension and self-efficacy	75
	3.7.1 Outcome expectancy and the Theory of Planned Behaviour	80
3.8	Sources of self-efficacy	84
3.9	Link between communication apprehension and self-efficacy	88
3.10	Conclusion	95

Chapter 4: Research methodology and method

4.1	Introduction	97
4.2	Research Paradigm	97
4.3	Ontology	100
4.4	Epistemology	101
4.5	Methodology	101
4.6	Ontological, epistemological and methodological choice	103
4.7	Preferred methodology and method	108
4.8	Research approach adopted in this study	111
4.9	Research design	114

4.9.1 Stage one: The first investigation	115
4.9.2 Stage two: The Professional Accountant course design and Communication Self-Efficacy design	117
4.9.2.1 Stone and Bailey's Team-Conflict Self-Efficacy model (2007)	117
4.9.2.2 Pilot study of Communication Self-Efficacy Questionnaire	119
4.9.3 Stage three: Investigation on the following year of undergraduate accountants	122
4.10 Ethical considerations of this thesis	122
4.11 Conclusion	124
<u>Chapter 5: Communication apprehension and self-efficacy: The initial test results</u>	
5.1 Introduction	126
5.2 Method of data capture	127
5.3 Findings	130
5.3.1 A summary of communication apprehension in the accounting and business students	130
5.3.1.1 Business and accounting students' levels of communication apprehension (CA)	130
5.3.2 Communication self-efficacy results for all the students in the study	131
5.3.2.1 Group statistics for communication self-efficacy (CSE)	132
5.3.3 Hypothesis testing of communication apprehension and communication self-efficacy	133
5.3.3.1. Group statistics for communication apprehension (CA) and communication self-efficacy	133
5.3.4 Analysis of the communication apprehension sub-tasks	135
5.3.4.1 Group statistics for communication apprehension for both degree categories	136
5.3.5 Gender profile	138
5.3.5.1 Breakdown by students by degree by gender	138
5.3.5.2 Split of male and female students suffering from communication	

apprehension	139
5.3.5.2.1 Chi-square test on the effect of gender	139
5.3.6 Age profile	140
5.3.6.1 Age analysis of both degree programmes	140
5.3.6.2 Age correlations for communication apprehension	141
5.3.6.3 Age correlations for communication self-efficacy	142
5.4 Business studies students	143
5.5 Conclusion	143
<u>Chapter 6: Course design and measurement</u>	
6.1 Introduction	146
6.2 Learning Styles	147
6.3 Thoughts behind the Professional Accountant course design at Sheffield Hallam	149
6.4 Communication	153
6.5 Self-efficacy techniques	154
6.5.1 Case studies	155
6.5.2 Co-operative learning	158
6.5.3 Tutors	159
6.5.4 Guest speakers	162
6.6 At risk students	163
6.7 Team-conflict self-efficacy and outcome expectancy model (Stone and Bailey 2007)	163
6.7.1 Stone and Bailey's 2007 pictorial model	165
6.8 Results of the questionnaire	166
6.8.1 Pictorial results	166
6.8.2 Simplified pictorial presentation	167
6.9 Latent variables results	167

6.10 Suggestions for future research directions	169
6.11 Conclusion	170
<u>Chapter 7: Model design and testing for communication self-efficacy</u>	
7.1 Introduction	172
7.2 Covariance-based Structural Equation Modeling (CBSEM)	173
7.2.1 A Diagram of SEM	174
7.3 Development of statements for communication self-efficacy	175
7.4 Development of statements for Outcome Expectancy and Behavioural Intention	179
7.4.1 Communication Self-Efficacy model	181
7.4.1.1 Communication Self-Efficacy pictorial model	181
7.5 Questionnaire item design	184
7.6 Response scaling	185
7.7 Statistical modelling choice	187
7.8 Testing of the Communication Self-efficacy prototype	188
7.9 Overall pictorial results from the Sheffield Hallam sample	189
7.9.2 The measurement model - Questionnaire items	192
7.9.2.1 A table of path coefficients below 0.4	193
7.10 Conclusion	196
<u>Chapter 8: The Second Investigation: Part one (Communication Apprehension Results)</u>	
8.1 Introduction	198
8.2 Methods of testing	199
8.3 Communication apprehension results compared to the previous study at SHU	199
8.3.1 Percentage of students with communication apprehension (CA)	200
8.3.2 Gender crosstabulation for the communication apprehension (CA) levels for the second intake	201
8.3.3. Original survey results (first intake) versus the first survey in the second intake	202

8.4 Communication apprehension questionnaire measurement	204
8.4.1 Paired sample statistics comparing the results of first communication apprehension questionnaire (2014) against the results of the same communication apprehension questionnaire taken by the same accounting students in their last week (2015) at Sheffield Hallam University:	205
8.4.2 Paired samples test for the difference in the two questionnaires involved in the second investigation	206
8.5 Further analysis of the demographics of the student	209
8.5.1 Contingency table of communication apprehension (CA) in relation to A-level background	209
8.5.2 Contingency table of communication apprehension (CA) in relation to how students rate their own ability in relation to others	210
8.5.3 Percentage of students with communication apprehension (CA)	211
8.5.4 Age correlations in relation to difference in communication apprehension	211
8.6 The communication apprehension results for female students in the study	212
8.6.1 Table of contingency for levels of communication apprehension by gender	212
8.6.1.1 Chi-square test for communication apprehension by gender	212
8.7 The communication self-efficacy results of the second investigation	214
8.7.1 Group statistics for communication apprehension (CA) and communication self-efficacy (CSE)	215
8.7.2 Paired samples statistics listing the result for communication self-efficacy (CSE) recorded at the start (2014) and end of the second investigation	216
8.7.3 Paired samples test highlighting the movement in communication self-efficacy (CSE) in the second investigation	216
8.8 The results for female students in the self-efficacy analysis	217
8.8.1 Group statistics showing the movement in communication self-efficacy categories between the first questionnaire and the second questionnaire in the second investigation:	217
8.9 Comparison of the results by gender	218
8.9.1 Communication apprehension (CA) results from the first questionnaire	

in the second investigation by category	219
8.9.2 Communication self-efficacy (CSE) results from the first questionnaire of the second investigation	220
8.9.3 The second questionnaire results for communication apprehension (CA)	221
8.9.4 The second set of results for communication self-efficacy (CSE)	221
8.9.5 Group statistics showing the movement in communication apprehension categories between the first questionnaire and the second questionnaire in the second investigation	222
8.10 The results of original self-efficacy on levels of communication apprehension	223
8.10.1 Contingency table communication self-efficacy (CSE) classification by communication apprehension (CA) difference	224
8.10.1.1 Chi-square test for communication apprehension and communication self-efficacy	224
8.11 Conclusion	226
<u>Chapter 9: The Second Investigation: Part two (Self-Efficacy Results)</u>	
9.1 Introduction	229
9.2 Course design in response to the initial test findings	230
9.2.1 Table demonstrating how the curriculum changed to cater for more presentation opportunities	232
9.3 The results of the model adapted for Communication Self-Efficacy	233
9.3.1 2014 Communication self-efficacy pilot study results	234
9.3.2 2015 Communication self-efficacy results of the second investigation	234
9.4 Findings	235
9.5 Amendments of the latest (2015) communication self-efficacy model	239
9.5.1 Confirmatory Factor Analysis table	239
9.5.2 Table of outer model and cross loadings	242
9.5.3 Questionnaire items review	243
9.5.4 The amended questionnaire overall results	245

9.5.4.1 Revised Confirmatory Factor Analysis table	245
9.5.5 The amended communication self-efficacy diagram	246
9.5.5.1 Amended overall 2015 results in graphical form	247
9.6 Male versus female results	247
9.6.1 Male results	249
9.6.1.1 Amended overall 2015 male results in graphical form	249
9.6.2 Female results	250
9.6.2.1 2015 revised female results diagram	251
9.7 Conclusion	255
<u>Chapter 10: Conclusion</u>	
10.1 Introduction	257
10.2 Summary of study	259
10.3 Contribution to literature	261
10.4 Practical implications	266
10.5 Limitations	269
10.6 Future research	273
10.7 Impact	275
10.8 Final thoughts	277
<u>Appendices:</u>	
Appendix one: The Communication Apprehension/Self-efficacy questionnaire	279
Appendix two: The Communication Self-efficacy questionnaire	287
Appendix three: The Professional Accountant's course outline 2013/2014	297
Appendix four: The Professional Accountant's course outline 2014/2015	299
Bibliography	301

List of Abbreviations

AAA	:	American Association of Accountants
ACA	:	Associate Chartered Accountant
ACCA	:	Association of Certified Chartered Accountants
ACMA	:	Associate Chartered Management Accountant
AECC	:	Accounting Education Change Committee
AICPA	:	American Institute of Certified Public Accountants
AVE	:	Average Variance Extracted
CBSEM	:	Covariance-based Structural Equation Modelling
CIMA	:	Chartered Institute of Management Accountants
CA	:	Communication Apprehension
CSE	:	Communication Self-Efficacy
FCA	:	Fellow Chartered Accountant
FCMA	:	Fellow Chartered Management Accountant
ICAEW	:	Institute of Chartered Accountants of England and Wales
IAESB	:	Institute of Accounting Education Standard Board
IES	:	International Education Standard
IFAC	:	Institute of the Federation of Accountants
IMA	:	Institute of Management Accountants
OCA	:	Oral Communication Apprehension
PLS	:	Partial Least Squares
PRCA	:	Personal Report of Communication Apprehension
PRCS	:	Personal Report on Confidence as a Speaker
PRPSA	:	Personal Report of Public Speaking Apprehension
SAE	:	Society of Accountants in Edinburgh
SE	:	Self-efficacy
SEM	:	Structural Equation Modelling
SPSC	:	Self-Perceived Speaking Competence
SPSS	:	Software Package for Statistical Analysis
TRA	:	The Theory of Reasoned Action
TPB	:	The Theory of Planned Behaviour
WCA	:	Written Communication Apprehension

Chapter one: INTRODUCTION

1.1 Introduction

In recent years the accounting profession has undergone a startling transition. With the advent of the Personal Computer and the increasing ability of new technology to process large amounts of data, the role of the accountant is dramatically changing (Denna et al. 1993). Many tasks that used to take a lot of time in the role of the accountant (such as invoice processing) are being removed or outsourced from the organisation. The role of the accountant is also being affected by other factors such as globalisation, new business relationships and increasing complex economic environment (Parker 2001, Zeff 2003 and Walker 2004).

These new factors affecting the accounting profession mean that there have been many calls from Professional Accounting bodies and accounting scholars to change accountants from being information processors to strategic business advisors (Albrecht and Sack 2000, Parker 2001, Holtzman 2004 and CIMA 2009). As a result the accounting profession requires a new type of professional accountant with a diverse business acumen, knowledge and skills. There have been increasing calls within the business community for accountants to display a wide range of vocational skills beyond the typically required skill of “being good at the numbers.” The first published statement of this desire for vocational skills such as communication, problem solving and interpersonal relationships began with the American Accounting Association’s Bedford Report (1986).

Calls were made for fundamental changes to accounting education curriculum (Albrecht et al. 1994, Neimark 1996, Nelson 1995). The new focus should be on broadening knowledge and increasing skills desired by the accounting profession (AECC 1992). Those required skills, personality traits and prior knowledge of students have been identified by many academics such as Graves et al. 1992, Davidson and Etherington 1995, Nelson and Vendrzyk 1997, Kovar et al. 2003. In response to these studies, changes have either been made or advocated to accounting pedagogy. These changes have affected the accounting education curriculum, content, teaching methods and texts (Friedlan 1995, Saudagaran 1996, Mladenovic 2000).

Higher education institutions have changed their syllabi to facilitate skills development, yet research by the Chartered Institute of Management Accountants (CIMA) one of the major accounting bodies in the UK stated that accountants still lacked communication skills. CIMA’s research published in 2009 (called Transformation and Business Partnering) was based on input from over three thousand businesses based here in the UK and all over the world. This research

found that accountants in the work place lacked the relevant skills to enable them to become an “effective business partner” with other sections in the organisation (p.11). In CIMA's research, several senior managers of large organisations described the future and vision for the finance function. Value creation is key and finance should have greater integration with other departments and all aspects of the business. These senior managers suggested that personnel within the finance department were lacking in vocational skills and "business partnering, although desirable" was "still not a part of the standard DNA of a finance department," with accountants having a “lack of understanding of the business and proper business communication skills” (p.16).

This study investigates the continued need for accountants to improve their vocational skills (with a particular focus on communication) to remain relevant in the modern business world. The key vocational skill demanded by employers of accountants the skill of communication (Stout and De Crema 2004). Yet research has indicated that employers view accountants as lacking this skill of communication the most (CIMA 2009). Therefore, in response to employers' demands that communication skills must be improved in accountants, this research investigates the communication levels in first year accountancy students at Sheffield Hallam University and investigates the potential ways of increasing their ability to communicate effectively. Thus meeting the needs of employers and giving students increased confidence in their ability to communicate in formal settings in both a verbal and written manner.

1.2 Aims of the study

The aims of this study are threefold:

1. The first aim is to inform accounting educators as to the current levels of communication ability in students entering the accounting degree programmes at Sheffield Hallam University. This is because it has been found in previous studies that students choosing accounting degrees have poor levels of communication ability. The way of measuring communication ability in this instance will be by using McCroskey's PRCA (Personal Report on Communication Apprehension).
2. The second aim is to develop a module on the first year accounting degree that will enhance employability skills and at the same time attempt to improve the communication skills of accounting students as it is suggested that the majority of

students entering accounting degrees (including Sheffield Hallam) do indeed have poor communication skills or are suffering from communication apprehension (Stang and Ladd 1990, Hassall et al. 2000, Simons et al. 1995).

One of the potential ways of improving the student's communication ability is to use a technique that has claimed success in many phobias: self-efficacy (Bandura 1977, 1986). This technique of self-efficacy has been chosen because the interventions to improve communication as suggested by McCroskey are difficult to administer to such a large number of students. Self-efficacy claims success on a wide-scale and its interventions are cheaper to administer.

3. The final aim is to develop a model to test if any of the suggested antecedents of self-efficacy do indeed improve communication self-efficacy and reduce communication apprehension in first year accounting students. This is an adapted model based on the work of Stone and Bailey (2007) which investigated team-conflict communication self-efficacy in business studies students. It is hoped that the results of this model will inform accounting education as to which antecedent of self-efficacy (personal mastery, vocational experience, stress levels, team and mentor support) has the greatest impact on improving communication in accounting students.

1.3 Research questions

The research questions that frame this study are as follows:

1. Is there a link between communication apprehension and self-efficacy?
2. What are the effects when students are exposed to self-efficacy techniques?
3. Does a questionnaire capture the key self-efficacy techniques that are vital in improving students' communication skills?

1.4 Research objectives

To achieve the aims of the study, the following objectives have been defined:

1. To integrate well-established theories about communication apprehension, self-efficacy and outcome expectancy in order to develop a pedagogical model to improve communication skills in first year undergraduate accounting degree courses.
2. To design and develop a valid and reliable survey model that captures accounting students' constructs of self-efficacy and future intentions to use their improved communication skills.
3. To evaluate and test the new model of communication self-efficacy and outcome expectancy on a sample of first year accounting students at the end of their first academic year.
4. To investigate the results of this new model in line with a survey instrument already previously used and tested on communication apprehension.
5. To examine the influence of innovative accounting teaching techniques on the constructs of self-efficacy in communication (communication self-efficacy).

1.5 Structure and rationale for the study

The initial structure of this thesis will be to explore prior studies that have defined and measured communication apprehension. It then considers the nature and cause of communication apprehension in relation to self-efficacy. There is an analysis of the research techniques in relation to the methodological issues and the philosophical assumptions of both communication apprehension and self-efficacy. This leads to deliberation on the reliance of natural sciences methodology in accounting with reference to the increasing subjective-objective dualism (Johnson 1995) that is thought to lead to uncertainty and apprehension amongst accountants. There are many behavioural aspects to consider in accounting research and there are arguments for adopting a more subjective epistemology to try to explain individual behaviours (Cohen and Cyert 1975) and general patterns of behaviour (Machlup 1967). It is claimed that organisations can only be fully understood if the actors of the socially-constructed world are explored to understand their values and attitudes (Covaleski and Dirsmith 1990). The important reality is what people perceive it to be, examining how the world is experienced (Taylor and Bogdan 1998).

Mainstream accounting research is based on a positivist epistemology and an objective ontology (Ryan et al. 1992). This thesis follows this same tradition by firstly adapting a questionnaire developed by McCroskey (1970, 1978, 1982) in order to explore the relationship between communication apprehension and self-efficacy. There is also further development of another questionnaire that attempts to further explore self-efficacy and outcome expectancy based on the work of Stone and Bailey (2007). The strengths and weaknesses of these two questionnaires are considered and compared to possible different approaches (such as qualitative techniques) in order to conduct this research.

Following this comparison, it was decided by this researcher that the main approach taken in this thesis is to maintain a quantitative methodology approach with the communication apprehension and self-efficacy questionnaire being completed by first year accounting and business studies undergraduate students. McCroskey (1984) designed and tested questionnaires that have been used in numerous studies to measure both Oral Communication Apprehension (OCA) and Written Communication Apprehension (WCA). These studies had over one hundred thousand respondents across the US and consequently had sufficient analysis to prove the reliability of the instrument (questionnaire). Reliable measures of communication apprehension have been developed for both oral and written contexts. Extensive research studies have indicated both national and vocational averages for these measures. The research considers that by continuing to build on this work it should be able to identify writing and oral communication apprehension amongst first year accounting students. The communication apprehension questionnaire was first given to the accounting students on day zero of them enrolling on their degree programme to capture their views before they fully entered the undergraduate experience.

This communication apprehension identification will also attempt to investigate an inverse causal link with communication self-efficacy. That if a person has high levels of communication apprehension (either written or spoken) then they will possess low levels of self-efficacy (confidence in their abilities to communicate). The link is drawn from thoughts that communication apprehension comes from a lack of self-belief in one's ability to communicate (either orally or written). This lack of self-belief has been identified as self-efficacy by Bandura (1977a, 1986).

The reasoning behind this investigation is that if the results suggest that individuals displaying high levels of communication have low-levels of self-efficacy then this will link to the work of

Bandura (1977a). Bandura's focus was not so much on the existence of self-efficacy but in finding techniques to raise an individual's self-efficacy. These methods can potentially be applied within education to alleviate the students' problem in communication. Bandura had four principal sources of self-efficacy improvement: performance accomplishments, vicarious experiences, verbal persuasion and physiological states. The applications for self-efficacy in education have been wide-ranging, stretching from how we teach children, right the way through to creating learning and work environments for adults in the workplace. Self-efficacy has helped to provide the necessary support and feed-back mechanisms to allow people to create positive mental images of themselves raising their individual self-efficacy levels that ultimately can increase an individual's productivity in their respective environments.

The method to overcome communication apprehension as identified by McCroskey is both time consuming and labour intensive. McCroskey's method cannot be applied to mass market education such as Sheffield Hallam with just over two hundred students currently being recruited onto the accounting undergraduate course. Various other methods for addressing for communication apprehension have been identified as potentially not working (Hassall et al. 2000). These other methods require a large amount of teaching resources that are costly to replicate especially in mass education (Brook and Platz 1968, Phillips and Metzger 1973, McCroskey 1976, Allen et al. 1989, Stanga and Ladd 1990, Ruchala and Hill 1994, Thomas et al. 1994, Kelly and Keaten 2000).

If there isn't an appropriate method for improving communication apprehension, then perhaps another way to help students overcome such apprehension is by creating programmes that will address their communication self-efficacy. The methods used for any form of self-efficacy as proposed by Bandura (1977) has been proven to work, is more tangible, logical and more importantly will be easier to introduce into the curriculum. There is empirical evidence of self-efficacy as a "potent mediator" of students' learning and motivation (Bandura 1986 p.265). This confirms the historic wisdom of educators that students' self-beliefs about academic capabilities do play an important role in their motivation to achieve (Zimmerman 2000). Students' self-efficacy beliefs are responsive to changes in instructional experience and play a causal role in the students' development (Schunk, 1981).

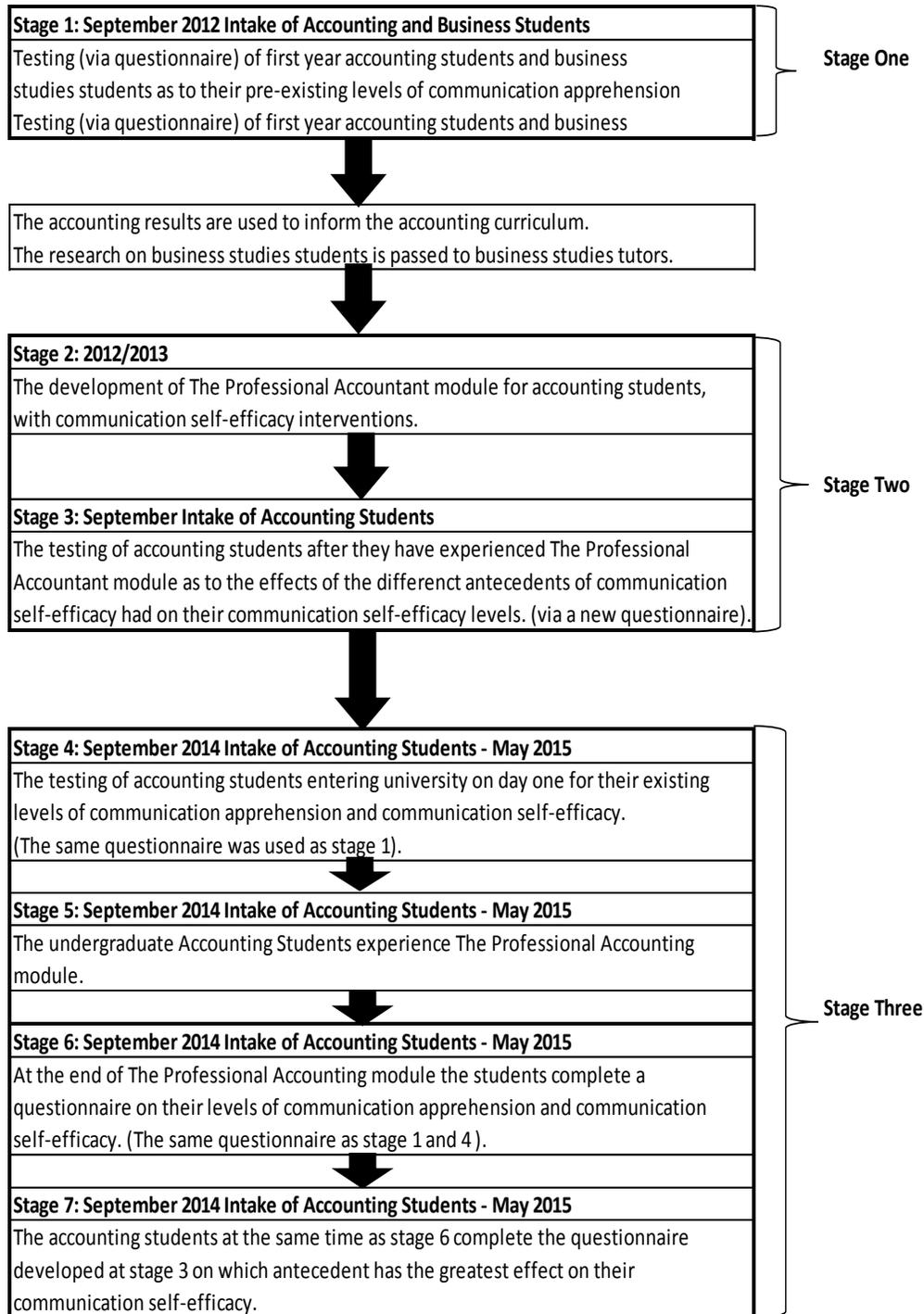
The results of the initial questionnaire issued to the first year accounting students at Sheffield Hallam did indeed suggest high levels of communication apprehension and low levels of self-efficacy. Therefore, communication self-efficacy techniques were introduced into a module in

the first year undergraduate program called “The Professional Accountant.” Once the curriculum was changed, there needed to be a test to examine which principal sources of self-efficacy had the most effect on communication self-efficacy. This test came in the form of a questionnaire informed by the work of Stone and Bailey (2007). They had a model based on nine statements that tested ‘team conflict self-efficacy’ which could empirically point to which principal source (antecedent) had the greatest statistical impact on raising self-efficacy. This model not only focused on self-efficacy, but also focused on outcome expectancy and behavioural intentions to use new found teamwork skills in the future.

The motivation of this study is to assist in the improvement of accounting students’ communication skills by the use of self-efficacy techniques. Informing accounting education as to the self-efficacy techniques that have a positive effect on accounting students’ communication skills will hopefully provide assistance to accounting educators, accounting professionals and provide a foundation for further research in this area.

1.6 Time-line

To help understand the timings of the questionnaires in relation to the findings and thoughts around the development of this thesis, please note the graphical timeline presented below:



1.7 Delimitation of scope

The thesis's research population is limited to first year accounting students at Sheffield Hallam University. This means that potentially this study can only make generalisations about students entering and the effects of studying one module on this accounting undergraduate program. The only other set of students tested in this thesis were first year business studies students. The business studies students were used purely for comparison purposes. In the samples used throughout this thesis, these first year accounting students (and business studies students) have a lot of demographic characteristics in common, such as ethnicity, religion, language and social background. The majority of these students were British, white and aged eighteen. These limited demographics can prevent the potential of greater external validity with a greater chance of an existing relationship being identified (Nunnally 1978).

However, the benefits of this study should be two-fold; the first is that the study should be able to identify certain sections of the first year undergraduate accounting population that have poor communication skills. The second point is that there is potential to identify what self-efficacy techniques can be used to help this population with poor communication skills.

1.8 Chapter structure of the study

This thesis consists of ten chapters, followed by a list of appendices and a bibliography. Chapter One, contains an overview of the thesis, the background of the research, aims, questions, objectives, and outline of the significance of the study. The remaining chapters of the thesis are organised as described below:

Chapter Two: presents the changing nature of the accounting profession. It highlights the fundamental changes in the activities, responsibilities and competencies of the accounting profession and accounting education.

Chapter Three: continues with the review of literature and explores the ideas and history of communication apprehension and the link to self-efficacy. The chapter shows how communication apprehension potentially affects the student's decision to pursue a career in accounting. The chapter also explores the educational strategies adopted by accounting researchers to influence the constructs of communication apprehension and self-efficacy.

Chapter Four: presents the research methodology, research approach and research methods adopted. There is a justification for the selected research paradigm and methodology, followed

by a discussion of the overall research process, testing of the possible link between communication apprehension and self-efficacy.

Chapter Five: gives a description of the setting of the study, the population selected for it and the data collection procedures used. The statistical methods, analysis and measurement theories are discussed here. There is analysis of the first questionnaire given to first year accounting students to examine if there is indeed a link between communication apprehension and communication self-efficacy in these students.

Chapter Six: Describes the development of The Professional Accountant module in relation to literature and the findings from the first questionnaire on communication apprehension and self-efficacy. It moves on to discuss how best to capture the effectiveness of pedagogical interventions (such as group work) on increasing the students communication ability. It highlights how a model designed by Stone and Bailey (2007) built around team-conflict self-efficacy was deemed the best model to adapt and capture the effectiveness of communication self-efficacy in the first year accounting students studying The Professional Accountant module.

Chapter Seven: Focuses on the development of the new survey model to test for levels of communication self-efficacy, outcome expectancy and behavioural intentions. It discusses the antecedents created. Suggestions for removing response bias and scaling of the responses are also given. A pilot study using the revised questionnaire on self-efficacy was undertaken. This questionnaire was administered at the end of The Professional Accountant module after the students had experienced the communication self-efficacy techniques that had been introduced onto the teaching of the module. The results are then analysed and discussed.

Chapter Eight: The start of the chapter discusses the changes to The Professional Accountant module in relation to the initial communication self-efficacy results and suggestions from the tutors involved. It then goes on to the set-up of the testing of the new batch of students whom will start the course and will be subject to another investigation. The investigation will examine the results of the testing of the students for communication apprehension at the start and at the end of the second running of The Professional Accountant module.

Chapter Nine: This chapter enters the second part of the study with analysis of the results of the communication self-efficacy questionnaire which was distributed again to the latest set of first year accounting undergraduate students. This questionnaire was also completed at the end of the second running of The Professional Accountant module. Results of the self-efficacy

questionnaire indicate which teaching techniques did or did not help the accounting students improve their communication self-efficacy levels. The chapter discusses the relationship between the findings, previous literature discoveries in self-efficacy techniques and provides a critical discussion of the overall research.

Chapter Ten: provides an overview of the study and identifies its contributions to knowledge. The chapter discusses the limitations of the study, and concludes with the main findings of the current research and offers suggestions for future research.

Chapter Two: THE ACCOUNTING PROFESSION AND ACCOUNTING EDUCATION LITERATURE
REVIEW

2.1 Introduction

This chapter provides an account of the changing nature of the business world that has led to the call for accountants to not just be numerate but also to possess a wider generic skill base to add greater value to the workplace. The purpose of this chapter is to have a literature review that establishes the grounds for a study of an intervention to improve communication skills in accounting students in their first year of university.

The chapter commences with a brief history of accounting and the development of the accounting profession. There has been a substantial body of research into the history of accounting according to Napier (2006). Please note that this thesis only focuses on research written in English and therefore will only deal with accounting research and accounting education research conducted in mainly English-speaking countries. The chapter highlights how accounting processes have gone from being simple single-entry bookkeeping, right the way through to modern times where a myriad of different accounting techniques have the potential to provide organisations with the information they require.

From the research on the history of business and accounting comes the call for the need for change in accounting education. This is due to that first year (or first courses in) accounting education are too focused on basic bookkeeping which is deemed dull, too formulaic and will not prepare young graduates for the current business world. The view is that it is critical for trainee and undergraduate accountants to be exposed to more dynamic courses demonstrating the new environment the modern accountant faces (Albrecht and Sack 2000). This potential redesign of courses may even help to reverse the potential decline in attracting the brightest and the best students to studying accounting (as noted by Marriott and Marriott 2003).

2.2 The history of accounting

There is a multitude of research describing the evolution of the accounting profession, examples of such research include the output of Hongren and Harrison (1992), Carruthers and Espeland (1991), Miller and Napier (1993), Previts and Merino (1998). Accounting can claim to be thousands of years old in which time (until as recently as the latter part of the twenty-first century) it has provided the appropriate information tools to aid the decision need of successive economies (Elliott 1991). As the basis of most ancient economies were agricultural, single entry accounting was developed to meet the trading needs of these economies. From that point, accounting and auditing grew and developed in ancient civilisations such as in Babylonia and Egypt (Farag 2009). By the time of Emperor Augustus, the Roman civilisation had access to detailed financial information on trading transactions and some of today's accounting language was created. For example, the name auditor comes from the Latin word "audire" (to hear) as oral checks were made on the movement of goods in warehouses (Oldroyd 1995).

In medieval Europe a system of single-entry bookkeeping was developed that primarily was designed to keep a note on what was owed by customers and to suppliers. This introduced the phrases that we know today such as Debit, which in Latin means he owes and Credit, he trusts (Thierry 2009). The trading of merchants became more complicated as they financed their activities with bank loans. Therefore a more complicated set of accounts were required to record these increasing complex transactions. The major breakthrough was the introduction of double-entry bookkeeping. The earliest example of double-entry bookkeeping appears in Florence. The Forolfi ledger 1299-1300 was created by the Givanno Farolfi Company (moneylenders to the Archbishop of Nimes) (Heefer 2005). The first complete double-entry system which is still in existence is the Messari and consists of the accounts of the city of Genoa for the year 1340. It has evidence of debits and credits journalised in a bilateral form with brought forward balances from the previous year (Lauwers and Willekens 1994).

The most famous name in early accounting history is the Italian Luca Pacioli, who is recognised as the "Father" of accounting (Lauwers and Willekens 1994). Luca Pacioli in his book "Summa de Arithmetica, Geometria, Proportioni et Proportionalita" (Review of Arithmetic, Geometry, Ratio and Proportion) published in 1494 described the process of debits, credit, journals and ledgers that laid the foundation for double-entry bookkeeping as it is practised today (Previts and Merino 1998). The process of double-entry bookkeeping can be found in twenty-seven pages of

the Summa under the treatise: “Particularis de Computis et Scripturis” (Details of Calculating and Recording).

Although Pacioli did not invent double-entry bookkeeping (as business and governments had been recording business information long before Pacioli’s Summa) and the book exhibits almost no originality (Carruthers and Espeland 1991), it is an important work due to it being the first published text on the topic of double-entry bookkeeping and is written in the vernacular Italian Language (Sangster 2010). It was popular with merchants who used the text as a reference and for educating their sons and this form of bookkeeping as described by Pacioli’s Summa was extremely simple and only involved recording cash, it did not deal with such complex items as a Balance Sheet or a Profit and Loss Account (Hines 1989).

2.3 The Industrial Revolution

The simple system of double-entry bookkeeping seems to have served the financial needs of business for centuries until changes in the economic environment caused by the British Industrial Revolution (which is judged to have commenced around 1760) also changed the need for accountants to create more complex accounting information (Elliott 1991). The development of factories created an enormous amount of accounting problems that needed to be solved. Due to the introduction of innovative accounting techniques that could help to analyse this increase in the scale of industry and commerce, accountants came to be seen as highly regarded professionals (Carr-Saunders and Wilson 1933).

Most companies at this time developed and grew not by huge initial capital investments but by reinvesting profits and borrowing lots of small amounts from providers of external capital such as shareholders and bondholders. These collective investors with their money at risk, tied up in machinery and stock, wanted to know not only the results of the company, but also through monitoring the workforce, that capacity was fully utilised (Fleischman and Parker 1990). The commercial significance of production units attracting ever increasing overheads and labour costs needed to be understood (Boyns and Edwards 1996). This development resulted in a split of accounting systems for external reporting leading to more disclosure regulation and independent audit of accounts (financial accounting), and for internal reporting (management accounting) with new accounting techniques for measuring performance, including return on investment (ROI), budgets, standard costing for planning and control (Carruthers and Espeland 1991). One of the most famous examples is Josiah Wedgwood undertaking profitability analysis

of his product lines in the 1770s (McKendrick 1970). Other early examples of accounting issues included the investigation into declining profits in diverse industries such as the Scottish Iron Industry in the 1790s (Fleischman and Parker 1990), the Welsh Iron Industry in the 1820s (Raistrick 1970) and the Yorkshire flax spinning industry in the 1850s (Rimmer 1960). From these early beginnings in the 1850s, accounting systems grew and developed to produce information that improved co-ordination of an organisation's operations and was an aid to strategic decision making (Boyns and Edwards 2006). Accounting systems enabled organisations to quantify, summarise and interpret the processes of manufacturing.

With the British Industrial Revolution creating even more success for the UK and London becoming the financial centre of the world, demand surged for technically able accountants from a proliferation of new manufacturing companies. Accountants had to be proficient in techniques such as asset depreciation, stock valuation, the latest company law and the control of production to maximise the rate-of-return on capital employed (Bryer 2005). These economic and organisational changes led to the rising public status of accountants and to the professionalisation of accounting (Kedslie 1990, Miranti 1990). The first professional body, Society of Accountants in Edinburgh (SAE) was formed in Edinburgh 1853 (Carnegie and Napier 1996). The accountants formed this body so that all legal and actuarial work was completed by appropriately qualified individuals and to protect their work for the business world from the challenge of lawyers (Parker 1986). These early professionals were very similar to today's Forensic accountants in that they incorporated the duties of expert financial witnesses. The name "Chartered Accountant" comes from the petition to Queen Victoria by The Institute of Accountants in Glasgow in 1854 arguing that accountancy was a profession of great respectability and required a varied group of skills. The required skills at that time were mathematical skills of calculation and to understand general principles of the legal profession as an expert witness on financial matters.

In the rest of the UK, individual accountants and practices merged together to form the Institute of Chartered Accountants in England and Wales (ICAEW) in 1880 (Perks 1993). This was done not only to mirror what had happened in Scotland (to help raise their image), but also to guard against criticisms of low standards. The ICAEW body started with only eight hundred members but grew rapidly and almost immediately created examinations and a code of conduct for members. Members were allowed to call themselves "FCA" (Fellow Chartered Accountant) if they were a partner in an accountancy firm or "ACA" (Associate Chartered Accountant) if they

were a qualified member of staff. In the United States, the first professional body was formed by just thirty-one accountants called the American Association of Public Accountants in 1887. Within a decade they too were setting exams for entry to the profession and were able to use the term “CPA” (Chartered Public Accountants).

2.4 The development of accounting history after the Industrial Revolution

Since the Industrial Revolution the business environment has continued to change dramatically at a rapid pace. How accounting has developed from the Industrial Revolution onwards to become the very complicated modern subject of today has led to much debate amongst academics (Velayutham and Rahman 2000). Accounting according to “traditional historians” (as identified by Loft 1995) should be seen as a continuous evolution towards its present state. Accounting should be seen as a set of techniques that serve the goals of the organisation that progressively get better over time in aiding decision making (Napier 2001). This accounting history literature states that business size, organisation structure, technology, strategy, competition and market demand have driven the development of organisations and their accounting systems (Boyns and Edwards 2006). This scientific or positivistic approach to accounting is seen as a system of recording and measuring transactions to arrive at a rational, linear answer (Carnegie and Napier 1996, Parker 1999, Napier 2006). This structural-functional approach was dominant in literature in the latter half of the twentieth century. For example: Wilensky (1964), Carey (1969), Buckley and Buckley (1974) and Hussey (1995) describe accounting as a technique that collects, processes and presents data as well as helping organisations with cost control, planning, pricing and scorekeeping.

The work of these traditional accounting historians are severely criticised by Anthony Hopwood who in his work “The archaeology of accounting systems” (1987) claimed that accounting historians are guilty of adopting a mundane technical perspective on the growth of accounting and its techniques. This functional approach has also been rejected by critical historians such as Hoskin and Maeve (1986), Carruthers and Espeland (1991) and Miller and Napier (1993). The focus has now moved towards accounting in relation to its behavioural, social and contextual approaches (Willmott 1986, Kedslie 1990, Manicas 1993, Arrington and Francis 1993). Accounting should be viewed as cultural phenomenon rather than a neutral set of techniques and tools (Carnegie and Napier 1996). There should be a greater focus on how accounting shapes the business environment and how that environment influences accounting. Researchers should view accounting not as a technical subject but as a social practice.

Accounting information prepared for management was derived from month-end reporting or ad-hoc calculations for a specific purpose (Burley 1958, McKendrick 1970) and it embraces an economics based empirical literature (Watts and Zimmerman 1986). The need for information by small businesses is not as great as larger organisations because the directors of such businesses can manage through observation, but large organisations require to be managed by the numbers due to the segregation of managers from the workforce (Ezzamel et al 1990). Other organisational decisions that needed new information on accounting performance included location of a new factory (Jones 1985), continuation of a product line (Boyns and Edwards 1996) and the decision to grow internally versus acquiring a new company (Pitt et al. 2000). Factors that have driven the success of improved management accounting techniques include declining market prices and demand and growing competition (McLean 1995). Littleton (1933) claimed that it is cost accounting and auditing that drives the expansion of the profession. Much of the changes to accounting processes were seen as being made in small minor steps by countless individuals within the organisation (Baxter 1981).

The twentieth century saw the creation of consultancy firms and accounting practices becoming more tailored to the individual organisation's needs (Matthews et al. 1998). This led to innovation in management accounting techniques such as the scientific apportionment of overheads based on machine rates (Boynes 2003). This has led to accounting and audit companies responding to that change and becoming large multi-nationals operating on a global scale. Within industry, the accounting function became dominated by the professionally qualified expert (Boyns and Edwards 1996).

Famous consultancy interventions included the introduction of standard costing and budget techniques in Daimler 1930s and other US engineering companies in the 1940s. Audit firms in 1950s were also being turned to for help on costing and the design of budgetary systems (Jones 1981). The installation and creation of accounting systems within these organisations have developed a wide range of practices to overcome the problem of managing the organisation effectively. The use of accounting information for strategic decision making gained further importance with the increase in large size investments in technical advances, creating the need for managers to understand the financial impact of their decisions (Edwards 1989).

Substantial changes to the profession also emerged from the 1960s onwards (Boyd 2004). There was a movement by the large accounting firms towards providing more business services other than just audit (Carnegie and Napier 2010). Hanlon (1994) noted that from the recession

plagued 1980s as organisations looked for the most cost effective traditional accounting skill provision, the big firms needed to offer other services such as commercial based consultancy. The accounting profession has to contend with increased demands concerning the nature of services delivered in the light of increasing market pressures and competition (Wyatt 2004). As early as 1985 Emmanuel and Otley noted that there is not one accounting answer applicable to all organisations. They created a contingency theory that attempted to match specific aspects of an accounting system with certain defined circumstances that an organisation found itself in. Accounting control systems are not neutral systems making production efficient (Johnson and Kaplan 1987) and the focus of academic research has been on how change to the accounting system has occurred. Suggestions offered include change has occurred either via an individual or via a firm or an institution (Parker 1979).

2.5 Accounting in the Twenty-first Century

Today, accountants face considerable challenges of keeping up to date due to the pace of change (Albrecht and Sack 2000, Kennie and Enemark 1996). In the Industrial revolution, as the basis of most western economies moved from agriculture towards industry, many techniques (such as double-entry bookkeeping) were already in place to deal with large complex entities and the accumulation of capital (Elliott 1991). However in the last three decades of the twentieth century the global economy shifted from a manufacturing focus towards a services and information focus. Accounting and accountants were not ready for this change and face ever increasing criticism for supplying the business world with information derived from industrial methods not suited to today's organisational needs (Denna et al. 1993).

Feeney (2013) describes how the role of the management accountant has changed from that of bookkeeper to business advisor (Burns et al. 1999, Seigel and Sorensen 1999). The accounting function has moved from recording the historical performance of the business and being the company watchdog to be more commercially orientated (Granlund and Lukka 1998). Due to the skills that accountants possess they can still play an important role in the development of organisational strategy (Burns and Yazdifar 2001). Matthews (1998) provides evidence that professionally qualified accountants have played an important historical role in the development of general management. The training and experience of accountants means that they are not just qualified in financial matters, but are trained in business techniques ranging from the sole trader entrepreneur to large organisations. This makes accountants technically well prepared for an active role in management.

From simple beginnings, the accounting profession has now grown from offering services such as double entry bookkeeping to strategic management services, assurances, audit, investment advice and all kinds of consulting (Stevens 1981, Willmott 1986). These multiple service offerings have allowed accountants to advance their profession by achieving positions of power, status and authority within many organisations (Hines 1989). The accounting profession now defined by Arnold and Hope (1983) aids organisations in three areas: decision making, planning and management control.

The business and economic environment has undergone massive changes in the last thirty years and many researchers have identified how new challenges have effected both business and the accounting profession. These include the changes in mass production techniques, global and personal investment, Information Technology, Globalisation, the Political and Economic environment (Albrecht and Sack 2000, Olivier 2001, Parker 2001, Holtzman 2004). Although accounting researchers and academics having differing opinions as to how the role of the accountant will change over the next few years in response to these influences, there is a common consensus that accounting practices will change not only in a major structural sense, but accountants will have to adapt to change at a rapid pace (IMA 1999, Albrecht and Sack 2000, Howieson 2003). This will also lead to increased challenges for accounting education to keep pace with these developments in the accounting profession to help create accountants that can meet these new developments and demands from industry.

The rise of Information Technology seems to have had the biggest effect on not just the accounting profession but all the other factors, creating a fast-moving global economy (Denna et al. 1993). Technology has made data preparation, processing and communication, quicker, inexpensive and easily available. This also applies to financial data. Computer software has made preparing and disseminating financial information, cheap and simple to produce. Traditional based financial reporting on the month and year-end is becoming increasingly less timely and less useful to decision makers (Koreto 1997, Lymer 1999, Sangster et al. 2009). This has meant that many of the basic yet time-consuming tasks such as bookkeeping, taxation and auditing have been simplified. Finance functions have seen their numbers dwindle as tasks such as data and invoice entry are being replaced by computer software or are outsourced from the organisation altogether (Sangster et al. 2009). This has meant that the accounting profession has changed to respond to differing demands of the new business environment (Olivier 2001, Holtzman 2004). Computers have helped accountants to input data and produce financial

statement quicker, and have thereby given accountants the potential to focus on adding value to organisations by creating more of a consulting, advisory and decision making role (Jordan 1999, Parker 2001, Elliot and Jacobsen 2002, Sangster et al. 2009).

It is claimed that globalisation has essentially been created because of advances in Information Technology (Olivier 2001) and consequentially globalisation has also become a major force that affects the future role of the accountant. Hirst (1997) claims that globalisation affects every aspect of economic life, politics, culture and society. This means that even the smallest businesses have the potential to sell their services all over the world (Holtzman 2004). Local businesses are changing rapidly to become global players and organisations are facing competition from all over the world. Intense levels of competition means that business decisions have to be made quickly and effectively. Capital and information move across international borders and small to medium businesses are engaged in export. In terms of affecting the employee, work is moving more and more towards flexible zero hour contracts, with employees needing to be more flexible on location (Parker 2001). This change again has had its effect on the accounting profession. Location is seen as being increasingly irrelevant and accounting work is becoming increasingly multidisciplinary (ICAEW 1997, Simister et al. 1998). Walker (2004) states that international accounting firms are now global suppliers of a wide range of financial and professional services. These large multi-national companies need to respond to more complex regulatory frameworks, facing increasing competition, saturation of the audit service market with increasing accountability in social and political life (Fogarty 1997 and Williams 2004). Clients place less value on traditional accounting, tax, audit services and now require products such as the creation of sophisticated performance indicators for their organisations (AICPA 1988, Simister et al. 1998).

The problem that now exists is that different companies use different accounting methods and techniques, some more detailed and advanced than others to aid management in an increasingly changing social and economic environment. As the problem changes so does the accounting information required, yet some organisations are embracing these new ideas and practices, whereas others are not (Boyns and Edwards 2006). All of the above factors are interrelated and have contributed to creating different organisation structures, with enormous competitive pressures on employees and departments. This has led to businesses requiring employees with new forms of personal skills and competencies in the accounting professionals

they employ. These changes and challenges have had (and continue to have) a profound effect on today's accountants and today's accounting educators (O'Connell et al. 2015).

2.6 The history of accounting education

Accounting education is also changing to help train accountants to meet the dynamic and constantly evolving business needs of the modern world. Professional bodies and academics recognise that the accountant of today dramatically differs from the accountant of the past. The new accounting professional can no longer rely on just being good at the numbers. To be an essential and integral part of any organisation, today's accountant must possess communication skills, leadership skills and critical thinking skills (AECC 1990). They must be able to provide input into all areas of the business, not just finance, but also have input into sales, human resources, information technology and logistics to be an effective part of the strategic decision making with the organisation (Seigel and Sorenson 1994, Basser 1998, Carozzi 1998, Dyer 1999).

Early accounting education in the UK offered accounting training in the form of apprenticeships. Most accountants in the late nineteenth century had limited formal education and learned their accounting skills via these apprenticeships. From the early days of the Industrial Revolution most practitioners believed that mastery of the profession was through practical experience and the role of accounting education was to develop the technical and analytical ability of the individual accountant. This meant that accounting education was dominated by the academic concept of accounting as a technical practice, where decisions were explained by an economic rationale (Bolt-Lee and Foster 2003).

At the beginning of the twentieth century accounting education in America also formally began as apprenticeship programmes, developed to train practitioners' assistants (Previts and Merino 1979). As demand for professional accounting education increased, business schools in American universities began developing education programmes for professional accountants (Oliverio and Newman 1996). From this provision for highly qualified professional accountants and auditors, the first university accountancy degree programmes were developed in the US (Miranti 1990). The creation of accountancy degrees meant that US accountants could publicly demonstrate their professional ability in terms of education, training and ethics (Carey 1969). This helped towards removing external and internal criticism about differing standards between accountants (Lee 1995). University accounting education rapidly grew in the US until there were three hundred and thirty five colleges offering over two hundred and fifty different accounting

courses by 1926 (Allen 1927). The UK however continued the apprenticeships model for much longer and only adopted this US model of degree and college courses in the late twentieth century (Lee 1995).

University educators in these first accounting courses advocated practicality and relevance, with little interest in classical subjects and offered a narrow focus of vocational study (Previts and Mereno 1979). This vocational perspective is linked closer to the functionalist tradition in the work of Comte, Spencer, Pareto and Parsons (Wallace and Wolf 1999). The vocational perspective of accounting education meant that accounting educators moved towards textbook driven curriculum concentrating on the mechanical aspects of bookkeeping and accounting. This teaching of the mechanical aspects was said to be damaging to accountancy and accountancy teaching (Parker 2001, Boyce 2004). Yet in these early university and college days it was academics who initiated changes to the profession as these educators were often also professional practitioners (or had been in the accounting profession before moving into education). There was a close alignment between the accounting techniques taught in the classroom and meeting the information needs of business (Bolt-Lee and Foster 2003).

2.7 Problems in perceptions of accounting education from the 1950's onwards

As early as the 1950s, accountancy scholars and academics were already beginning to state that accounting pedagogy was no longer attractive to prospective students and that the current accounting graduates were poorly prepared for the business world (Carey 1953, Cramer 1957). This was due to the fact that many of the early university accounting educators had either retired, not been replaced or had moved out of education, drawn back into industry. Accounting academics were also faced with an increasing demand to produce scholarly research, rather than preparing students for the world of work (Nelson 1995, Oliverio and Newman 1996).

At the same time as this criticism of accounting education appeared, there was the development of a negative stereotype for accountants. Stereotypes (as defined by Lippman 1946) are where people make simple generalisations or a collection of attributes to describe the members of an occupational group (Ashmore and Del Boca 1981). It also helps individuals create and identify different groups to justify collective action (Oakes et al. 1994). Decoster (1971) summarises research undertaken in the 1950s and 60s that showed the stereotypical accountant in a negative light as an impersonal, inflexible, introverted and numbers based individual, devoid of emotional intelligence.

A number of studies were launched in the late 1950s to try to examine what the future of accounting education should look like. One report, the Gordon and Howell Report (1959) stated that accounting education should cater for an individual's entire career, not just concentrate on the entry level basic bookkeeping and that the level of accounting research was poor. It also went on state that the best method for providing an educational foundation for an accounting professional was a four year liberal arts education followed by two years of professional work in accounting after graduation. Another report, the Pierson report (1959) was also critical of the accounting curriculum, stating that it did not adequately define the role of the accountant and did not delve deep enough into the underlying concepts of accounting. Both of these reports were highly critical, accusing accounting educators of being mediocre, not attracting the best students and not providing the type of education that would develop capable accountants for businesses.

Practitioners blamed universities for failing to produce accounting graduates who were work ready and unable to adapt to the changing business environment (Sundem 1999). There was also an increasing concern regarding the decline in the quality of students (Inman et al. 1989) and the reducing number of students choosing accounting in the US (Astin 1997). This then created a vicious circle with less able accounting graduates being available for entry-level positions in various organisations. There was also concern that because of these negatives traits, certain types of individuals would be attracted to the profession that would not suit the changing requirements of being an accountant. It was Holland (1963, 1973 and 1997) with his trait factor theory that matched an individual's job to their personality. People will look for environments that will match their skills and abilities. Holland argued that certain personalities were attached to certain vocations or jobs, individuals seek environments that matched their type.

Despite the early warning, the practice of accounting education did not change and as the 1970s drew to a close, prospective university students still had a negative perception of the accounting profession (Taylor and Dixon 1979). The stereotypical accountant was still being viewed in a negative light. Aranya et al. (1978) reported that accountants were viewed by the general public as conformists with an adherence to socially accepted values. The accounting profession does not seem to have removed this view, as later studies (such as Houghton 1992, Friedman and Lyne 2001) describe the typical stereotype of the accountant as a negative one with the typical accountant not having as much prestige as a doctor or lawyer.

2.8 Accounting Education's major studies in the 1980's

Due to the concerns of the accounting profession regarding the quality of accounting education, from the mid-80s to the end of the twentieth century major studies were launched that had a large influence on accounting education. The first was the American Accounting Association's (the AAA) Bedford Committee study in 1986 prepared in conjunction with accounting educators and researchers. It stated that from 1925-1985 accounting and its practices had changed and expanded significantly, but accounting education had not. To correct his problem, accounting education had to rapidly adapt and change before the start of the new century. The accounting curriculum needed upgrading and the pedagogy revised. There was a need to change the classroom experience of the student before the start of the twenty-first century.

This study was the first to recognise that generic skills as well as technical skills are required for a graduate to be successful in future organisations. The study stated that accounting students should be prepared for career long professional learning. Students should gain knowledge not just from mathematical sciences but also gain knowledge from the social sciences, arts and humanities. This new approach of "learning to learn" should help future accountants understand the nature and skill of logical reasoning develop a capacity for creative thinking, problem solving, and an appreciation of ethical standards. There was a challenge by the committee to accounting educators that they must modify the traditional classroom teaching to include softer skills, ensuring that accountants develop effective and interpersonal relations (p179-180). Accounting education must create material that encourages deeper self-learning and understanding of inter-organisational relationships. The industrial delivery teaching method must be changed so that students move from being passive recipients of information to "active independent learners" (p187).

The American Institute of Certified Public Accountants (AICPA) also created a Strategic Planning Committee in 1986 that was tasked with developing a future for the accounting profession. They decided upon a twelve point strategic plan, two of these (number five and number six) focused on accounting education. They stated that as there were decreasing numbers of students entering the profession and wages were ever increasing, there needed to be an aggressive recruitment and retention of well qualified students. There also needed to be an improvement in the quality of accounting education programmes so that accounting graduates are properly prepared to enter the accounting profession. This concern for improvement in accounting graduates was mirrored by the top eight accounting firms, who in 1989 published their White

Paper (Perspectives on Education: Capabilities for Success in the Accounting Profession) stating that the number and quality of students selecting accounting degrees had declined.

In response to this pressure from the large accounting firms to improve the quantity and quality of accounting graduates, the American Accounting Association (AAA) received a four million dollar donation from the “Big six” accountancy firms. With this donation the AAA created the Accounting Education Change Commission (AECC) in 1990 which operated until 1996. Their mission was to ensure that accounting students should be prepared in the skills of life-long learning before entering the profession. This meant that the AECC was to become a leader in improving the academic preparation of accounting students so that the students possessed the skills, knowledge and attitudes required for success in the accounting profession. The AECC stressed the need for a broad and general education and that change must be provided by educators. Accounting educators according to the AECC must focus on creating courses with greater emphasis being placed on accountancy students acquiring the skills of life-long learning not just the rote learning of facts and regulations.

The AECC’s first statement of position “Objectives of Education for Accountants” (1990) argued that accounting education’s major objective should be to provide students with the foundations to enable lifelong learning. The three main areas that should be taught are firstly skills (communication, interpersonal, intellectual), secondly knowledge (general, business, accounting) and finally professional orientation. It is the responsibility of educators to keep their curriculum up-to-date reflecting accounting’s response to the new dynamic business environment effected by such topics as: globalisation of business, advances in technology and new ways in which businesses operates (such as strategic alliances).

The AECC’s second position statement “The First Course in Accounting,” identifies that the first course in accounting for students should give an understanding that accounting is now about communication, providing financial information to other members of an organisation to aid decision making. The AECC did not provide one single course design for educators to follow, but did stress the need for the pedagogy to include group work, learning by doing and the creative use of technology (Rebele et al. 2002). The use of group work should be centred round material such as case studies with an integration of organisational perspective to create an atmosphere of interaction between the students themselves and between the tutors and students.

2.9 Calls for changes in Accounting Education in Twenty-First Century

Since the appearance of the AAA's Bedford Report in 1986, researchers such as Elliott (1991) continued to describe accounting education as being in trouble. Francalanza (1997) stated that the accounting education revolution had stalled for over twenty years due to the reluctance of educators to change the curriculum, preferring to teach accounting students accounting models rather than being perceptive to the dynamic environment in which accounting graduates will operate. It was still claimed and widely acknowledged that traditional accounting education programmes were still narrowly focused with graduates only trained in the techniques of financial accounting, auditing and tax (Reckers 1996, Baril et al. 1998). Heffes in 2001 described accounting education as still being in crisis and stated that accounting education must provide students with skills and knowledge to become competent professionals in this ever changing business world. Accounting scandals such as Enron, Parmalat and Worldcom have brought into question the effectiveness of accounting education and its relationship with the accounting profession (Diamond 2005). Pfeffer and Fong (2002) expressed concern that the level of separation between academics and accountancy practitioners is much greater than in other vocations such as medicine, law, engineering and teaching.

Opinions of a stereotypical accountant having a conservative nature are still in existence today. A study from Coate et al. (2003) on first year undergraduate business students found that these students thought of accountants in a negative light. Accountants were viewed as being formal, reserved, sceptical less open to new experiences and working alone with numbers. Pollock et al. (2002) found that US senior school careers advisors perceived accounting as uninteresting, stressful and not rewarding financially. Barsky and Catanach (2001) found that students and parents do not understand how the role of the accountant is changing from scorekeeper to strategic advisor. Barsky and Catanach go on to advise that this change must be communicated to students to dispel the negative perceptions of accounting as being boring and irrelevant. Byrne and Willis (2005) found that Irish secondary school students thought of the work of accountants as boring and compliance driven.

Recruitment to university accounting courses also faces an un-certain future in the quality and quantity of undergraduate students (Nelson 1995, Albrecht and Sack 2000 and IMA 2000). In the 1980s and 1990s undergraduate accounting programmes attracted a high calibre of students and therefore recruitment involved choosing from a high pool of highly qualified graduates (Nelson 1995). Accounting was seen as a lucrative degree within the remit of business (Collins

1987) therefore the best students were attracted to these degrees (Previts and Merino 1979, Langenderfer 1987). However with the changes in the profession such as the lowering of salaries, the introduction of the tuition fees, the offering of apprenticeships and degrees from training providers, the numbers in accounting undergraduates have reduced. This has the obvious knock on effect of reducing the quantity and quality supply of new accounting graduates (Graner and Dombrowski 1997, Vangermeersch 2000). Some academics paint a bleak picture where some accounting graduates will be without a job and will not do any accounting work of any type in their potential future careers (diFazio 1998, Esposito et al 1998, Tinker and Koutsoumadi 1998).

The AICPA (1998) found that the wrong student type was attracted to the profession because of these misconceptions about an accountant's role. Many thought that it was a safe role, maths based, with a right answer. A number of research studies found that students were put off accounting by this mechanistic approach (Cohen and Hanno 1993, Adams et al. 1994). Marriott and Marriott (2003) argued that students' attitudes towards the accounting profession are a fundamental factor in their decision to choose accounting as a career or university degree choice.

There is an admission that many problems exist in accounting and accounting education (IMA 2000) due to a common concern that accounting still has not found an intellectual basis for its practices (Lee 1995). Despite many attempts in the UK and US to identify a theoretical body of knowledge, there is a consistent view from researchers that this has not changed accounting education (Hines 1989, Archer 1993).

It is now claimed that it is not just accounting courses that have suffered, but universities as well by trying to meet the needs of business (James 2008). Universities have themselves started to resemble corporations and now instead of being a community of scholars, they are corporate-type entities that no longer primarily exist to offer research, critical thinking and intellectual debate (Marginson 2000, Klein 2001, Saravanamuthu and Tinker 2002). There is even the extreme claim that vocational education will create a generation of passive subservient workers (Kell et al. 2004). A critical approach to accounting education will help students develop generic skills such as personal adaptability, by increasing personal levels of self-confidence, self-image and the ability to face different tasks in different contexts (James 2008).

Accounting Education must change its subject matter and the pedagogical methods employed in the classroom to remove negative stereotypes and perceptions of the profession. There is criticism of what is currently being taught for having too narrow a focus, with a concentration on data collection, preparing external financial reports, journal entries, transaction mechanics and processing, with a correct answer to set problems (Mathews 2001). There must be a complete radical overhaul of what is being taught (Patten and Williams 1990) with a greater focus on general business issues (Inman et al. 1989).

In 2000 the AICPA launched their "Vision Project" to focus on improving accounting education. This project suggested that if accountants are to remain of value to the business world they need to develop a more entrepreneurial mind-set. To do this accounting educators need to focus now on increasing business knowledge, education, experience and life-long learning. There is a need to create an intellectual base for future change. However the greatest influence on accounting education at the start of this century comes from the report by Albrecht and Sack (2000): "Accounting Education: Charting the Course Through a Perilous Future." This report by Albrecht and Sack was a joint project of the AAA, AICPA, IMA and the Big Five accountancy firms. This report stated that accounting education had not kept up with the changes in the global business environment. Accounting Education was failing to attract the brightest and the best students.

Albrecht and Sack also noted that there was a decline in the number of students enrolling in accounting programs of up to twenty three per cent between the years 1995 and 1998 (p19). Practitioners and educators put this down to lower starting salaries than other business graduates, accounting degrees are more demanding of students and hence a risky option. Other reasons included a perceived lack of alternative career options, and a lack of information and understanding about accounting careers. There is also mention that practicing accountants would not study accounting again if they were starting their education journey again. This is due to the fact that many of the practitioners viewed accounting teaching as out-of-date and in need of modification.

Albrecht and Sack (2000) continued to paint a dire picture of accounting programs and state that something must be done to prevent declining enrolments in accounting courses, leading to declining accounting teaching departmental budgets, declining faculty positions and the possible elimination of accounting programs from business schools. Accounting education needs to recognise that what is being taught is out of date, narrow-focused, focused on content, out of

touch and having failed to improve the quality of service. Some courses are in essence bookkeeping courses (Albrecht and Sack 2000) and offer little intellectual challenge to the student. This bookkeeping approach gives the wrong impression of accounting as orderly, structured and having precise solutions to prescribed problems (Williams 1993). Williams suggested that accounting educators should promote assumptions and estimates as the solutions for questions set. Educators give a negative impression of accounting as one of rules and regulation (Baldwin and Ingram 1991). This perception leads to students not attracted or interested in the profession (Inman et al. 1989). Another perception created is one of difficulty. As the students feel that accounting degrees are more demanding, technical and therefore difficult, students are also using this as a reason not to choose to study an accounting degree (Price and Murvin 1992).

These curriculum changes with a focus on business awareness must happen within a student's first accounting course (Baldwin and Ingram 1991, Saudagaran 1996, Mladenovic 2000). Criticism of first year accounting courses are that they are traditionally taught at universities by tutors with little or no prior teaching experience and very little understanding of the profession (Baldwin and Ingram 1991). It is claimed that the more experienced tutors are not interested in teaching the basics as they see it as uninteresting and offering little opportunity for research that can be published (Nelson 1992). However the first year is also seen as the best opportunity to attract accounting students into the profession (Garner and Dombrowski 1997, Mauldin et al 2000). First year accounting courses must focus on making accounting being perceived as an information development and communication function that supports business decision making (AECC 1992). Many accounting researchers have all pointed out the role of the accounting teacher in the recruitment of future accountants, with university teachers being the greatest influence on a student's choice of accounting as a profession (Inman et al. 1989, Felton et al. 1994, Paolillo and Estes 1992, Albrecht and Sack 2000, Hunt et al. 2004).

A redesigned accounting curriculum would see graduates trained to be both accountants and consultants equipped to act as business advisors. Albrecht and Sack (2000) found that changes in accounting education have not been enough. Many of the changes have not been for the better and with dwindling resources and poor leadership, accounting faculties could either be "terminated or merged" (Albrecht and Sack 2000, p.43) into other departments. Albrecht and Sack continue their criticism stating that accounting programs at universities are clones of one another without a distinct "personality" (p.45).

This lack of differentiation between accounting degrees at differing universities has not been a problem in the past. As prospective students now have greater access to information on the strength of university's teaching and research in accounting (such as league tables in the UK), this could lead to some university accounting schools actually closing as students choose not to study accounting at a particular university that the students view as underperforming in the league tables. To stop this there is a need to remove the teaching of mundane technical skills and to start teaching generic skills to allow accounting students to adapt to the pressures of the modern day organisation (Albrecht and Sack 2000). It must be noted that these changes in accounting education must be done with an ethical focus as education is pivotal in the construct of understanding of the world and changes could be used by people for their own ends (Thomson and Bebbington 2004). Research undertaken by Price Waterhouse Coopers (2003) found that ethics is not a consistent integrated part of education.

There is a counter-argument from academics in that too much change and too much focus on the softer skills might result in entry-level accountants who do not know the basics and will have only received a generalised view of accounting (Dyer 1999). Boyd et al. (2000) stated that to avoid this generalisation accounting students must still be taught the basic concepts and procedures to ensure possession of adequate technical abilities. There must also be reconnection within the accounting profession that accounting education claims to serve. The importance of faculty and practitioner collaboration was highlighted in the Practice Involvement Committee of Administrators of Accounting Programs Group (Bullock et al. 1995) stating that practitioners must now get involved again in the design of future accounting curriculums. This statement may help counter the findings of May et al. (1995) that there is an expectations gap between practitioners and academics, with academics reluctant to change the curriculum. Livingston (1992) did however state that as academic institutions face more accountability this may provide the motivation to change the curriculum anyway.

Thankfully it is not all bad news for the image of accountants. There are a few findings that suggest that the accountant stereotype can be varied and there can be more than one stereotype (Imada et al. 1980, Cory 1992, Dimnik and Felton 2000). More people external to the profession are beginning to recognise the changing role of the accountant to become involved in business strategy (Bougen 1994). Hunt et al. (2004) surveying accounting undergraduates found that they had a positive image of accountants as highly valued business advisors. Hartwell et al. (2005) found that prospective undergraduate students thought an accounting degree useful if an

individual wanted to be a CEO or wanted challenging work. Therefore potentially the message is changing and consequently students are being attracted to the profession with the required skill set.

Albrecht and Sack (2000) put another slant on the lack of recruitment stating that it is due to a lack of information as to what accountants do. The IMA (2000) found that this lack of understanding is created by three major reasons. The first reason is that school teachers and career advisors at secondary school level do not know what accounting is about. The second reason is that the skills advocated to be successful as an accountant are also incorrect (just being good at maths). The final reason is that accounting studies at secondary school are focused primarily on double entry bookkeeping, giving the impression that accounting is a narrow field of study and that accountants are only bookkeepers in an organisation.

The most obvious solution to this is to put more emphasis and effort into the recruitment process (Mauldin et al. 2000). There must also be more effort to recruit students not just with a maths background but also recruit students with more diverse personalities, skills and values (AICPA 1998). Collins (1987) states that the accounting profession should work with universities and senior schools to educate students as to the breadth of accountants' work. Hermanson et al. (1996) suggested a radical solution strategy to the recruitment problem. This included inviting curriculum input from the accounting profession, inviting speakers from the business community and to have the best full-time accounting professors teach on the first year accounting courses. Studies by Metrejean and Zaezeski (2001), Metrejean et al. (2002), Fedoryshyn and Tyson (2003) confirmed that carefully planned guest speaker presentations can provide very exciting real accounting experiences to undergraduate first year accountants.

Students are unprepared for the business world and this lack of adaptability has been exacerbated by an increasing complex business environment (Sundem 1999). There needs to be an acknowledgment that accounting is increasingly influenced by Information Technology, Globalisation, the decline of traditional accounting services and the growth of consultancy changes the role of the accountant (Deppe et al. 1991, May et al. 1995). Accounting education must therefore change to remain relevant to the business world (Olivier 2001, Parker 2001, Howieson 2003). The AICPA in 2000 pointed out that the professional accountant must be transformed into a business advisor who will be able to carry out a full range of accounting and value-adding consultancy services required by various organisations. If educators can meet this

challenge, then the future well-prepared accountant will have many opportunities in the organisation (Baser 1998, Ireland 2016).

2.10 Communication skills

On investigation as to which of the generic skills were deemed important for the future accountant, the two most important skills have been identified as oral and written communication skills (e.g. Deppe et al. 1991, Novin and Tucker 1993, Nelson et al. 1996, Morgan 1997, DeLange et al. 2006). As early as Ingram and Frazier (1980) there was recognition that communication skills were top of employer's requirements with 54.5% recognising that oral presentation skills were necessary to be successful in the workplace. However, only 1.4% of employers agree that their staff were able to demonstrate competency in the skill of communication.

The AECC's (1990) definition of communication skills was that accountants need to be able to transfer and receive information with ease, solve diverse unstructured problems in unfamiliar settings, deal with judgements, ethical issues, conflicting demands, unexpected requirements, coinciding deadlines and work effectively in groups with diverse members. Novin and Tucker (1993) found that in a survey of Certified Public Accountants of all the key educational topics required to be successful in business, the top two skills that needed to be added to accounting education programs were written and oral communication. Yet the biggest shortcoming in accounting graduates being reported by employers was poor communication skills (Mangum 1996).

A survey of Certified Management Accountants found oral communication skills among the five most commonly mentioned weaknesses in entry level management accountants (Novin, Pearson and Senge 1990). Daggett and Liu (1997) in their survey of employers found that accounting graduates were best prepared for entering, retrieving and analysing data and least prepared for tasks in writing, presentation skills and interaction with other members of the organisation.

Siegel and Sorenson (1999) in a major study of management accounting employers found that the key skills needed to be a success in a finance function were listed as: communication (oral and written) skills, the ability to work in a team, analytical skills, strong understanding of accounting and the understanding of how a business operates. Kim, Ghosh and Meng (1993) found that the three most important criteria used for the selection of accounting graduates

were interest in the job, personal qualities and communication skills. Unfortunately, many studies have shown that students entering undergraduate programmes in accounting suffer from communication apprehension more than their peers (e.g. Stanga and Ladd 1990, Simons, Higgins and Lowe 1995, Faris, Golen and Lynch 1999).

Rebele et al. (2002) give a summary of accounting education interventions for the latter half of the twentieth century and noted that there had been only one published journal article that attempts to integrate oral communication into the curriculum (Ruchala and Hill 1994). This may be lack of interest from educators, but it is more due to lack of resources. It has been noted by May and May (1989) that potentially there is not enough classroom time in a regular accounting course to develop an adequate program in developing oral communication skills, especially with larger classes. Ruchala and Hill (1994) although claim to improve oral communication skills with limited resources, their study is only for twenty two students in the final year of their studies and all of their research subjects already had strong levels of communication ability. However they do note that students can improve their oral presentation skills when they understand what effective presentation looks like, practice giving individual and multiple group presentations and experience consistent instructor feedback.

Ruchala and Hill (1994) themselves note that whilst there has been a lot of attention given to improving written communication in accounting programs (May and Arevalo 1983, Wygal and Stout 1989, Stout, Wygal and Hoff 1990, Gabriel and Hirsch 1992), little attention has been given to introducing oral communication skills into the curriculum. These findings are reflected in the work of Borzi and Mills (2001) who noted that a significant amount of communication apprehension was still present in undergraduate accounting students and called for changes to the curriculum to face this particular issue and help to improve accounting students' poor standard of oral and written communication skills.

It could be that as Leveson (2000) suggests there is a conflict in communication requirements between universities and business. That is because in business the most important communication skill is that of oral communication, whilst in university, the most important is written communication.

At present universities, colleges and academic programs are communicating through mission statements as to how they are meeting the educational needs of students. Many of these statements focus on the development of core competencies that include oral and written

communication, leadership and teamwork. Yet little information has been shared in literature as to how communication skills are integrated in accounting education (Kerby and Romine 2009). In fact, it has been recognised that teaching and assessment strategies for developing all generic skills are lacking (Sharma 1998, Nash et al. 2015).

There are a few specific examples in academic literature as to how communication skills may be integrated into the curriculum, such as with case studies (Boyce et al. 2001), business simulations (Gammie, Gammie and Gargill 2002), development over small tasks (Grace and Gilsdorf 2004), co-operative learning (Ballantine and McCourt Larres 2009) and assessment by presentation (Kerby and Romine 2009). Not one clear method of integrating communication skills into the accounting curriculum has been advocated, nor indeed has any intervention been tested for reliability or validity as to the potentially increased levels of communication skills in the undergraduate accountant.

There is a call that accounting educators must take direct responsibility for the development and implementation of teaching strategies that will increase a student's generic skills, but there is doubt that this will happen because accounting tutors prefer to use rule-based teaching that is not consistent with deep learning and generic skills development methods (Cherry and Reckers 1985, Brown and Guilding 1993, Wolk and Nikolai 1998). Boyce et al. (2001) claimed that this should not be a surprise as tutors themselves are the product of this conventional accounting teaching and the accounting profession has an inbuilt preference for a technical orientation (Truan and Hughes 2000). This means that not only will students be resistant to a change in methods, but the tutors will potentially be resistant also (Libby 1991). Tutors must make a conscious effort to move away from an objectivist mind-set and embrace different approaches that will encourage the development of generic skills (Hassard 1990, Hamer et al. 2011).

2.11 Future professional accountants

Traditional roles such as invoice entry and ledger preparation will always exist, but technology has automated many of these time-consuming tasks. This means that the personnel requirement for these tasks has reduced and in some organisations the finance function has been outsourced. The new roles that have developed for the accountant, the accounting profession and the accounting department are becoming more multi-disciplinary (Keeva 1998, Russell et al. 1999, Howieson 2003). These roles include internal consultants, analysts and valued business partners (IMA 1994). The new accountant should be able to work in cross-

functional teams, involved in business decision making and strategic planning (Howieson 2003). Accountants in organisations need to move from being score keepers to score setters, involved in feed-forward techniques as opposed to the traditional month-end feedback. Accountants should be involved in not just understanding the costs of the business but also understanding the commercial aspects of the business (Phillips 1998, Grundy 2000, Ireland 2016).

The new and emerging organisations and the adapting accounting profession have therefore got to change the perception of the knowledge and skills required by an accountant in order to offer a relevant service to other departments of the organisation. In a survey of individuals who had just obtained partnerships in large accountancy practices, the most important skills required for success were technical competence, communication skills, interpersonal skills, practice development and administrations skills (Bhamornsiri and Guinn 1991). Employers are looking for something more than just data collection in the skills and knowledge of the accountant (Wilder and Stocks 2004). Accounting has always been an information system designed to collect analyse and disseminate knowledge. Accountants have the ability to be a main player in the commodity of business knowledge (Elliot and Jacobson 2002, Howieson 2003). Accountants have a competitive advantage in knowledge management as their training gives them insight into different departments with the organisation. The way the future accountant can add value is to analyse and interpret accounting information, provide a management advisory service and consultancy for appropriate courses of action (Albrecht and Sack 2000, Howieson 2003). A growing number of studies have identified the increasing number of new business activities that accountants have been involved in (Charles 1995, IMA 1999, Albrecht and Sack 2000, Parker 2001, Messmer 2001, Howieson 2003).

To increase their employability and appeal to organisations accountants will need to be visionaries, strategists and technical experts (Albrecht and Sack 2000, Williams 2001). Analysing, evaluating, offering business consultancy and communicating financial information will require the accounting pedagogy to ensure that the future accountant has a wider range of knowledge, skills and abilities than the traditional basic accounting competence. Today's accountants must be well trained in financial and management accounting techniques, have a wider understanding of the global business environment and to correctly identify the problems and information necessary to solve different issues of different organisations (Kullberg et al. 1989, AECC 1990, IMA 1994, 1996, 1999, IFAC 1998, 2002, 2009 and AICPA 1999, 2010).

All the above requirements, changes the accountant from being a specialist with a specific body of knowledge to being a more generalist member of the organisation. However, before courses are re-designed there must also be an inclusion of ethics. This is due to the fact that accounting scandals such as Enron, WorldCom, Parmalat and others have damaged the reputation of trust and competency of accountants. The primary responsibility of the accounting profession is to protect investors, creditors and employees from being misled by financial statements that allow unacceptable accounting practices and inadequate disclosures (Wyatt 2004). Future accountants should also behave in an ethical manner and understand their social responsibilities as laid out by the Sarbanes-Oxley act and new auditing standards which have been set. Cooper and Sherer (1984), Chua (1986) and Walker (2004) have stressed the significance of accounting as a method for social and organisational control.

These demands echo the work of Cooper (2002) and Howieson (2003) that performance expectations of accounting graduates are complex and demanding, requiring them to develop a broad range of skills, committed to professional development and lifelong learning. Studies have also been undertaken on a whole range of interested parties from employers, certified public accountants, management accountants and educators to gain further insight into the above claims for greater vocational skills. The general consensus is that the most important vocational skills of any future professional accountant should be: general business knowledge, communication skills, inter-personal skills, problem solving skills, accounting knowledge, computer and information technology skills and personal attitudes and capabilities (Novin and Pearson 1989, Deppe et al. 1991, Ahadiat and Smith 1994, Morgan 1997, Arquero et al. 2001)

Of all these desired attributes, the two most important skills viewed by academics and employers alike for accounting graduates are oral and written communication skills (Deppe et al. 1991, Novin and Tucker 1993, Nelson et al. 1996, Morgan 1997, Siegel and Sorenson 1999, DeLange et al. 2006). This is because accounting is defined as an information system and that written and oral skills are necessary to allow an accurate and efficient exchange of accounting information (Hirsch and Collins 1988). An individual can possess good internal analytical skills but these skills are of no use if that person cannot communicate with others (Zaid and Abraham 1994). The increasing importance of business communication skills may also be attributed to several other factors. Buckley et al. (1989) suggest that the growth of service oriented businesses has increased the need for communication skills. Maes et al. (1997) suggested that popular organisation initiatives such as decentralisation of decision-making, empowering

employees, and the creation of small internal work teams have increased the need for communication skills. Changes in Information Technology are also reducing the accountant's role as the score-keeper, and pushing accountants into more internal consulting roles, where communication skills are a key to be successful in that role (Christensen et al. 2002).

However the findings of academics suggest that accounting students still possess high levels of communication apprehension (Borzi and Mills 2001), that they are better prepared for entering, retrieving and analysing data than they are for presenting, writing and interacting with other work colleagues. This indicates that there is still a need for accounting pedagogy to change to improve these skills in students, making them more employable and being able to adapt to a wide variety of career-related situations (Gabric and McFadden 2000). Accounting educators are being urged to alter curriculum to produce accounting graduates with a broader set of skills and attributes than purely just having technical accounting expertise (Braun, 2004, AICPA 2010).

2.12 Future accounting course design

Undergraduate accounting programs still supply a significant proportion of individuals entering the profession, yet these course have been severely criticised for failing to provide the education necessary to create today's accounting professionals (Diamond 2005). Things have changed in the University sector here in the UK and the US. The current environment is one where students leaving sixth-form (or high school in the US) view participation in higher education as the norm rather than the exception (Milliron 2008). This rapid increase in student numbers this has created a time of "soaring expectations and crushing realities" (Twenge 2006 p.2). Milliron's study of undergraduates enrolled in accounting classes found that there was a shift in expectations, with students emphasising the need for a low workload and even more worryingly putting low importance on key employment skills such as communication skills, analytical skills and the need to work with other students in teams. This is despite continuing evidence from professional bodies and employers that vocational skills such as strong communication skills are important (Ulinski and O'Callaghan 2002, Bolt-Lee and Foster 2003).

The Bedford Committee, The Big Eight White Paper and the AECC all stressed the importance of change in accounting education and that future accounting students must possess a strong fundamental understanding of general accounting and develop analytical and conceptual thinking skills. All the frameworks wanted students to develop leadership, interpersonal and communication skills. The emphasis is for accounting students to be trained not in rule

memorisation, but to use vocational skills in the decision-making processes within organisations. The accountant of the future cannot be just good at the numbers but must incorporate accounting as the language of business (AICPA 1999). Change is at its most urgent in the first accounting course at undergraduate level because this either confirms or dispels negative images of accounting (AECC 1992). This first course should help shape students' perceptions of the profession, the skills required to have a successful career in accounting and the careers available within accounting (IFAC 2009).

Before the accounting curriculum is revised Scribner (1995) suggests that accounting programs must establish objectives that satisfy as many stakeholders as possible. There may be the obvious problem of having many conflicting objectives. If that is the case, then educators must decide whether to design the curriculum for the general needs of employers or for a specific sub-section. Choi (1993) suggests accounting students should receive a strong foundation in economics, finance and quantitative analysis, develop teamwork skills and have increased opportunities to improve communication skills. Choi suggests that students should integrate more with other courses and disciplines. This sentiment is repeated in the work of Wolcott and Lynch (1997) who suggest that accounting material should be integrated with key concepts from courses in the liberal arts.

Criticisms of accounting programs are that a lot of the courses are rules driven and students have to memorise volumes of accounting standards in regards to financial transactions (Keating and Jablonsky, 1991). As most of the mundane tasks of accounting have been automated, accountants will prove their worth by using higher-order skills such as critical-thinking, problem solving and analytical skills (Hunton 2002). There is a call for removing the technical aspects altogether from university curriculum (Albrecht and Sack 2000, Herring and Williams 2000). It has been noted by some academics that individuals without university qualifications perform most of this work, so it is perceived that all the technical and procedural aspects of accounting should not be taught at university (Barker 2001, Boyce 2004). Care must be exercised here as these suggestions go against the advice of earlier reports that accountants should still have a sound technical grounding (AAA 1986, AECC 1990).

Future accounting courses must incorporate a broader educational background than the narrow, technical based one of the past. Geary and Rooney (1993) state that accounting education has been rule based and now must change to give future professionals the ability to think on an intuitive basis. There must be an understanding of the whole organisation and the internal and

external influences on the organisation such as the social economic, political, cultural and psychological forces (AECC 1990). Accounting curriculums should use a more constructivist model of learning whereby students use their knowledge to understand new material and draw relationships with what they have learned before (Thomas and Rohwer 1986, Dennick 2014).

The new approach to accounting education must be that when designing a new course, the transmittal method of teaching, whereby the students are viewed as containers to be filled with accounting rules, methods and official pronouncements should be abandoned (Saudagaran 1996). Instead educators must see that knowledge is created by the individual student constructing or reconstructing information in line with what they already know (King 1992). There should be the ability to use accounting information and knowledge as well as generic skills (Lee and Blaszczyński 1999). Cognitive skills of pattern recognition, synthesizing and complex problem solving are associated with higher value-added work and premium level salaries (Milliron 2008). Yet a study by Friedman (2006) highlighted that less than one-third of US College graduates can demonstrate a high level of proficiency in these cognitive skills.

To help reduce this problem of students lacking cognitive skills there are studies (Meas et al. 1997, Ulinski and O'Callaghan 2002) that demonstrate that oral presentation skills are important as they can help students develop and demonstrate higher levels of cognitive thinking. Albrecht and Sack (2000) stressed the importance of skills development because:

“Students forget what they memorise. Content knowledge becomes dated and is often not transferable across different types of jobs. On the other hand critical skills rarely become obsolete and are usually transferable across assignments and careers.” (Albrecht and Sack 2000, p.55).

The major objective of course design should be to provide students with a broad-based introduction to accounting rather than the narrow bookkeeping perspective offered under the traditional approach. Courses should use a variety of pedagogical tools to develop judgement, and address improvement in oral and written communication (Saudagaran 1996). Students should be able to identify, frame and solve unstructured problems in an environment of uncertainty (Wolcott and Lynch 1997). Technical material must be replaced by material that requires analysis and problem solving. Accounting graduates should now possess not just technical knowledge but qualities that include strong ethics, preparing them for lifelong learning, and personal development in light of an unknown future (Bowden and Marton 1998).

Accountants need educating in complementary bodies of knowledge such as organisational behaviour, marketing and strategic management (Elliott and Jacobsen 2002), perhaps even providing an education that adopts an interdisciplinary teaching for accounting students (Mathews 2001). The focus must be not on a particular skill but being able to evolve and develop, renewing skills and knowledge throughout their professional working life (Crebbin 1997). To develop these critical thinking skills, the alternative pedagogic approaches that should be used in future undergraduate degree programmes include case studies, role-playing and simulations. These should help students engage in the learning process (AAA 1986, AECC 1990, Adler and Milne 1997, Ireland 2016).

Failure to make accounting courses interesting and inform students about the changing nature of the accounting profession will lead to a decline in students who choose accounting as a profession (Cohen and Hanno 1993). The AICPA Accounting Careers Subcommittee (1990) stated that introduction accounting courses must be changed to make them appealing to students. The actual content of these courses should focus on an overview of the accounting profession, including its history, international dimension, ethics and public responsibilities of accounting (Parker 2001, Diller-Haas 2004). Saudagaran stated that traditional accounting courses taught across western countries consist of focusing on debits and credits, journal entries, financial statements, adjusting entries (Nelson 1992). Class time is spent listening to lectures and problem solving in seminars. Homework consists of reading from a specific text-book and solving the assigned exercises. Assessment is largely objective and tests accounting students' ability to apply memorised methods to highly structured problems. Bougen (1994) stated that the complexity of the image of the accountant comes from the association with bookkeeping. Despite the fact that today's accountant will be needed to make judgments with imagination and creativity, bookkeeping although necessary is boring and routine. Sale in 2001 found that students only associate accountants with money, numbers, maths and taxes. These findings were reaffirmed by Catanach (2001) who found that not just the students, but their parents also do not understand the changing role of the accountant to that of becoming more of a valued business advisor. Accounting is still seen as hard work and a career for those who are interested in maths and are not creative, or people orientated (Albrecht and Sack 2000). This is in their opinion down to factors such as; the lack of knowledge of accounting by careers advisors, the skills required to be a successful accountant, high school courses and introduction accounting courses that are too narrow focused and technical.

There have been attempts to change the accounting curriculum on different non-traditional methods such as co-operative learning, case studies and role playing (Friedlan 1995, Caldwell et al. 1996, Marcheggiani et al. 1999, Mladenovic 2000). Caldwell et al. (1996) found that cooperative learning techniques employed in the classroom helped students maintain a positive perception of accounting. AECC in their second statement (1992) although not providing an actual template suggest that to create an interactive and interesting course there needs to be case studies, group work and integration of organisation perspectives. This is line with the findings of Baldwin and Ingram (1991) who suggest that introductory accounting courses on the processing of accounting information such as bookkeeping attracts the wrong sort of student to accounting degrees. Therefore there needs to be a shift from this procedural view of accounting for students to be more interpretative and conceptual. Friedlan (1995) showed in a study of two Canadian courses (one traditional, the other using innovative techniques such as mini case studies, critical thinking and class discussion) that newer teaching techniques improved students' perceptions on accounting. The more traditional course continued to confirm negative stereotypes of the profession.

Other studies such as the one conducted by Daroca and Nourayi in 1994 warn that changing the curriculum does not always change the students' perceptions of the accounting profession or of the role of the accountant. Foster in 1995 studied ten accounting courses that had changed or had been created after the AECC announcements. Foster (1995) noted that there was not conclusive evidence that traditional versus innovative pedagogical accounting courses have had any different effects on accounting students. Foster did note that one of the reasons why these perceptions did not change was that the students did not see the point of the innovation teaching method and were not motivated to take part. This focus on attitude from the students was captured also by Nelson (1992). Nelson found that students' attitudes towards accounting worsened during the first semester and the worst attitudes were discovered in the more innovative courses. Metrejean et al. (2002) argued that due to time and fiscal constraints, it has been difficult for academics to create truly innovative accounting courses, there needs to be simpler and less expensive techniques to improve students' perceptions on accounting.

Accounting education must take an active role in informing students of this new dynamic accounting profession (Felton et al. 1994, AICPA 2000, Mauldin et al. 2000, Fedoryshyn and Tyson 2003). Cory (1992) argued that accounting stereotypes will change when students receive more information about the profession. One of the ways to change perceptions is through

accounting academics themselves as these academics maybe the closest contact students have with the accounting profession. DeZoort and Lord (1997) stated that students are relying on their tutors to inform them on the realities of the profession and possible career choice, yet the tutors are offering little in the way of this sort of advice and support.

Deines and Pallett (1989) criticised accounting educators for not attracting the brightest and best students to the profession. The widespread view that accountants are just bookkeepers is difficult to change and must be attacked right away (Howieson 2003, Hunt et al. 2004). The primary goal of accounting educators must be to change these perceptions and attitudes. This can be done by using accounting professionals (Byrd et al. 1989, AECC 1993, Davis 1993, Violette and Sanders 2004). Cory (1992) has suggested that practitioners speak to students in introduction classes to see the dynamic, energetic personalities and understand the challenges and rewards of the accounting profession (Metrejean and Zarzeski 2001). Hermanson and Hermanson (1995) went further than that and suggested that accountants should also speak to high school students, using personal stories and interpersonal skills to change perceptions of the profession. Howieson (2003) noted that academics and practitioners do not work together. Therefore to solve this Metrejean et al. (2002) invited practitioners to speak at guest lectures and recorded that students found the lectures useful but were unsure that these accountants had changed perceptions or attitudes towards the profession.

There is a call for practitioners to return to education but in the US some academics have laid the blame on the decline of university accounting education provision squarely at the AACSB (the business school accrediting body). The AACSB states that the main teaching qualification requirement for university for accounting educators should be doctoral degrees (Weis 1990, Porter 1992). This has led to a decline in university accounting tutors with professional accounting experience. This is despite the findings of Paolillo and Estes (1980) that the accounting experienced teacher influence was a greater factor in career-choice decisions than any other professional group. Fedoryshyn and Tyson (2003) found that lectures given by accountants did provide valuable insight into the profession and the tasks that they perform. The AECC in its Position Statement No 2 (1992) stated that tutors involved in the first years of teaching accounting should be enthusiastic and committed and have a record of success in teaching, up-to-date with the latest professional developments and research literature and stress the relevance of the course.

Violette and Sanders (2004) designed an undergraduate course that informed the student on differing areas of the accounting profession and possible careers. Their findings were that the information provided either reinforced the students' view that accounting was either the right career choice for them or not. Langenderfer in 1987 stated that tutors who can change accounting education must be able to instil in students an interest in the profession and its contribution and significance to society. A university education should lay the foundations for students to commit to lifelong learning and professional development (West 1998). Carnegie and Napier (2010) recognised that education of professionals emphasised professionalism and a code of ethics, with a strong association with integrity, honesty and respectability. Hanlon (1994) is concerned that the development of accountants has become primarily concerned with developing commercial awareness as opposed to serving the public interest. The accounting profession maintains a significant status within society and is considered one of the leading professions in the context of size, influence and number of services offered. James (2008) suggested that accounting educators follow the work of MacKillop and accounting education should be aimed at developing the whole person not just improving their literacy and numeracy skills. There must be built into the accounting student the "formation of personal integrity and civic consciousness" (Lovat 2004 p.107).

Employers are looking for graduates who have work and life skills, a passion for the subject, with strong communication, team work and problem-solving skills. Given these high level demands from employers, priority needs to be given to delivering these skills and attributes in accounting programmes if accounting graduates are to survive in today's global business environment (Kavanagh and Drennan 2008). Hassall et al. (2005) highlighted the challenge educators faced in creating graduates with a more extensive skill set, but also found that employers were unsympathetic to the claims of universities that they had limited capacity to meet these demands. It is unrealistic for universities to guarantee that graduates will leave with the necessary generic skills to make them work ready (Cranmer 2006). However, employers must also understand that learning is a continuous process and many of the skills can only be further developed and strengthened whilst in full-time employment (James 2008). If employers continue to demand skills that most graduates do not possess then this will lead to the inability to recruit (Gati 1998).

2.13 Conclusion

This chapter described the general background to the accounting profession and accounting education. It started with the history of accounting, how the role of the accountant increased with the arrival of the industrial revolution and has moved at rapid pace in relation to the increasingly change to the world of business. In comparison, accounting education has been slow to reflect the increasing changing nature of the accounting profession. There have been some courses that have tried to integrate different teaching methods (with particular focus on the key skill of communication) into their accounting curriculum, but these have not been successful (Ireland 2016).

Many pieces of research such as the findings of IFAC (2009) have identified that communication and interpersonal skills are the key vocational skills necessary for the future accountant to be successful in the workplace. The next chapter will explore what barriers accountants potentially face in attempting achieving the desired level of communication ability. The chapter will then go on to provide suggestions as to the potential therapies which may help accountants and accounting students overcome any of these barriers to improving their communication abilities.

Chapter Three: COMMUNICATION APPREHENSION AND SELF-EFFICACY

3.1 Introduction

The overall objective of this thesis is to try to improve communication skills in undergraduate accounting students. The previous research chapter focused on why this is important due to the changing nature of the business world and the need for the role of the accountant to change in relation to these new business needs.

This chapter will focus on the theories as to why accountants encounter possible mental and physical barriers to improving their skills in communication. This focus will lead towards the theory of communication apprehension (McCroskey 1970) as one of the main potential barriers accountants face in improving their communication ability. Once that potential barrier has been identified, there will also be acknowledgement that the remedy for communication apprehension is both time consuming and fiscally expensive to administer, therefore another technique has to be developed. The technique that is suggested is that of self-efficacy (Bandura 1977a). These techniques are fully discussed and the link between the two major themes (communication apprehension and self-efficacy) that could be found in Sheffield Hallam University's current accounting undergraduates is explored in this chapter.

3.2 Communication and Communication Apprehension:

Communication (from the Latin "Communicare" meaning "to share") is defined as the exchange of information between two or more individuals to send or receive intended meanings through a shared system of semiotic (signs) rules (Harper 2000). To graduate from High Schools in the United States in the Eighteenth and Nineteenth Century, students were required to give a final presentation to other students on their work called a "Dissertation." The reasoning behind this test was that if a student could demonstrate high levels of communication ability, then they were thought to possess high levels of intelligence. This requirement led to a dramatic increase in the demand for teachers in public speaking and at the start of the twentieth century in the USA, the academic discipline of Human Communication was founded by the Eastern Communication Association (1909) which became the National Communication Association (1914).

The first major model for communication was introduced by Shannon and Weaver (1949) who deemed that the process of communication was similar to telephone technology. They created a simplistic model which was called the transmission model. The basic steps of communication are: the forming of communicative intent, the composure and encoding of message,

transmission of the message, receiving the message, decoding the message and interpretation by the receiver. This model was later improved upon by Berlo (1960) to include social interaction creating the transactional model of communication. This model proposed that individuals can be simultaneously engaged in the sending and receiving of messages. These first communication studies were positivistic based and quantitative in nature, but today, communication studies encompasses a wide-range of qualitative topics, from conversation to television broadcasts. These studies in communication now examine how messages are interpreted in relation to other disciplines such as sociology, politics, psychology, anthropology, economics and cultural studies (Hayes 2005). Barriers to effective communication that can result in the failure of the process or distort the message include: filtering, selective perception, information overload, emotions, language, silence, communication apprehension, gender differences and political correctness. One of the biggest factors in preventing people from communicating is the fear of criticism (Robbins et al. 2013).

Many employers are not happy with new accounting graduates and in particular their low levels of communication skill despite some universities providing communication training with an increased focus on employability skills (Howieson 2003). This training is viewed as not working by employers and one of the reasons is thought to be this overriding fear of communicating. The idea of fear of communicating or communication apprehension is nothing new to academia. The first definition of communication anxiety was mentioned in the work of Lomas (1934). Gilkinson (1942) created the first scale that attempted to measure students' communication anxiety when communicating and his findings noted that there were differing levels of apprehension between individuals. The factors that created communication anxiety include: what the speaker perceives to be at stake, whether the speaker feels subordinate to their audience, how conspicuous the speaker feels, the degree of uncertainty in the given situation, the degree of dissimilarity between the speaker and the audience, memories of previous success or failures and the level of communication skills the individual possesses.

Anxiety in giving a public speech was also defined as stage fright (Clevenger 1959). Stage fright is experienced by most people a one time or another and in a nationwide survey of American adults, the most frequently reported fear was speaking in public (Bruskin Associates 1973). There have been studies that noted that there was a significant relationship between perceived anxiety in public speakers and their competence and trustworthiness (Mulac and Sherman 1975). Others have noticed fear and anxiety about oral communication and have used other

definitions to describe the problem such as: reticence (Phillips 1968) shyness (Zimbardo 1977) and audience sensitivity (Pavio 1963). Reticence was the most popular construct in that it refers to a trait of an individual remaining silent rather than participating in communication (Phillips 1968). People who remain silent can be viewed in a negative way. The longer a person remains silent, the more other people will view that reticent person in a poor light.

The expansion of higher education in the US in the 1960s, whereby more students were allowed to enter university education created issues by introducing types of students who were not used to public-speaking and were now having to now cope with the communication aspects of the curriculum (such as presenting an oral dissertation). This issue was investigated by the “Ad Hoc Committee on Evaluation in Speech Communication” which later went on to become the Speech Association of America. This committee found that problems in speech pedagogy came from an individual’s “Inhibitions rather than their inability” (Research Notes Spectra, 1969, p4).

It was from the above expansion of US university education that a tutor called McCroskey who witnessed students struggle to communicate, introduced the term “communication apprehension” in (1970 p.270). McCroskey’s very first article was published in 1958 after one year of teaching in which he already recognized that making students perform a recitation in public (declamation program) improved the students by getting them to experience speaking in public before an audience, encouraged them to think critically and trained them to give an effective public speech. McCroskey (1962) published data that demonstrated that not only did practicing public speaking improve the students in this field, but also improved them academically. McCroskey’s work continued to focus on communication with debate on the effects on public speaking (McCroskey 1967, 1969).

McCroskey based his work on the findings of Gilkinson (1942), Friedrich (1970), and more importantly the work of Phillips (1968). McCroskey noted that Phillips had not only identified communication anxiety in individuals when it came to public speaking but also demonstrated anxiety in other forms of communicating such as interpersonal interactions and small groups. This is what McCroskey labelled as “communication apprehension” (1970 p.270). In this same work McCroskey adapted the empirical questionnaire items and Likert scale from Gilkinson’s Personal Report of Confidence as a Speaker (PRCS), to create his own Personal Report of Communication Apprehension (PRCA). McCroskey also provide three variations of this PRCA aimed at testing college students (PRCA-college), year ten students (PRCA-ten), year seven students (PRCA-seven) and one designed for testing public speaking, the PRPSA (the Personal

Report of Public Speaking Apprehension). The aim of all these tests was to identify communication apprehension “reliably, quickly, and inexpensively” (McCroskey 1970, p277).

From this 1970 publication identifying communication apprehension, many other academics either worked with McCroskey or published their own findings. This plethora of variations of studies on communication apprehension led to McCroskey (1977) giving a summary of these collective findings and publish a definition of communication apprehension as “an individual’s level of fear or anxiety associated with either real or anticipated communication with another person or persons” (p. 78). An individual with a high level of communication apprehension will avoid communicating to avoid the fear or anxiety they have associated with communicating. This does not mean that a person with high communication apprehension will never communicate, rather they would prefer not to.

3.3 Possible causes of communication apprehension:

In the research as to the possible causes of communication apprehension a scale was created by McCroskey called the Oral Communication Apprehension Continuum (OCAC) (1979b). This was based on the work of Spielberger (1966) and Lamb (1973) who made the distinction between “trait” and “state.” The extreme ends of McCroskey’s OCAC describe a person as either having trait like symptoms of oral communication apprehension or state like symptoms. Trait is the most severe and if an individual possesses this, they will be afraid to communicate in any form and may even potentially have a stammer, stutter or speech impediment. Trait like apprehension was more associated with personality and a consistent reticence to communicate. This should not be considered as a characteristic of normal, well-adjusted individuals (Pervin et al. 2005). Individuals with high levels of trait communication apprehension are far less common, although McCroskey (1976) found that potentially up to twenty per cent of students in major universities could be suffering from trait communication apprehension.

State is more to do with a person being apprehensive about a particular situation such as giving a public speech. State communication apprehension is considered a normal response to a threatening situation. Individuals will demonstrate high levels of anxiety that lead to physical expressions of fear such as an increased heart rate, sweating etc. (Beatty and Dobos 1997). There is very little recognition of this condition as most people suffer in silence not realising that this is a common instance (Horwitz 2002).

Individuals can also experience different levels of written communication apprehension. People can experience anxiety or apprehension when preparing a report or essay and can develop negative attitudes to writing. This idea was developed by Daly and Miller (1975a) who were students of McCroskey. Written communication apprehension does not identify individuals as having poor writing skills but being unable to communicate their message effectively (Simons et al. 1995). Research into written communication apprehension is not as extensive as verbal apprehension but the importance of writing apprehension must not be underestimated especially considering the demands of the workplace (Scott et al. 1978). However the initial apprehension is again not easy to identify as apprehension levels will differ between individuals (Clark 2005). To be successful in either oral or written communication McCroskey (1984a) indicates that an individual must possess three elements. The first element that an individual must possess is the required psychomotor skills to engage in oral communication behaviour. The second element is that the individual must be comfortable in communicating with others and the third element is that the individual must be able to correctly identify the correct oral communication behaviour for the correct situation.

There have been a lot of investigations into why communication apprehension exists and a lot of early research was conducted on the nature versus nurture debate. In terms of nature Beatty et al. (1998 p.199) created the term “communibiology.” They linked genetically inherited neurobiological structures to personality traits. Essentially brain activity precedes any social interaction such as motivation and emotions involved in communication. This means that the nature of communication apprehension is down to the individual brain function with a small acknowledgement to nurture as playing a small factor in communication apprehension. Social theorists suggest the opposite that nurture plays a stronger part in the development of communication skills (Condit 2000) than nature. Eysenck (1997) however suggested that nature and nurture cannot be studied separately both aspects must be considered together.

In the promotion of nurture theories, the initial causes of communication apprehension may never be known but studies seem to indicate that communication apprehension can develop during early childhood years. Research has indicated that children can enter nursery with communication apprehension already established (Phillips and Butt 1966, Wheelless 1971). McCroskey (1997c) stated that a person’s background had a major factor in the creation of this apprehension. There is not one single factor that contributes to communication apprehension becoming a trait in an individual, more a collection of factors such as rewards, parents, skills

development etc. (Daly et al. 1997). Children will repeat behaviours that are reinforced, while behaviours that are not will disappear over time (Bugelski 1971). Therefore if a quiet child is not instructed to be more communicative, that child will remain quiet. Any negative experience in a person with high levels of communication apprehension will have a negative lingering effect and will only increase their reticence to communicate (Richmond and McCroskey 1989). Therefore if a child is frequently told off for being too talkative or noisy, then the probability is that a quiet child will be the long-term result. The typical school environment will also have a potentially negative effect on a quiet child with a high level of communication apprehension. The school environment will reinforce the need to be quiet and the child will remain withdrawn (McCroskey 1977).

Reinforcement seems a valid suggestion as to the way children can develop this communication apprehension trait (Ickes 1971), yet these theories cannot explain the differences between individual members of the same family. There were studies into the backgrounds of the upbringing of children raised in either a rural or suburban areas being the potential source of communication apprehension (Richmond and Robertson 1977, Grutzeck 1970). The findings seemed to indicate that potentially as children who lived in rural areas had less chance to interact with other people, that they suffered from communication apprehension more. However these studies still did not explain the differences found in family members. Data from a later study contradicted this initial finding (Wheless and Scott 1976).

In testing communication apprehension, factors such as gender, culture and background seem to also influence results. Females are commonly reported to be more apprehensive than males in communicating in public, meetings and overall (McCroskey et al. 1982, Andriate and Allen 1984, Jaasma 1997, Lang et al 1998, Donovan and MacIntyre 2004). For writing however female levels of apprehension are lower than males (Pajares and Valiante 1997, Riffe and Stacks 1992) but this is disputed by Clark (2005) and Rechtein and Dizinno (1998) who do not notice any significance difference. In terms of culture, students from countries in the far-east (such as Japan and Taiwan) display higher levels of oral communication apprehension than US students. Reasons for this are that individual assertiveness is not encouraged in Japan and Taiwan either in society or in education (Hsu 2004). As for background, there are findings in the US that suggest that those from a lower socioeconomic background have lower communication apprehension than those from a white collar background (Lang et al. 1998).

3.4 Consequences of communication apprehension

When an individual suffers from high levels of communication apprehension there are only negative associations for that individual such as communication avoidance, poor development of communication behaviours and poor attitude towards communication (McCroskey 1997). Those with high communication apprehension will be less effective communicators and less willing to communicate (McCroskey and Richmond 1987). People who experience high levels of communication apprehension will seek to avoid communication when possible. This avoidance and possible withdrawal will be received poorly by others with lower levels of communication apprehension in the same environment. Those who display poor cognitive processing during interactions, are perceived to be less confident and are characterized as inattentive and unable to recall important information (Allen and Bourhis 1996).

Students suffering from high levels of communication apprehension will not ask questions in class, not attend classes, achieve less and receive poor marks than their peers (O'Mara et al. 1996, Bowers 1986). Students with high levels of communication apprehension prefer large lectures to small seminars (McCroskey and Anderson 1976) and will prefer to sit at the sides or at the back of a class (McCroskey and McVetta 1977). These students will also, in small group seating scenarios choose to avoid positions in seating arrangements that they deem has having high influence (such as at the head of a table) or having a greater likelihood of being asked to participate in a group task (Weiner 1972).

One of the most common methods to avoid communication, especially in small groups, is to remain silent or talk less (Hamilton 1972, Weiner 1972, Fenton and Hopf 1976). One of the main reasons for remaining quiet is due to a feeling of inadequacy compared to others in their group (Kougl 1980). Others with lower levels of communication apprehension may attempt to get these quiet members of the team to talk, but these attempts will reduce over time. The person with high levels of communication apprehension may even respond to these promptings by answering with irrelevant comments as a defence mechanism to remain outside of the group (Wells 1970, Weiner 1972). Individuals with communication apprehension involved in brainstorming or generation of ideas sessions will tend to come up with less ideas than others in the same situation (Jablin and Sussman 1978).

In terms of the workplace, individuals with high levels of communication apprehension choose occupations in which communication requirements are low (Daly and McCroskey 1975). Daly

and McCroskey found that people with high levels of communication apprehension would rather take a lower paid job than take one that paid better and had a higher status. This was due to perceptions that the job may involve greater communication requirements. Employees with high levels of communication apprehension are also far less likely to be promoted, less likely to display job satisfaction and will disclose less about themselves than other people (Hamilton 1972, Richmond and McCroskey 1989). These employees are also seen (according to Richmond 1997) as being less competent than their fellow employees, not good at networking and forming relationships. They may not even get the job they want as they will suffer at interview, or will be viewed as requiring more communication training than their peers who are better at displaying their communication competencies (Daly and Leth 1976).

As a consequence, those with high levels of communication apprehension will have their lives impacted negatively in an economic, academic, political and social way (Gardner et al. 2005). Teachers given descriptions of children with high and low communication apprehension levels, perceived the child with the higher level of communication apprehension to have lower overall academic achievement, not be able to form relationships with their peers and have lower future prospects (McCroskey and Day 1975). Although no links have been found between intelligence and communication apprehension (Bashore 1971, McCroskey, Day and Sorensen 1976), students with high levels of communication apprehension are found to consistently under-achieve in junior schools (Hurt, Preiss and Davis 1976) and college (Scott and Wheelless 1976). McCroskey and Richmond (1976) found that individuals with high levels of communication apprehension can even influence their everyday life choices. These choices included preferring to live in an isolated house in the country rather than in suburban areas to avoid interaction and will even marry the earliest after graduation compared to other students to avoid engaging in dating behaviours.

People with high levels of communication apprehension are perceived less positively by others in the same environment. Individuals with high levels of communication apprehension will withdraw and seek to avoid communication whenever possible (McCroskey 1977). They will be seen to lack assertiveness and responsiveness to others (Knutson and Lashbrook 1976). Lacking assertiveness means that they will be seen as risk adverse, slow to take action and lacking in responsiveness. This leads to communication apprehensive people being seen as cold, uncommunicative, difficult to know, unfriendly, independent and business-like. Even individuals with high levels of communication apprehension themselves, will view others with the same or

greater high levels of communication apprehension in a poor light (McCroskey, Daly, Richmond and Cox 1975). Those with high levels of communication apprehension are seen as less attractive, less competent, exert less leadership and are less extroverted (McCroskey, Daly, Richmond and Cox 1975, McCroskey and Richmond 1976, Wenzlaff 1972, Fenton and Hopf 1976, Wissmiller and Merker 1976).

McCroskey found in his research that an individual with communication apprehension will potentially not view this trait negatively and will have adapted their lives to this condition. Some individuals even claim that it is better to have communication apprehension than to be extroverted and face difficulties that being extroverted can bring, such as talking too much and always pushing for promotion at work (McCroskey 1977). Additional research has found that having a high level of communication apprehension is not all bad with Allen and Bourhis (1996) noting that some students with high levels of apprehension will have a quiet determination to complete tasks and achieve good grades. Watson and Munroe (1990) suggested that communication apprehensives do this to avoid being punished for failure, but they will make life harder for themselves by possessing a fear of asking for assistance or interacting with their peers and academic staff.

The negatives around written communication apprehension are that students with high levels of apprehension will write essays that are short and are further unable to expand ideas (Daly 1977a). Careers are chosen where writing is perceived as not necessary for the job (Daly and McCroskey 1975, Daly and Shamo 1976, Bennett and Rhodes 1988, Wiltse 2006). However research has indicated that the introduction of computers, electronic media and the internet has helped those with written communication apprehension overcome some of these problems, especially when communicating in anonymous on-line electronic forums (Mabrito 2000).

3.5 Controlling or treating communication apprehension

The two main approaches to reducing communication apprehension have been either behavioural interventions or pedagogical interventions (Simons et al. 1995). These two approaches are either an attempt to reduce an individual's communication apprehension or increase the individual's skills involved in communicating.

Pedagogic approaches focus on the use of strategies such as restructuring programs to reduce apprehension (Daly and Miller 1975a). These techniques are complex, contextual and again potentially resource intensive also there is less evidence of the success of this approach.

McCroskey (1977) advances the ideas of testing children as early as possible for communication apprehension to prevent it developing into a trait condition (afraid of all types of communication). If identified early enough McCroskey suggests that teachers should be trained in improving communication techniques and should implement a program of support as soon as possible. Parents can help by using the method of positive reinforcement and encouragement for the child to speak out as suggested by Bugelski (1971).

A study undertaken by Kelly et al. (1990) compared three classes: one that was a basic speech class, one that was designed to tackle communication apprehension and a control class. The results using the PRCA as measurement found that apprehension was lowered in the students more than in the control classes, but the class designed to reduce communication apprehension did not produce results any better than the basic speech class.

Early research into the possible methods used to improve communication at university level (as designed by McCroskey 1970) involved the students being enrolled in a public speaking class and made to speak. Whilst McCroskey found that individuals with moderate levels of communication apprehension responded well to this method, those with high levels of communication apprehension found this to be “harmful in most instances, deeply traumatic in many” (McCroskey 1977 p 91). The suggestion was that using the incorrect intervention to treat an individual’s level of communication apprehension could cause severe distress in their life.

With this method producing results that were highly ineffectual at best and potentially seriously harmful to the individual, other ways were suggested. They included wild suggestions such as hypnosis (Barker et al. 1972), relaxation induced by biofeedback (Fenton and Hopf 1976), reality therapy (Phillips and Metzger 1973), and reduction of state communication apprehension through false heart-rate feedback. Other studies found positive results in reducing apprehension levels by giving specific training in skills such as public speaking (Fremouw 1975) and interpersonal communication (Barnes 1976).

Behavioural intervention has focused more on an individual’s physiological and psychological state which is analysed in relation to attitudes and fears involved in communicating. The attempts to treat the condition (or inventions) include systematic desensitisation (McCroskey 1970, 1972, 1977, Friedrich and Goss 1984), cognitive restructuring (Fremouw 1984), assertiveness training (Adler 1977, Zuker 1983), and visualisation techniques. There is evidence (Berger et al. 1982, Berger and McCroskey 1982), that all these techniques can reduce

communication apprehension. The application of these techniques is normally on an individual basis by qualified practitioners and is time consuming, resource intensive and inappropriate in terms of mass education. Systematic desensitisation is a physiological or mental approach that involves muscle relaxation, identification of stimuli that produced anxiety and then using mental relaxation techniques to reduce the anxiety. Cognitive modification is the ability to create a more positive self-image by identifying negative self-statements, examining the causes of communication apprehension, development of coping mechanisms and then testing these coping mechanisms by practising communication techniques.

The most extensively studied approach in the early identification of communication apprehension has been systematic desensitisation (Heald 1976, McCroskey, 1970, 1972, 1977). This approach has claimed to not only lower an individual's levels of communication apprehension (McCroskey 1972) but also to be the most highly effective help for individuals with high communication apprehension (McCroskey 1977). This method helped the students improve their communication skills in small group (Wells 1970) and public speaking (Goss et al. 1978). McCroskey (1972) claimed that this method of systematic desensitisation is inexpensive and relatively easy to administer. However, further research into this method shows that this sort of method cannot be implemented into a university such as Sheffield Hallam. This is due to the number of students potentially involved, the time constraints, the nature of the training and the responsibilities placed upon the tutor involved in helping the students.

McCroskey's work on systematic desensitisation comes from the work of Wolpe (1958) who in turn was influenced by Pavlov's classical conditioning (1927) which is the foundation of behaviourism in psychology. Wolpe's work derives from his observation of his experiments on cats and realised that these cats exposed to certain fearful situations could overcome their fears through gradual and systematic exposure to that particular fear. McCroskey (1972) when addressing communication apprehension mirrors the work of Wolpe very closely, where there is the need to have three small steps to enable systematic desensitisation. The first step is to identify what is causing a particular anxiety and then to create a scale ranging from what fear is causing the least anxiety rising to the fear that is deemed the most stressful. The second step is to gradually expose the individual to their fear and to help this individual learn a coping mechanism (in this case learning to relax). The final step is to expose the individual to both the relaxation techniques and the anxieties.

McCroskey (1972) actually described the process of how to desensitise either university students or business professionals. Once individuals are identified (by use of the PRCA questionnaire) as having high levels of communication apprehension, McCroskey suggests treating these individuals by placing them in a small quiet room with comfortable chairs in. Relaxing music and instruction provided by Wolpe (1966) on how to relax is played over a sound system and the individuals involved are told follow these instructions and relax. Once relaxed the first low level communication anxiety is played to them and they are told to block out any thoughts of this anxiety and to use the music and the relaxation instructions to reduce their anxiety. This is repeated over and over with the anxiety gradually increasing, but each time the individual is encouraged to relax and block out the anxiety.

The above process is not something that could not be considered being applied at Sheffield Hallam University. There are approximately two hundred students enrolled on the accounting courses and using McCroskey's (1972) assumptions of anywhere between twenty and forty per cent of these students could be suffering from some form of communication apprehension. That means provision needs to be found for between forty and eighty students who needs treating and would respond well to systematic desensitisation. McCroskey (1972) mentions that to treat just five to seven students would require a room the size of a normal classroom and the sessions lasts for one hour, to be repeated five to seven times either over a course of a week or a number of weeks. Timetabling and lack of suitable classrooms (enabling students to relax) would mean that Sheffield Hallam would not be able to replicate these sessions as advocated by McCroskey.

Monetary constraints include the provision of comfortable chairs to enable the students to relax in and either the cost of tutors who would have to be trained in the techniques of systematic desensitisation or the hiring of experts to do the training. Even if all these requirements could be met, this method of systematic desensitisation would not help every individual who took part (McCroskey 1977). Wolpe (1958) claimed that there was a ten per cent failure rate, whilst McCroskey claimed only five per cent. McCroskey warns that this five per cent who failed to respond to his methods should be encouraged to seek professional assistance from a psychologist. Whilst McCroskey claimed that systematic desensitisation methods can be safely used by tutors, there are others who advise that before a program of help is designed, there must be at least one person involved who has a background in counselling or clinical psychology, or has been trained by such a person (Barrick 1971).

So despite the claims of McCroskey (1972) that individuals were “cured” (p264), due to the lack of training, expertise and resources over the decades, systematic desensitisation has been used less and less in addressing anxiety disorders such as communication apprehension. There is recognition that the initial use of systematic desensitisation was in a controlled experiment, the results are not applicable in normal academic circumstances and the reduction in communication apprehension was not as great as first thought (Beatty, McCroskey and Heisel 1998).

3.6 Studies carried out amongst accounting students

Studies of communication apprehension in universities suggest that one in four students suffers from verbal communication apprehension at least once a week and this apprehension was not affected by age, sex, background etc. but was more due to personal behaviours and appearance in front of others (Bowers 1986). In terms of specifically researching accounting students, the first study undertaken was by Stanga and Ladd (1990) exploring communication apprehension amongst accounting and business studies undergraduates. They concluded that accounting students did indeed appear to have above average levels of oral communication apprehension. This was followed by Simons, Higgins and Lowe (1995) who found that not only were oral communication apprehension levels high in accounting students, but their written communication apprehension levels were also above average. Accounting students who possess high levels of communication overall are more apprehensive about communicating in public speaking, groups and meetings (Borzi and Mills 2001). The only situation that research noted that accounting students were as confident as their business studies colleagues in communicating was in informal conversations.

Accounting students show increased levels of communication apprehension as the perceived audience size increases and the context moves from social to public speaking. This apprehension becomes worse for female accounting students (Simons et al. 1995) especially if they are put in a public speaking and formal meeting scenarios (Hassall et al. 2000, Gardner et al. 2005, Arquero et al. 2007) but this viewpoint has been contradicted by Stanga and Ladd (1990) who reported that male and female accounting students had equal levels of communication apprehension.

The PRCA instruments (questionnaires) of McCroskey have allowed studies of undergraduate accounting students to be replicated worldwide. There have been studies in the UK (Hassall et al. 2000) and other English speaking countries such as Canada (Aly and Islam 2003), New

Zealand (Gardner et al. 2005) and Ireland (Byrne et al. 2009). All have reported accounting studies students to have higher than average levels of verbal communication apprehension. The validity and reliability of the PRCA seems even to be successful when translated into other languages such as Spanish and report the same consistent findings that accounting students have high levels of communication apprehension (Arquero et al. 2007).

There are fewer studies investigating written communication apprehension than verbal communication apprehension despite the acknowledgement that writing skills are as important as verbal communication skills in organisations (Scott et al. 1978). There are strong links to demonstrate that accounting students who have high verbal communication apprehension will also have high written communication apprehension and vice versa (Smith and Nelson 1994, Simons et al 1995, Arquero et al. 2007, Marshall and Vernono 2009). These apprehension findings for writing in accounting students are again reflected by research conducted outside of the US (Hassall et al. 2000, Gardner et al. 2005, Arquero et al. 2007). In terms of gender effecting written communication apprehension, there are confusing results, with some reports stating that female accounting students are less apprehensive regarding writing tasks (Riffe and Stacks 1992 and Elias 1999) while other studies reported the opposite (Cayton 1990, Simons et al. 1995, Faris et al. 1995, Gardner et al. 2005, Arquero et al. 2007). Several studies including Hassall et al. (2000), Arquero et al. (2007) have noted the importance of students' previous educational background. Students from a humanities background are less apprehensive than their counterparts from a scientific background.

Importantly Daly and McCroskey (1975) found evidence that communication apprehension was significantly related to the perceived desirability of certain professions (including accounting). Individuals with higher than average levels of communication apprehension will be attracted towards professions that they perceive as having relatively low levels of requirement for communication skills. A major problem for the accounting profession will occur if students perceive the role of the accountant as not requiring a high level of communication ability. This means that those students with high levels of communication apprehension will be attracted to the profession because of this misconception about the required levels of communication. Individuals with high levels of communication apprehension will then enter the profession when actually one of the key skills required for future accountants is that of communication (Howieson 2003).

Hassall et al. (2006) and Ameen et al. (2010) have evidenced that students joining accounting courses have above average levels of communication apprehension suggesting that their perception of accounting is of a profession necessitating low levels of requirement for communication skills. There is a clear difference evidenced here between the need for communication skills as perceived by the accounting profession, those joining the profession and those who have influenced this vocational choice. This expectations gap needs to be addressed by revising the image of the accounting profession, particularly in terms of the communication requirements needed and the views held by students when making their choice of career and the people assisting in the making of these choices.

It is also concerning that levels of communication apprehension in accounting students are not affected by changes to the curriculum to increase vocational communication skills. The major concerns are that despite changes to the curriculum, communication apprehension levels remained unchanged in accounting students (Allen and Bourhis 1996; Hassall et al. 2000, Aly and Islam, 2003, Gardner et al. 2005, Arquero et al. 2007). Fordham and Gabbin (1996) noted that the communication focus in the curriculum was not enough to lower communication apprehension levels in students and emphasised the need for accounting educators to pay special attention to tackling communication apprehension specifically in their module designs.

3.7 Communication apprehension and Self-efficacy

McCroskey has published over two hundred articles and thirty books in relation to the subject of communication. In the twenty years between 1977 and 1997, communication apprehension became the single most researched concept in the field of communication studies (Wrench et al. 2008). A substantial body of work has been created over this time and in 1997 Richmond et al. compiled a bibliography containing one thousand references of communication apprehension.

McCroskey compared his findings of individuals identified as possessing communication apprehension with the work of Phillips (1968). Phillips also identified individuals with the inability to communicate, which Phillips claimed was due to these individuals being reticent. McCroskey makes it clear that communication apprehension is different to reticence due to the fact that communication apprehension is focused on the specific fear or anxiety to communicate. McCroskey claims that his work is closer to audience sensitivity (Paivio 1964) and shyness (Zimbardo 1977) and the only difference is the disciplines in which they were created. Audience sensitivity was created in developmental psychology, shyness was created in social

psychology and communication apprehension was created in speech communication disciplines (McCroskey et al. 1976, McCroskey and Richmond, 1976 and Sorenson and McCroskey 1977a).

McCroskey's work spanning over forty years only tested the use of systematic desensitisation. Systematic desensitisation became less popular due to the increase in other techniques such as flooding, implosive therapy, and participant modelling (McGlynn et al. 2004). Other academics have suggested methods to help alleviate communication apprehension. Stanga and Ladd (1990) suggested using assertiveness training. Assertiveness training was defined as the ability to communicate thoughts and emotions with confidence and skill (Adler 1977). There has been a renewed focus on the belief that public speaking is a task that can be successfully completed by individuals with high levels of communication apprehension, but there must be an associated attempt to decrease the threat of punishment for failure in the completion of this task (Allen et al. 1989). Pedagogic approaches have focused more on the individual's communication task with interventions including skills training and practice of public speaking.

Other key skills are required by educators in tackling communication in individuals. These include recognising communication apprehension as normal amongst students (Connell and Borden 1987, Grace and Gilsdorf 2004) and creating an atmosphere of trust, of allowing the student to fail (Neer and Kircher 1989). Educators should be well trained in these techniques, especially in the recognition of the need to empathise and be sympathetic with the students (Hassall et al 2000). Application of these common approaches of systematic desensitisation and assertiveness training would be outside the typical accounting curriculum and therefore the necessary teaching resources would not exist (Saudagaran 1996). In education it would appear that the focus in improving communication skills is on the task of communicating a task rather than addressing the students' attitudes and fears (Robinson 1997). McCroskey (1976) does suggest using a mixture of attitudinal and skills training. Unfortunately from a mass-market educational perspective this approach is again unfeasible. This is because it requires large amounts of one to one teaching in beliefs and fears (Brook and Platz 1968, Phillips and Metzger 1973, McCroskey 1976, Allen et al. 1989, Stanga and Ladd 1990, Ruchala and Hill 1994, Thomas et al. 1994, Kelly and Keaten 2000). Existing interventions are too costly for 'mass education' and most modern universities. Therefore for Sheffield Hallam University a more efficient, but effective, method of reducing communication apprehension was needed. McCroskey encountered other theories of self-belief and noted the comparisons between self-esteem,

confidence and self-belief in the achievement of communication tasks and the reduction of communication apprehension in an individual (McCroskey et al. 1977).

Another theory that was closely linked to self-esteem was that of self-efficacy (Bandura 1977a). McCroskey noted that self-efficacy had been identified as a potential theory to overcome a phobia such as the fear of communicating but did not investigate this connection any further (McCroskey and Richmond, 1990). Self-efficacy originates from the work of Albert Bandura a prominent Stanford psychologist who with his years of research used a behaviourist and social learning construct to create a Social Cognitive Theory (SCT) framework. Social Cognitive Theory and its variable self-efficacy has been labelled “one of the few grand theories that continues to thrive at the beginning of the 21st century” (Zimmerman and Schunk, 2003, p. 448).

Social Cognitive Theory has its foundations in the work of Holt and Brown (1931) who suggested that all actions taken by animals are to fulfil the psychological needs of feeling emotion and desire, with one of their major constructs being focused on the imitation of others (social learning). From this social learning idea, Bandura was able to conduct a series of studies (the Bobo Doll experiments) on children’s behaviour after the children observed an adult beat up a doll, with the adult either being rewarded or punished for those actions (Bandura, Ross and Ross 1961, 1963). It showed that people not only learn by being rewarded or punished for their individual behaviour (behaviourism), but they can also learn indirectly from watching somebody else being rewarded or punished (observational learning). This observational learning is particularly strong in children, where they have a social model of behaviour gained by watching the behaviour an individual with authority or higher social status such as a teacher or a parent. Bandura created a surge in the interest of observational learning and also gave insights into the potential influences on children’s behaviour by other mediums such as violent television programmes.

From these experiments, Bandura produced his Social Learning Theory (1977b) and Social Cognitive Theory (1986) claiming that people learn through observing, imitating, and modelling the behaviour of others. Bandura argued against traditional theories of learning that suggested that an individual’s behaviour was created only by learning from direct experience. Bandura stated that this was incorrect, an individuals’ learning was more influenced by observation. This vicarious experience allowed people to learn quickly rather than build up patterns of behaviour by trial and error.

In the same year, building on the Social Learning Theory, he published “Self-efficacy: Toward a Unifying Theory of Behavioural Change” (Bandura 1977a) which presented a direct correlation between a person’s perceived self-efficacy, outcome expectancy and behavioural change. Self-efficacy comes from four sources: “performance accomplishments, vicarious experience, verbal persuasion, and physiological states” (p171). Bandura also introduces the term Outcome Expectancy, which is when an individual learns a particular behaviour they also need to be aware of its potential outcome, especially when they intend to repeat this behaviour. This outcome is learnt from observing another (modelling) and will have an impact on cognition and future behaviour as to whether the individual expects to be rewarded or punished for this new behaviour. These expectancies are heavily influenced by the environment that the observer is in and any individual who helps the observer see what a particular choice of action will lead to.

The full definition of Self-efficacy by Bandura (1977a) was given as the belief in “in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). The term came from Banduras' observation of individuals with phobias. Bandura noted that in a controlled environment the patient was able to overcome their fears (such as the inability to stroke a dog), but once they were out of the controlled environment, despite being given control techniques on how to overcome their fears the patient quickly reverted to techniques of avoidance. This definition has been split further into general self-efficacy and social self-efficacy beliefs. General self-efficacy can be referred to as an overall self-efficacy and social self-efficacy has been linked to shyness and social anxiety (Schwarzer and Knoll 2007). General self-efficacy belief is more relevant to this thesis as it is the belief in an ability to undertake a task, in this case communication that is being studied. However the two are very closely linked and if one or the other is affected, there is a tendency to get an increase in self-efficacy in all areas of an individuals’ life including reduction in shyness and social anxiety.

The origins of efficacy can be seen as a learning curve between direct and mediated experience. Self-efficacy draws on other theories regarding the development of the self. Attribution theory (Heider 1958) looks at experiences and how they affect the individual’s perception of themselves. This theory draws on three major topic areas, Locus, Stability and Controllability. Locus of control (Rotter 1966) is a concept that focuses on the amount of affect an individual has on a certain outcome. Rotter’s study of personality demonstrated that outcomes of a person’s behaviour are either due to an individual’s actions or the individual has no influence on the result at all. Events are either personally or externally determined. Anxiety activates

defensive behaviour (Wolpe 1974). In relation to locus of control people with high levels of self-efficacy will see failure in a task being the result of external factors whereas those with low levels see failure as something they have done. After people become adept at self-protective behaviours they perform them in potentially threatening situations without having to be frightened. The link with self-efficacy is that if personal attributes have caused either success or failure, then the levels of self-efficacy will be affected either favourably or adversely.

Bandura (1977b) introduced the term self-efficacy as a key component in social cognitive theory. Social cognitive theory is centered round the development of the individual by observation of other people's actions. These observations help shape social behaviours and cognitive processes over time. Self-efficacy is developed from external experiences and self-perception in relation to a social group and has an effect on future decisions taken. In 1986 Bandura extended the theory that human behaviour cannot be explained simply by the effect of external environmental forces. Individuals are said to have an internal system of self-regulation that allows an individual to exercise control over their thoughts, feelings and actions. This means that individuals should be able to self-regulate their behaviour, reflect on their actions, choose alternative courses of actions and learn from others. Bandura insists that human behaviour is the result of a mix of this self-system of regulation and the external environment. Individuals are able to also differentiate between knowledge and behaviour. Knowledge of a situation does not act as a perfect predictor of how an individual will act in a given situation. From this supposition, Bandura (1986) suggest it is more the beliefs that people hold about their abilities and how the outcome of their efforts influences their behaviour. Self-efficacy he argues, has the greatest influence on their behaviour, which goes some way to explain how people with the same knowledge and skills may behave very differently. The reason why people do better or worse than predicted can be better predicted by their beliefs than what they are actually capable of achieving.

3.7.1 Outcome Expectancy and the Theory of Planned Behaviour

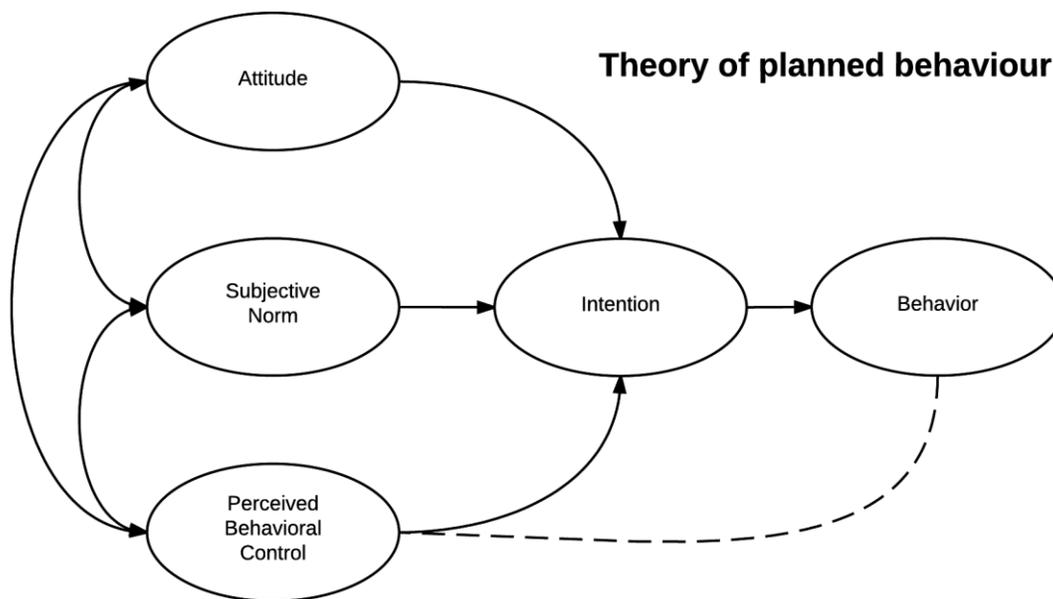
Outcome expectations are related to self-efficacy beliefs of individuals who believe they are good at a particular undertaking will also expect successful future outcomes for undertaking that activity. For example, students who are confident in their academic abilities will expect to obtain high marks in their exams and coursework. The opposite is also true of those who lack such confidence. Students who doubt their academic ability see a low grade on their exam even before they begin the exam. Bandura (1986) suggested that because the outcomes that people expect are the result of their belief in what they can achieve in a task, outcome expectations are thought to be unlikely to contribute to predictions of behaviour. Therefore, under normal circumstances, behaviour is driven more by self-efficacy beliefs than by outcome expectations because individuals' assessments of their abilities contribute to the outcomes they are expecting.

This can also mean also that an individual makes personal judgements in their ability to achieve certain goals in relation to others (Bandura 1997). Self-efficacy is a self-evaluative technique that has the ability to influence decisions about what behaviours to engage in, how much effort is needed to overcome obstacles, and the ultimate mastery of a specific behaviour. The thought process behind this attitude was defined as "judgments of how well they will be able to perform in given situations" (Bandura, 1986, p.392). People with differing levels of self-efficacy view the world in very different ways. People with high levels of self-efficacy are of the opinion that they are in control of their own lives, which are shaped by their own actions and decisions. People with low levels of self-efficacy obviously feel that they are not in control of their lives. This is closely linked with other social learning theories, such as the observations of Ormrod (1999) who demonstrates on how individuals learn behaviours from each other and how they understand the limits of their ability by either being successful or failing at a particular skill. Self-efficacy in this context reflects a person understanding what they can offer in a group setting. Self-concept theory (McAdam 1986) looks at the way people use multiple experiences, past and present, to define themselves. This means that many of the successes and failures experienced are linked to how people view themselves and in their relationship with others. This perception changes over time and is dynamic and changes in line with new experiences.

There is not one model of self-efficacy that fits all, each model must be tailored to suit every individual study (Bandura 2006). Bandura expands his theory of self-efficacy using behavioural intentions influenced by the Theory of Planned Behaviour (Ajzen 1991). Both expectancy

theories as advocated by Bandura and Ajzen belong to a larger group of psychological theories described as Expectancy Value (EV) theories by Maddux et al. (1986). The Expectancy-Value theory was developed in the 1950s by John Atkinson (1957) and expanded upon by Eccles in the field of education (1983) in an attempt to understand individual's motivation to achieve a task. The findings were that individuals were motivated by their expectancies (confidence) and values (how useful or interested) they were in the task. A model of expectancy and values was then developed by Fishbein and is described as the Expectancy Value Theory (EVT) which later became known as the Theory of Reasoned Action (TRA) after work with Ajzen that created a set of complex equations to create a measure of attitude. Attitude is a factorial function of values and beliefs and becomes a Behavioural Intention. In this model, intention is determined by an individual's evaluation of the outcome of their behaviour (attitude) in relation to perceived social pressure from others (social norm) (Fishbein and Ajzen 1975).

The link with Bandura's self-efficacy (1977) comes with the addition of perceived behavioural control which Ajzen adds to the TRA thereby creating his own model of behaviour called the Theory of Planned Behaviour (Ajzen 1991). This third element was added because it was felt that the TRA was applicable to only to behaviour under complete control of the individual, whereas other behaviours were affected by other thought processes such as past experience.



Source: Ajzen (1991)

In combination, the three elements of attitude, subjective norm and perceived behavioural control will influence the individual's intention to act. If the person's attitude, social norm and perception are strong, then there is the potential to act. However previous experience or perception of difficulty may actually prevent them from acting on that thought. Perceived control is the perception an individual has towards their behaviour. Ajzen believed that the strength of an individual's cognitive control belief, affected by perceived importance of that belief, created the overall behavioural control thoughts of that individual. These control beliefs that had either a positive or negative effect on the perceived difficulty of the future behaviour were formed by past experience, information of past experience from other sources and the experiences of friends and colleagues (Ajzen 1991).

The Theory of Planned Behaviour is thought of as one of the most powerful explanatory models in psychology with over one thousand articles published on TPB on diverse subjects as weight loss, exercising, blood donation, drinking alcohol, exposure to sunlight, and career choice (Freeneay and O'Connell 2012). There has been criticism of this theory as overly simplistic (Terry 1993) and that there is weak internal reliability of the constructs (Beale and Manstead 1991). Ajzen in 1991 recognises that his theory of planned behaviour is closely linked to self-efficacy, yet makes the distinction between in that the theory of planned behaviour measures perceived control an individual has over their actions, whereas self-efficacy is about belief in their ability to achieve the task.

Self-efficacy is not a measure of actual skill but rather a measure of an individual's perception of their ability to perform a specific behaviour (Bandura, 1977a, 1982, 1997). Low self-efficacy will lead people to believe tasks are more difficult than they really are, resulting in increased stress, poor planning of tasks and it can even lead to erratic, unpredictable behaviour. Bandura sought to measure self-efficacy by level, generality and strength across various activities and in various contexts. In defining level, Bandura explores different perceptions on a particular task, such as the spelling of words with increasing levels of difficulty. Generality is exploring the transferability of self-efficacy beliefs across activities (e.g. the ability to communicate well in both groups and public speaking activities). If an individual believes that they cannot do one thing it will negatively affect their beliefs about their ability to achieve another similar task. Strength is concerned with how fearful individuals are of achieving a certain goal. If a person has high levels of self-efficacy they will take on a task if they feel that they can succeed.

People with high levels of self-efficacy believe that tasks are there to be mastered not avoided. Self-efficacy represents the personal perception on the ability to achieve goals or tasks and motivation towards completing a task will be strong in people with high levels of self-efficacy. If an individual believes that they will succeed they will be more inclined to attempt a task, put more effort into completing the task and be prepared to maintain this effort for a longer period of time despite encountering obstacles. Individuals will attempt tasks where they have high self-efficacy and avoid tasks where they have low self-efficacy. Individuals with self-efficacy lower than their actual ability, are therefore unlikely to develop their skills. However having less self-efficacy in certain academic circumstances may be useful (Jernigan 2004) were a negative feeling such as being poor at a subject may be a motivator for some to actually try to improve and not avoid the task ahead of them.

In social learning analysis, people will approach, explore and try to deal with situations within their self-believed capabilities and will avoid transactions with stressful aspects of their environment they perceive as exceeding their ability. If a person feels that they will fail because of static influences such as the fact that the task is difficult and that they have no personal influence on that particular task then they will not succeed. This is then linked to controllability (of emotions) which is all about personal control. If that person knew that the task is difficult but has not worked hard enough, that person will feel guilty. People with low levels of self-efficacy will try to avoid the task altogether or will spend less time trying to overcome the problem and will not develop and become successful in achieving their goals or objectives.

Care has to be taken with high levels of self-efficacy. Too high and a person who is too confident in their ability has every chance of under-estimating the challenge of the task and therefore fail. A self-efficacy level a little above actual ability seems optimum in that it encourages individuals to attempt tasks and therefore gain experience from that task increasing a person's own belief in their ability to succeed in specific situations (Csikszentmihalyi 1997). This belief in a person's ability cannot just affect a specific scenario but also can affect a person's social interaction in almost every way.

3.8 Sources of self-efficacy

The success of self-efficacy has been noted in many areas including medical and clinical fields such as; phobias (Bandura 1983), stress (Jerusalem and Mittag 1995) and addiction (Marlatt et al 1995). Bandura's focus (1977a) was not so much on the existence of self-efficacy but in finding a solution to remove the problem. His solution was through four principal sources of self-efficacy; performance accomplishments, vicarious experiences, verbal persuasion and physiological states. It is from an early stage in life that these preconceptions about ability are formed and therefore it is best to address these problems in the early stages of a person's development. However self-efficacy has found remedies for an individual later in their life. The strength of self-efficacy treatment is such that not only can it address the specific apprehension that an individual has; it also can increase the same individual's belief in their ability to achieve other goals, tasks and challenges in their life.

The behaviour of people is not controlled by a single action but by aggregate consequences (Baum 1973). People process and synthesize feedback information over long intervals. The correct behaviours will not increase if the individual is not rewarded for displaying that correct behaviour (Estes 1972). Efficiency expectations are a major determinant of people's choice of activities and how much effort they will sustain in dealing with stressful situations. Removing dysfunctional inhibitions and defensive behaviour cognitive processes plays a prominent role in the acquisition and retention of new behaviour patterns. Bandura writes around self-efficacy as psychological procedures creating and strengthening expectations of personal efficacy and outcome expectations in a person's estimate that a given behaviour will create a certain outcome. An efficacy expectation is the conviction that one can successfully execute the behaviour required to produce the outcomes. In this system, expectations of personal mastery will affect both initiation and persistence of coping behaviour. The strength of people's convictions in their own effectiveness is likely to affect whether they will even cope with given situations. People will fear and tend to avoid threatening situations. Self-efficacy can have a direct influence on choice of activities, settings and coping effort once initiated. This effort is the key; the stronger the perceived self-efficacy, the more active the efforts. Individuals who persist in subjectively threatening activities that are relatively safe will gain corrective experiences, reinforce their sense of self-efficacy and eventually eliminating their defensive behaviour. Those who do not engage or stop participating will obviously retain their self-debilitating expectations and fears for a long time. Reinforcement operations affect behaviours; creating expectations

that behaving in a certain way will produce anticipated benefits or avoid future difficulties (Bolles 1972b). Self-evaluative reactions are also important in changing behaviours (Bandura 1976b, 1977a) by making self-rewarding reactions conditional on attaining a certain level of behaviour; people create self-inducements until their performances match self-prescribed standards.

Performance accomplishment is seen as the most powerful way of overcoming self-efficacy and is described by Bandura (1977a) as experience (or mastery). Successful accomplishments of a task raises self-efficacy (failure lowers self-efficacy), but it must be seen as a real accomplishment not artificial bolstering of self-esteem. There is no point telling someone they can do it if experience informs them otherwise. Failure can have a minor or major impact dependent on the timing and total pattern of experiences. Failure should be permitted and the person who fails will benefit if they are given the opportunity to learn from their mistakes and then given the chance to attempt a similar task again. If that task is met with success it can strengthen self-motivated persistence if it is made clear that sustained effort will overcome obstacles. Once established by experience, self-efficacy can generalise to other situations in which performance was self-debilitated by pre-occupation with personal inadequacies (Bandura et al. 1975). Not only do they get improved performance feedback they also get a general skill for dealing with unsuccessful situations, a skill that can overcome dysfunctional fears and inhibitions in everyday life (Bandura et al. 1975).

Vicarious experience is in essence observing how other people overcome similar aspects of inadequacy. Seeing others perform without adverse consequences can lead to increased levels of self-efficacy. If others can do it, so they can do it to (Bandura and Barab 1973). It is a less effective source of help than personal experience, the results are weaker and the observer is more likely to revert back to their original low levels of self-efficacy if they have another negative personal experience. For this technique to succeed there needs to be the observation of a person who is perceived as originally not capable in a task such as public speaking, taking steps to overcoming obstacles and successfully complete the task. The vicarious experience method will not work if the observer watches someone who finds the task of communicating easy and then performs a related task with ease (Kazdin 1973). Showing gains made by effortful coping behaviour makes for a more positive impact. Clear outcomes must be provided in this change of behaviour or else it will have less impact on the efficacy in which the outcomes of the behaviour remain ambiguous. (Kazdin 1974b). Many examples of sustained effort can enhance

observers' perceptions on their own abilities. Showing the individual suffering with low levels of self-efficacy multiple people with multiple levels of self-efficacy adopting their behaviour to increase self-efficacy in a task can lead to the individual identifying with other people's success and increasing their own personal self-efficacy (Bandura and Menlove 1968).

Verbal persuasion is simply the ability to persuade someone with low levels of self-efficacy that they can achieve a certain task. This is the easiest and the most common method as it is the most readily available yet the most ineffective in relation to performance accomplishments and vicarious experiences. People are led to believe (or think) through suggestion that they can achieve a certain task that has overwhelmed them in the past. The results using verbal persuasion are not very strong due to the fact that prior personal experience of failure in a task can still convince an individual that they are not good at that task. No matter what efficacy can be increased by suggestion, this can be readily be extinguished by a new experience of failure (Lick and Bootzin 1975). Simply informing people that they will increase their ability in a task (and therefore increasing their self-efficacy) will result in people not believing in what they were told especially when it contradicts what they have experienced.

Social persuasion can have an impact on reducing self-efficacy if people are socially persuaded that they possess the capabilities to master a difficult situation and can be seen to master that situation. The impact of verbal persuasion will vary substantially depending on the creditability of the persuader, their prestige, trustworthiness and expertise. The more believable the person doing the persuading, the more receptive to change the individual with low self-efficacy is to change. If verbal persuasion is to be used there must be room in any programme to allow for personal effective performance. If that person after persuasion is not given the chance to attempt a task again, this will discredit the persuaders and undermine self-efficacy. There must be a mix of personal experience and social persuasion.

Emotional arousal is the experience of stress, or an anticipation of fear and anxiety in any given performance. It is the effect of self-efficacy in coping with a given stressful situation. Stress can work in two ways it can either be seen as debilitating or motivating (Weiner 1972). The more stressful the situation, generally the reaction is in the negative and it will affect performance. Individuals are therefore likely to expect success when they are not stressed. Individuals who come to believe that they are less vulnerable than they previously assumed are less likely to generate frightening thoughts in threatening situations (Bandura 1977a). With the fear of a stressful situation and the fear of their own ineptitude, individuals can create in themselves

anxiety that far exceeds the fear actually experienced during the threatening situation. The help in such issues is created by a mix of vicarious experience and personal experience again.

Physical arousal comes from the appraisal of the situation, such as a job interview. This appraisal may swing either way as something to be motivated by or to avoided (Mandler 1975). People who see this as fear stemming from personal inadequacies are likely to perform worse (Sarason 1976) focusing on these inadequacies rather than the situation. Help in this instance is by creation of modelling situations, whereby the student experiences the workplace without having the threat and fear of making a mistake in a caring and nurturing situation (Bandura and Barab 1973) will help to increase self-efficacy in the task set. This repetitive exposure to such stresses eventually reduces the level of stress in an individual. Avoidance of such anxious situations is not a good idea and must be discouraged as it prevents the development of coping behaviours such as the ability to eliminate fear arousal and managing any adverse aspects of an environment (Averill 1973).

Regardless of the methods involved, results of comparative studies attest to the superiority of performance based solutions. Bandura in 1986 suggested that to achieve lasting changes in self-efficacy there must be participation, using powerful induction methods to develop capabilities combined with self-directed reflection on the mastery of the subject. Independent performance is important because it creates a safe environment to former threats and reduced emotional arousal or stress confirms increased coping skills. If the independent performance tasks are completed well then this only reinforces the positive and increases self-efficacy beliefs in a task. The idea is to create a programme of extensive self-directed performance of formerly threatening activities under progressively challenging conditions. Success with minimum effort is likely to gain greater reduction in self-efficacy as opposed to rewards created with high levels of effort. Thought process is important. The task must be seen as not easy but easy to master with a little bit of effort. People who experience failure but then go on to accomplish the task create greater reductions in their self-efficacy (Bandura 1977a). Through this method, the individuals rapidly lose their fears so that ultimately they can cope unassisted. Self-directed mastery experiences are then arranged to reinforce this newly gained personal efficacy.

There is a need to create a long-term programme of continuous professional development for those individuals who are identified as having low levels of self-efficacy as a few unfavourable experiences can return a person back to their original state. Performance desensitisation produces substantially greater behavioural change than symbolic desensitisation (Strahley 1966,

LoPicollo 1970, Sherman 1972). Symbolic desensitisation reduces autonomic response to imagined but not real threats. Performance desensitisation eliminates autonomic response to both imagined and actual threats and in less time (Barlow et al. 1969). Real encounters with threats produce results decidedly superior to imagined exposure which has weaker effects (Emmelkamp and Wessels 1975, Stern and Marks 1973). Prolonged encounters are more likely to increase improved behaviours as opposed to short encounters (Rabavilas, Boulougouris and Stefanis 1976). This solution allows the incapacitated to rapidly lose their fears and even to reduce fears and inhibitions in other aspects of their lives (Bandura 1977a).

People displaying fears and inhibitions centered on a certain task such as communication will adopt avoidance techniques and will not do what they fear. In implementing participant modelling, teachers can structure the environment so that students can perform successfully despite their weaknesses. This includes graduated tasks, variation in the severity of the threat itself and joint performance (Bandura, Jeffery and Wright 1974). One note of caution is that expectations that have served self-protective functions for years are not easily discarded. A number of factors including social, situation and temporary experiences will have had their collective affects. They may behave boldly in situations that are deemed as safe yet will revert to old behaviours of avoidance in less secure conditions. Achieving reductions in fear in a controlled and safe environment such as the classroom maybe immediately replace by old levels of self-efficacy if the individual believed that success in class will not lead to success in the real world.

3.9 Link between communication apprehension and self-efficacy

Bandura recognised that levels of communication apprehension were related to and affected an individual's belief in their ability (or competence) to communicate, but he did not directly relate any of his work with self-efficacy (McCroskey and McCroskey 1989). Several personality variables have been correlated with communication apprehension and these examples have included extroversion, assertiveness, self-disclosure and self-control. Other findings have reported consistent negative associations between communication apprehension and educational achievement (Bourhis and Allen, 1992). Therefore it is perhaps straightforward to compare communication apprehension, the fear of communicating (McCroskey et al. 1976), with self-efficacy, the lack of belief in accomplishment of a task (Bandura 1977). In this case, the lack of belief in the task will be that of lack of belief in communicating.

Many similarities can be drawn between the two theories, especially as either high levels of communication apprehension or low levels of self-efficacy can affect accounting students not just in terms of communication abilities, but also in terms of their complete academic results and choice of future careers. Communication skills are recognized as critical to effective job performance, success in an organisation and ultimately career advancement (Kavanagh and Drennan 2008). A core managerial competence is the ability to present to multiple audiences. If most people are afraid of public speaking, this lack of self-efficacy in the ability to communicate can be a reason for this anxiety and lack of skill attainment (Maddux et al. 1988, Rubin et al. 1993). Self-efficacy has been included as one of the four dimensions that create self-evaluations, alongside locus of control, neuroticism and self-esteem (Judge et al. 1997). These four dimensions have been used to successfully predict individual's feeling around job satisfaction and job performance (Judge et al. 1998, Bono and Judge 2003, Dormann et al. 2006). Specific measures of academic self-efficacy refer to a student's beliefs that they can successfully engage in and complete course-specific tasks such as completing assignments and passing the course (Bong 1997, Soffa 2006, Rushi 2007). Both Schwarzer and Hallum (2008) and Schoen and Winocur (1988) have studied self-efficacy in teachers and how these teachers viewed their ability to meet the demands and challenges of the teaching profession.

Academic self-efficacy has been developed as a predictor of academic performance by Pajares (1996) and this approach has also been developed in an accounting context by Christensen et al. (2002). Feelings of self-efficacy in relation to academic work can affect pro-social behaviour with a negative correlation with moral disengagement (excuses for bad behaviour, avoiding responsibility, blaming others). Other immediate similarities include the avoidance techniques displayed by individuals when faced with a task that they do not wish to undertake. Students with low levels of self-efficacy will adopt severe avoidance techniques such as choosing careers that they feel comfortable in and not require them to communicate (Lent and Hackett 1987, Hackett and Lent 1992, Ackerman et al. 2011) and specifically in accounting (Tourna and Hassall 2006, James 2008). Allen and Bourhis (1996) and McCroskey et al. (1976) found relationships between high levels of communication apprehension and negative academic performance.

McCroskey et al. (1977) did study communication apprehension in relation to self-esteem and noted that an individual perception of self significantly affected attitudes and behaviour. The results saw self-esteem as a causal inverse relationship; if a person had low self-esteem they

would have high levels of communication apprehension. Other studies also have found a negative relationship between self-esteem and communication apprehension (Colby, Hopf, and Ayres 1993). Hopf and Colby (1992) investigated whether communication apprehension was more strongly correlated with self-efficacy or self-esteem. The findings were that a much stronger inverse relationship existed between self-efficacy and communication apprehension than between self-esteem and communication apprehension. They suggested from these findings that communication anxiety came from an individual's feeling of powerlessness in the situation. From these studies several teaching strategies and interventions were developed to help students experiencing trait communication apprehension and low self-esteem (Colby Hopf and Ayres, 1993), but these were based around the weaker visualization desensitization, rather than the more powerful performance desensitization. However care must be taken not confuse self-efficacy with self-confidence or self-esteem. Self-esteem relates to a person's overall feeling of worth, as opposed to completing a task and again it has been linked that improvement in self-efficacy can improve a person's feeling of self-esteem (Parajes and Valiente 1999). This was due to the fact that self-esteem is a function of an individuals' interaction with others (they need to be praised by another to increase self-esteem) and if a person lacks communication skills they are negatively perceived (McCroskey, Daly, Richmond and Cox 1976).

Other researchers, did not directly allude to self-efficacy but did observe that an individual's belief in their ability to communicate affected communication apprehension levels. This belief was referred to as perceived communication competence (MacIntyre 1994, McCroskey and McCroskey 1988). Once this communication competence had been identified, researchers tried to identify personality factors that might influence this competence (Richmond and McCroskey, 1989), but it was found that the best test of an individual's ability to communicate is still to test the individual's level of communication apprehension (McCroskey and Richmond 1987, 1991).

Another issue is that most studies only investigate the levels of either communication apprehension or self-efficacy in a group or set of individuals and do not discuss the root cause of the issue. Stanga and Ladd (1990) and Ruchala and Hill (1994) note that despite the importance of communication skills, relatively little is known about the obstacles that accounting students face when attempting to develop their communication abilities. Suggestions for these obstacles include the observations of Richmond and McCroskey (1989) who stated that communication apprehension in individuals as being caused by "trait" or "state". They explained an individual's

general unease in communication situations is seen as being a personal “trait”, whereas the fear of communicating in specific situations is referred to as “state”. Biggers and Masterson (1984) supported the state categorisation indicating that this would give certain individuals higher levels of anxiety. Beatty et al. (1998) saw communication apprehension as a biological phenomenon. They argued that previously trait communication apprehension was largely seen as the result of a social learning process but in fact there was little evidence to support communication apprehension primarily as a result of biological functioning with individuals who had high levels of communication apprehension having a neurotic, introverted personality or temperament. This behaviour can then be reinforced by experience and produces an individual in whom the potential communication situation produces anxiety, behavioural inhibition or avoidance techniques.

The main link between communication apprehension and self-efficacy comes as psychology moved away from systematic desensitization. This was the main solution for communication apprehension as advocated by McCroskey, but its popularity waned as this desensitisation was claimed to be difficult to replicate outside of a controlled experiment environment (Beatty, McCroskey and Heisel 1998). Psychology began to focus on new techniques to help behavioural anxiety such as flooding, implosive therapy, and participant modelling (McGlynn et al. 2004). Implosive therapy and flooding are similar to each other and similar to its predecessor systematic desensitization. Implosive therapy asks the individual to imagine their fears whereas flooding uses actual exposure to the cause of the anxiety and is not recommended for all patients and indeed by all psychologists. Participant modelling (or observational learning) is a technique in which someone demonstrates something to encourage the other person to imitate a specific behaviour. Bandura uses this participant modelling with his work on observational learning in children (Bandura, Ross and Ross 1961, 1963) and his creation of Social Learning Theory (1977b) and Social Cognitive Theory (1986) has created another potential solution for people who have high levels of communication apprehension. The overall common method used for communication apprehension and communication self-efficacy is cognitive restructuring. This is the removal of negative self-image, replacing this with more positive ones and using these new images and other coping mechanisms to practice the very thing the individual has a phobia of.

The method to help reduce communication apprehension as advocated by McCroskey is time consuming and expensive when dealing with a large number of students. Potentially, self-efficacy techniques can be applied cheaply and more effectively. The current solutions for communication apprehension have been suggested by the likes of Allen and Bourhis (1996) and Spitzberg and Cupach (1984), to be not working. Both findings state that techniques aimed at the development of communication skills will not resolve communication apprehension, especially if an individual has a high level of communication apprehension and will not result in improved communication performance. Indeed, Boorum, Goolsby and Ramsey (1998) argue that a low level of apprehension is considered the ideal scenario to be a necessary variable for achieving communication competence.

Bandura was focused on improving self-efficacy rather than establishing the causes, but Bandura suggested his methods worked on increasing self-efficacy in many phobias (1982). Knowing the correct levels of self-efficacy can help support the translation of intentions into action (Gutierrez-Dona et al. 2009). Bandura (1986) noted that the perception of low competence to perform a task can cause a person to be anxious while performing that task.

In the area of academic achievement, most researchers agree that academic self-efficacy beliefs are related to and predictive of academic performance. Extensive academic research on self-efficacy has found it to influence learning, motivation, achievement, and skill acquisition (Bandura 1997, Schunk 1989, 1995, Stajkovic and Luthans 1998). In the study of academic performance of students, Bandura and other researchers have found a student's self-efficacy plays a major role in how goals, tasks, and challenges are approached. Students with a general high level of self-efficacy are more likely to believe they can master challenging problems and they can recover quickly from setbacks and disappointments. Research involving self-efficacy and academic outcomes has shown self-efficacy beliefs to be predictors of performance and persistence, (Multon et al. 1991, Hackett et al. 1992, Lent et al. 1993). These types of students are also more likely to work harder or persist longer when they encounter academic difficulties than those students who have low levels of self-efficacy and doubt their abilities. Students with low self-efficacy tend to be less confident and don't believe they can perform well, which can lead them to take drastic action such as not turning up to class to avoid challenging tasks. Students will become more effortful, active, pay attention, highly motivated and better learners when they perceive that they have mastered a particular task (Schunk 1995). Multon, Brown

and Lent (1991) noted that caution must be taken with self-efficacy results as they can be affected by the specific characteristics of the studies, such as the time period during which the variables were assessed, students' achievement status, age, and the type of performance measure used.

There have been studies that investigated the levels of self-efficacy beliefs related to academic writing outcomes (Daly and Millar 1975, Shell et al. 1989, Pajares and Johnson 1994). These studies found that males were significantly more apprehensive than females and that apprehension was related to self-reported previous success in writing courses. Lent et al. (1984) found that the self-efficacy beliefs of students participating in a science and engineering 10-week career planning course were related to their grades and persistence during the following year. Higher self-efficacy students received higher grades and persisted longer in related majors.

In terms of oral communication apprehension, inverse relationships between students' perception of competence and levels of apprehension have been found in several academic studies (Richmond and McCroskey 1989, Miller 1987, Rubin, Rubin and Jordan 1997, Ellis 1995). This relationship can happen very quickly with Rubin, Welch, and Buerkel (1995) finding that the communicative skills of high school students improved over a semester. In a longitudinal study Rubin, Graham, and Mignerey (1990) noted significant increases in communicative competence over four years of college especially in those students who received instruction in how to improve their public speaking. Care must be taken here though as some studies have found that a basic public speaking course sometimes can have a negative impact on those students with high trait communication apprehension levels (McCroskey 1977, Newburger and Daniel 1985). These studies, as well as others, have recommended that the communication apprehension/perception of ability (self-efficacy) relationship be further investigated because of the implications it could have on instructional methods. Some academics have attempted to implement these instructional methods in the curriculum and noted the positive impact this had on reducing apprehension and improving competence and success. Tucker and McCarthy (2001) found that their course design for business students that included presentations, increased students' presentation self-efficacy through classroom practice. Students with low presentation self-efficacy benefitted the most from this approach.

Very few studies still have yet to find a direct link between public speaking, communication apprehension and Bandura's work on self-efficacy. Rubin, Rubin, and Jordan (1997) suggested that self-efficacy could be a link between communication apprehension and self-efficacy but

were not able to query its impact in their basic course study. Other researchers have suggested for the greater exploration of the relationship between communication apprehension and self-efficacy rather than actual examination or introduction of self-efficacy into course curriculum (Colby, Hopf, and Ayres 1993, Karpanty 1998). The study that actually comes closest in terms of matching one of the goals of this thesis (in exploring the causal relationship between self-efficacy and communication apprehension) is the work of Dwyer and Fus (2002). Part of their study involved examining the relationship between communication apprehension, self-efficacy, self-perceived speaking competence (SPPSC), and impact on course grade for students on a public speaking course. Results of that study indicate that there were indeed significant statistical relationships in self-efficacy, communication apprehension and self-perceived speaking competence. The strongest correlations indicated that students who reported higher trait communication apprehension also had a lower self-efficacy.

The findings of Dwyer and Fus (2002) were only produced from one sample at one university. They hoped however that it would create a base line of knowledge especially around the connections between self-efficacy and communication apprehension in particular. Although that study makes a direct link between communication apprehension and self-efficacy, it only looks at self-efficacy of predicted grade. This though led them to a suggestion that it may be more important to help students increase the beliefs that they possess the necessary skills to succeed rather than focus directly on reducing their communication apprehension.

On the back of the findings of that study, further research into specifically understanding self-efficacy of students is required. The course of Dwyer and Fus (2002) was only a basic public-speaking course and although the majority of the students in their study were first year students, they were not accounting students. They suggested that future studies need to include instructional methodologies for a curriculum that increased self-efficacy. Dwyer and Fus note that few if any, longitudinal studies have explored the changes that occur in communication apprehension and self-efficacy. They did not know how long the increased self-efficacy levels and reduced communication apprehension levels would last in the students. These increased levels may not last throughout the rest of their studies as students continue to be exposed to more public speaking. It will be interesting to note if taking the recommendations of this study for improving students' self-efficacy and applying them in an employability course where public-speaking techniques are used, will have any positive effects on the accounting students at Sheffield Hallam. An increase in self-efficacy should not only help reduce a student's anxiety

about communicating, but could also lead to increasing their beliefs in their overall abilities and may even help some stay in college (Dwyer and Fus 2002).

3.10 Conclusion

This chapter has shown that potential students entering accounting education may be choosing to do so to avoid using a skill set that makes them uncomfortable, in this case communication. This avoidance or unwillingness has been identified by McCroskey as communication apprehension. This apprehension can be both spoken and written. The bad news is that it can lead to life-long negative effects such as a lower paid job, lack of work opportunities and even the inability to make friends. The remedy of systematic desensitisation as advocated by McCroskey (1970, 1972) is both expensive and timely to administer.

Systematic desensitisation lost its popularity over the decades as research found that exposure of patients to examples of negative traits that the patients wish to stop actually increased that patient's negative traits rather than improved them (Paludi 2011). Therefore other techniques such as observational learning have replaced systematic desensitisation. This new technique of observational learning was then developed by Bandura where he associated an individual's behaviour as being influenced by the observation of others (Bandura, Ross and Ross 1961, 1963). From this came the theory of self-efficacy that looked at the influences on an individual in their belief in achieving a particular task. The raising of an individual's self-efficacy levels has been claimed to help in many aspects of that person's life including phobias. Glossophobia, the fear of public speaking, or stage fright is one of the greatest phobias for an individual. Therefore using the methods suggested in raising a person's self-efficacy Bandura (1977), should help to overcome the phobia or anxiety associated with communication apprehension.

The next chapter will set out the methodology and methods used in an attempt to measure self-efficacy in relation to communication apprehension. Associating self-efficacy with communication apprehension will be an inverse causal relationship as McCroskey identified communication apprehension with self-esteem (McCroskey and Daly 1976), whereby an individual with high levels of communication apprehension should have low levels of self-efficacy. If there is deemed to be an empirical link, then there is the potential to use the less costly and time-consuming self-efficacy techniques to combat communication apprehension in accounting students.

Chapter Four: RESEARCH METHODOLOGY AND METHOD

4.1 Introduction

This chapter discusses the research objectives of this thesis in more detail and considers the fundamental philosophical assumptions associated with this research. There is consideration of the potential methodology approaches this study used and could have undertaken. The chapter then explains the quantitative method used together with an acknowledgement of its limitations.

All researchers have different beliefs and values whilst interpreting the world around them, leading to research studies being conducted in different ways. The chapter begins with an explanation of the process that all researchers must decide upon, as to what each paradigm, methodology and method means for the researcher. This is because these provide certain standards and rules to guide a researcher on their choice of method to apply to their study.

The next part of the chapter discusses the reasons for the choice of methodology and the method used in this thesis. It continues to explain the research process which is divided into three stages. The first research stage examines if communication apprehension and self-efficacy do indeed have a causal inverse relationship. The next stage includes course design, development and testing for communication self-efficacy. The final stage is a second investigation that puts the measurement of communication apprehension and communication self-efficacy together to examine how first year undergraduate accounting students are effected at the start and finish of a course (The Professional Accountant) specifically designed to improve generic skills (with particular focus on communication).

4.2 Research Paradigm

To conduct research there needs to be an understanding of the philosophical issues that lie behind the choice of method by which the research is conducted (Easterby and Smith et al. 2002). Across disciplines there are varying views of what research is and how it relates to the development of knowledge. Research is defined as a process of intellectual discovery that has the ability to change our understanding of the world around us (Ryan et al. 1992). It is important to know as a researcher that there are many ways to view the world and that an approach to knowledge is shared amongst many (Guba 1990).

The first philosophical choice is that of a paradigm, as defined by Kuhn (1962, 1970), which forms the underlying assumptions and intellectual structure on which this research is based. A paradigm has its own distinctive rules and language which allows researchers to classify their

observations made of the world, breaking down the complexity of the real world (Patton 1990). In a paradigm's framework there are a set of theories, methods and ways of defining data (Guba 1990). From this overall assumption, the paradigm can then provide a structure or framework for interpreting and understanding the world. The framework as identified by Burrell and Morgan 1979 listed four categories to that framework of ontology (the question of what is real), epistemology (the nature of knowledge and how it is acquired), human nature (the effect on knowledge) and methodology (the processes of gaining knowledge). The different philosophical paradigms that exist are: positivism, interpretivism (symbolic interactionism, phenomenology and hermeneutics), critical inquiry, feminism and postmodernism (Crotty 1998). The two major extreme philosophical doctrines that exist in the social sciences are that of positivism and anti-positivism (interpretivism) (Easterby and Smith et al. 2002, Hussey and Hussey 1997).

Positivism is derived from the work of Comte (1865) and has been the dominant paradigm in social sciences research (Bisman 2010). Positive knowledge is based on the fact that the world is external to an individual and reality is observable. Information on the world is derived by reason and logic, and then reported in a neutral language. This information is derived from verified data created by empirical evidence; therefore positivism is based on empiricism. Society, like the physical world (with its natural science laws on gravity etc), also operates according to general laws. Knowledge based on intuition, reflection, metaphysics and even theology is rejected (Bryman 2001). A positivist approach suggests that researchers begin with a general causal relationship that has been logically derived from causal laws in a general theory of the subject being observed. The researcher has to remain detached, neutral and objective so as to measure particular aspects of social life by examining evidence and replicating the research of others. These processes led to an empirical foundation for the laws that govern social life in theory (Neuman 1994).

The main criticisms of the positivistic paradigm (Gill and Johnson 2002, Hussey and Hussey 1997) are that people cannot be separated from their social contexts. Highly structured research design may lead to constrained results and ignore relevant and interesting findings. Positivism regards human behaviour as being de-humanised, passive and controlled by the external environment. Researchers cannot be neutral and will bring their bias to their research. It is impossible to capture complex phenomena in a single measure, eg intelligence assigned a numerical value. Therefore this need for consideration of subjectivity gave rise to anti-positivism (naturalism, or interpretivism).

Anti-positivism is the belief that observation of the social world should not be subject to the same methods of investigation as the natural world. Reality is multi-layered and complex (Cohen 2000). Researchers should reject empiricism and scientific methods in conducting social research. Researchers should focus on the influence of social interaction, understanding cultural norms, values, symbols and social processes viewed from a subjective perspective.

There is a need to understand the world at the level of subjective experience with explanations within the realm of individual consciousness and subjectivity with the researcher being a participant (Burrell and Morgan 1979). The interpretive research reflects a methodological perspective attempting to describe, understand and interpret the meanings that human actors apply to the symbols and structures of the settings in which they find themselves (Baker and Bettner 1997). The acceptance of human subjectivity in explaining human beliefs and values does not mean that interpretivists reject positivism as human behaviour and actions have an internal logic (Laing 1967). It is more to do with achieving an empathic understanding of feelings and world views than with testing laws of human behaviour (Neuman 1994). If there is a need to understand the differences between people and objects of the natural sciences, then therefore there is a need to understand the subjective meaning of social action (Bryman 2001).

The criticism of interpretivism comes from the fact that results come from the interpretation of the actions of others and the researcher's own subjectivity (Chua 1986). Most of the research conducted in this area involves small samples investigated in depth or over time which will limit the generalisation of the research findings. Data collection may take a great deal of time, and analysis and interpretation of data may be difficult. Of the two methods researchers such as Bisman (2010), note that positivism remains the dominant approach to accounting research. This may be because research using positivist quantitative methodologies holds a greater prestige, or that numerical work is easier to work with in producing information, therefore being perceived as more scientific and more trustworthy.

Once the paradigm is chosen by the researcher there then needs to be investigation into the rest of the framework as identified by Burrell and Morgan (1979). There needs now to be the consideration of the categories relating to that paradigm. There should be consideration of using ontology to decide the question of what is real, epistemology to decide as how knowledge is created and will be acquired, the understanding that human nature can have on the gaining of this knowledge and finally choosing the correct method to gain the required knowledge.

4.3 Ontology

The word ontology means the science or theory of being (Birkin 2000). Ontology is concerned with the nature of reality (Hopper and Powell 1985). It allows the researcher to question whether the world is a separate observable entity or indeed is a construct of an individual's mind (Hussey and Hussey 1997). Ontology deals with the questions concerning what entities exist or may be said to exist, and how such entities may be grouped and questioned how these entities may be said to "be" (Carvalko 2005 p.21). This influences the nature of the research to be undertaken, whether the reality viewed is external to the individual or a product of individual consciousness (Creswell 1994). Ontology asks the question as to whether the focus on research subjects should be associated with an objective (positivism) perspective or subjective (anti-positivism) perspective.

Ontology in relation to positivism portrays the world as observable and exists in reality external to the researcher (Saunders et. al., 2009, Bryman, 2008). The positivistic ontology views the world as external to the individual that can be measured empirically (Gill and Johnson 2002). The view is that the world exists in its own right, external and independent to the individual's mind. This positivistic, ontological approach has dominated research for some time, particularly in the domain of the physical sciences (Bitter-Davis and Parker 1997, Gallagher 2008).

Ontology with the subjective view, reflects the anti-positivism (interpretivism) view that the world is created from perceptions and consequent actions of the researcher and other individuals called "actors" (Bryman, 2008, p.23). Reality as a projection of the individual's consciousness (Morgan and Smircich 1980) and that the external world to individual cognition is nothing more than names, concepts and labels which are used to structure reality (Burrell and Morgan 1979).

Identifying the correct ontology at the start of the research process is important as it determines the choice of the research design. If the choice of the researcher was to adopt an objective ontology, then this would lead to a positivistic epistemology with a deductive research approach and therefore quantitative research methods would have to be used. If a subjective ontology was chosen, this would lead to the selection of an interpretivistic epistemology with an inductive approach taken with qualitative methods of data collection and analysis used.

4.4 Epistemology

It was Ferrier in 1854 who described epistemology as concerned with the nature and scope of knowledge or the theory of knowledge. Epistemology is the study of knowledge and justified, belief and questions how knowledge can be acquired. Epistemology is concerned with the study of knowledge and what is accepted as valid knowledge (Hussey and Hussey 1997) and is also concerned with the assumptions about nature and the grounds of knowledge (Burrell and Morgan 1979). Epistemology helps with defining the criteria of what constitutes science and what does not in a discipline (Bryman 2001). Here again the researcher must decide the part they play when attempting to discover knowledge, are they part of it or external to the observations made? This depends on the researchers' ontological view: do they see themselves as objective or subjective?

Epistemology follows ontology, which in turn follows its paradigm. There are different epistemological definitions: positivism and interpretivism (Bryman 2001), positivism and anti-positivism (Burrell and Morgan 1979), objectivism, subjectivism and constructionism (Crotty 1998). Therefore a positivistic paradigm will have an objective ontology with an epistemology that is based on scientific research methods associated with the physical sciences, having certainties of logic and pure mathematics (Lee-Kelley, 1929). This epistemology is linked to the ontological belief that individuals have an ordered and rule based external reality. Objectivist epistemology is where the knowledge exists independently of any consciousness and only any phenomena that can be measured and observed are regarded as knowledge (Hussey and Hussey 1997).

4.5 Methodology

Methodology is the choice of theoretical perspective that researchers should decide to adopt in their studies although the term methodology can be used in an undisciplined way (Gaffikin 1986). Methodology refers to the overall approach of the research approach from the theoretical basis right the way through to the collection of data (Creswell 1994). The researcher must decide whether to adopt a scientific method or a more ethnographical approach in collating data (Wainwright 1997). Gaffikin (1986) goes on to state that a methodology should be the underlying principle, not the study of techniques and methods to accept or reject knowledge. Methodology is the process of thinking and creation of a research agenda however this process differs in each researcher (Lodh and Gaffikin 1997). Methodology should be a wider

concept than just methods of collecting data it should be an aid to the overall research decision making process based on a background of assumptions and paradigms (Birley and Moreland 1998)

One of the main focuses within a methodology is to decide if the approach taken is either inductive or deductive (McAuley 1985). The deductive approach means that the researcher takes an objective position, whereas an inductive approach means that the researcher is part of the study itself. Deductive research is where the researcher tries to use empirical results to construct explanations and theories of what has been observed (Gill and Johnson 2002). This should allow the researcher to make specific observations and measurement and move towards generalisation of the entire phenomena studied.

Deductive (positivistic) research begins by developing a theoretical structure and testing this theory by empirical observation. Statements regarding causal relationships are generated and tested against empirical data, allowing the researcher to move from generalisations to specific observations. In this approach, the researcher would start with a statement about the nature of the world and the empirical results would either confirm or not confirm that theory. The advantage of using the deductive approach, is that there is clarity on what is about to be tested and data can be collected quickly and efficiently (Easterby and Smith et al. 1991).

A distinction has been made in methodology between qualitative and quantitative approaches and their different paradigms (Bailey 1978, Cohen and Manion 1989, Hessler 1992, Bryman 2001). There have been battles over which approach is the best to study and understand the world (Miles and Huberman 1994). The dominant view has been that using quantitative data is the best way of creating replicable results (Cresswell and Clark 2007). Qualitative data methods and results are gaining some credibility but it is still quantitative data that gets the most funding and recognition. Qualitative research is about using methods other than statistical or empirical means to produce new knowledge. These types of studies are usually an investigation into peoples' lives, behaviours and emotions. It can even include human behaviour in the workplace, cultural phenomena and how nations interact (Strauss and Corbin 1998).

Quantitative methodology is based on a positivistic approach and aims to examine common patterns in a specific population, constructing explanations of relationships of cause and effect (Remenyi et al. 1998). Positivism is founded on the belief that observation and recording methods of human behaviour should be the same as the ones used in the natural sciences

(Hussey and Hussey 1997). This approach involves the creation of variables, causal relationships, units of analysis and the testing of hypothesis. Data is created by using methods of data collection such as large scale surveys, and statistical procedures are used to obtain relevant data, allowing the researcher to generalise and demonstrate external validity (Strauss and Corbin 1990). This testing of data is meant to produce a reliable picture of the phenomena studied, with the researcher and research subjects being distant from the objects of investigation (Remenyi et al 1998). The criticism of this approach is that it fails to take into account the behaviours and actions of individuals in relation to the phenomena studied. This objective view fails to take into account the outside world, creating a static view independent of everyday lives and creating a false sense of precision and accuracy (Bryman 2001).

Qualitative research is focused on the subjective nature of the individual. The respondent as the primary source of the information allowing the researcher to understand an individual's experience, attitudes and perceptions on the problems they face and how they react to these issues (Denzin and Lincoln 1998). The main techniques used in qualitative data include interviews, focus groups, case studies, historical research, biographical research and ethnographies. The main output is based on words and phrases, not numbers. This interpretative approach focuses on a small sample studied in depth or time. The studies are also time-consuming to conduct and the results are difficult to create. The main criticisms are that studies using qualitative methods cannot be easily (if at all) replicated, the results are too subjective and there are problems in generalisation (Bryman 2001).

4.6 Ontological, epistemological and methodological choice

Researchers must become aware of the different philosophical approaches to justify their processes and findings in any research conducted (Pring 2000). Burrell and Morgan (1979) claim that all researchers will either intentionally (or not) make assumptions about the nature of the world and the methods that can be used to investigate it. Therefore in order to understand the world (and in particular the business world) this researcher must understand the various epistemological and ontological viewpoints of this world. Epistemology is concerned with the nature of knowledge, how to understand the world and gain knowledge from it. Ontology is to consider the nature and existence of reality in terms of relation to the individual. Does reality exist external to the individual or does it only exist in one's mind? A researcher can adopt different ontological perspectives and ways of viewing reality. The researcher could perhaps adopt the belief that the world exists independently from their own perceptions, that it is a

rational, external entity and responsive to scientific and positivist modes of inquiry. The researcher may also potentially view reality as being created by individuals who interact and make meaning of their world. Therefore the researcher would analyse people's lived experiences through interpretation and subjectivity (Graue and Walsh 1998, Byrne-Armstrong et al 2001).

There are many factors that influence a researchers' choice of paradigm and methodology. The factors include budget constraints, nature and purpose of the research question, the ability to apply an adopted methodology and the extensive nature of the current body of knowledge on the subject matter (Creswell 1994, Strauss and Corbin 1998, Bryman 2003). There is also the researchers' beliefs on the world in which they operate. If they believe that the world is external to them and measurable a positivistic approach is more likely to be taken, whereas researchers who believe that the world is subjective and open to definition are more likely to choose an interpretivistic paradigm (Burrell and Morgan 1979).

Based on the objectives of this study, this research uses a positivistic paradigm, with a realist and deductive approach. The choice of methodology for this thesis is a quantitative one, due to the researcher's beliefs that the world is objective, separate and measurable. It should be noted that the majority of other research conducted in this subject area is based on a positivistic paradigm (Porta and Keating 2008). The phenomena studied in this thesis focuses on testing a causal relationship between communication apprehension and communication self-efficacy in students. It then looks to create a model that measures the constructs of communication self-efficacy and the variables of students' intentions to use new found beliefs in the future. This researcher would like to create a neutral observation, rather than let bias and previous experience influence results.

Accounting practice, teaching and research has in the past been heavily influenced by a positivist epistemology and objective ontology as defined by Ryan et al. (1992). Most accounting research is conducted based on a positivistic paradigm (Nelson 1992, Cohen and Hanno 1993, Felton et al. 1994, Marriott and Marriot 2003). There is also a large body of literature in accounting education based on the factors that affect communication apprehension using positivistic methods (e.g. McCroskey 1970, 1972) and self-efficacy (eg Bandura 1977a, Dywer and Fus 2002). This thesis will continue in this positivistic paradigm by using questionnaires to explore the potential causal relationship between communication apprehension and self-efficacy in oral communication in accounting students. There will also be development of a model that will

attempt to explain which antecedents help to increase a students' communication self-efficacy after the students' exposure to certain deliberate self-efficacy interventions in The Professional Accountant module. The aim of this research is to identify which self-efficacy technique has the biggest impact (and hopefully benefit) that will aid the student to increase their communication self-efficacy and lower their communication apprehension.

Accounting researchers have used empirical methods to define the nature of business; that the business world is knowable in its entirety, an objective entity outside the mind of the researcher that can be measured and universal laws or truths can be formed (Porta and Keating 2008). There is a lot of current argument between quantitative and qualitative methodology when conducting accounting research, with the majority of accounting research dominated by a quantitative, positivist research model (Cassell and Symon 2004). This positivistic world of accounting research is influenced by a neoclassical economic framework that is the underpinning of accounting and business, that managers and owners of a business are profit maximisers derived by marginal economic analysis and incremental cash flows (Johnson and Duberley 2000). This economics background has led to considerable measure of "academic respectability" (Ryan et al. 1992, p.46) by rigorous mathematical testing of hypotheses as opposed to practical usefulness.

To counteract this dominant positivistic approach, Whitley (1988) claims that in the modern business world accountants should not use predictive linear models to aid business decision-making. Therefore a more phenomenological approach must be taken as accounting can no longer claim to be scientific and neutral (McCrosley 1985). Researchers must consider the organisation as a whole and to take a post-modernist perspective (Berg 1989), that multiple forms of an organisation exist without a single universal law by which to control and govern them. To understand accounting research we need to adopt a more subjective epistemology and try to explain individual behaviours (Cohen and Cyert 1975) and general patterns of behaviour (Machlup 1967). Organisations can only be fully understood if the actors of the socially constructed world are explored to understand their values and attitudes (Covaleski and Dirsmith 1990). The important reality is what people perceive it to be, examining how the world is experienced (Taylor and Bogdan 1998). The objective view of the organization is being replaced with a more subjective view being taken of the organisation.

The constructivist or nominalist approach is that the business world is made by those living in it and there are no universal laws, no single truth. The world is being constructed by actors, with

Bryman (2008, P18) stating that a “constructivist” approach to the organization should include “social phenomena and their meanings are continually being accomplished by social actors.” One of the major limitations of agency theory is that with its roots based in positivism it cannot address issues such as the imbalances of power in the social context of the organization (Hunt and Hogler 1990). Organisations should be presented as complex processes produced by struggles between actors whose interests are in conflict. Organisations are seen as subtle, intricate idiosyncratic causal processes with much hanging on the choice made by each of the contending parties. Managers can act in pure self-interest that defies scientific models focused on empire building (Reimann 1979). Popper (1945) suggests that we should not act with a grand vision but with a step by step flexibility and adaptability using adaptive problem solving through piecemeal engineering. This desire to find the grand vision or truth is according to Popper both misguided and dangerous.

The subjective approach is that reality is the production of an individual’s views. Organisations contain individuals that have different beliefs, values and attitudes. Business research is not a, “free value endeavour,” and researchers should be aware the impact their own personal values will have on their research findings and topics (Williams and May 1996, p 192). Assumptions will be made about the environment about to be investigated (Burrell and Morgan 1979). Bendix (1956) was one of the first to note the power of accountants (quoting Marx) stating that accountants play their part in legitimising capitalist ideology and maintain a system of domination and social control within the organisation. Neoclassical economics and accounting based upon empirical research operates in a “fairylane of perfect competition” Tinker et al. (1987p.191). Tinker goes on to describe an accountant as a “disinterested, innocuous, historian” (p.188). Accounting practices that claim to be neutral within an organisation can actually enhance the power of accountants. This ideology of neutrality, allows accountants to gain credibility by claiming to be able to separate subjective views from decisions and create an objective view point.

Cooper and Sherer (1984) state that accounting researchers should investigate a range of social issues that are currently overlooked by research. Arrington and Francis (1989) described the use of predictive models to predict outcomes in an uncertain world as “naïve empiricism” (p.23) locating itself in intellectual prestige of scientific research with rigour and validity of mathematics. Kelman (1987) actually turns neoclassical economics and accounting on its head and argues that it cannot be an objective process but is itself a construction, not social theory

which can be viewed by different people with different economic preferences. With reference to Weber (1927), Ritzer (1996) recognises accounting to be part of an ever increasing bureaucratic process that created rational systems that were both inhuman and dehumanising, which he termed the “McDonaldization” of society. Ritzer viewed accounting as part of an organisation’s drive for efficiency, calculability, predictability and control. Critical theorists (Chua 1986) have attacked this position and the attitudes towards accountants are changing as they are now constantly being asked to create a solution and move away from this air of objectivity to provide leadership (CIMA 2009). It is this subjective epistemology to which this research was being drawn, to create future accountants who did not rely on models and spreadsheets to lead an organisation. However this researcher also recognises that the nominalist view that the social world is constructed by those people living in it and there is no single truth (Bryman 2008). This nominalist view could lead to creating potentially difficult research that will be impossible to generalise and take forward.

Habermas (1974) claims that there cannot be theory-neutral language and we should try to understand our view of the world and explore why we hold the theories that we do. Our behaviour is internally motivated and justified by our beliefs about what we believe to be true or false influenced by our ontological assumptions of the world. Social practices are not natural phenomena, they are socially constructed by social actors and the rules can be changed. We should not be looking for universal laws and generalisations as in nature sciences, rather rules of social behaviour (Ryan et al 1992). To study social practices researchers need to observe day-to-day social interaction and the dimensions of social structure in the local and wider context. There needs to be acknowledgement that accounting is shaped by the socio-economic system and that it provides a set of rules emerging out of social practices and organisational participants. Researchers need to understand participants’ views not just from an organizations point of view but from a historical, economic and social context. Accounting is part of a unified organization and this researcher needs to build up a picture on the system as a whole.

4.7 Preferred methodology and method

Despite all the claims above, the research approach that will be adopted is a positivistic research methodology. It could be argued that triangulation, a mixed methodology approach of both quantitative and qualitative methods (questionnaire plus interviews), could be used in this study. There is an immense amount of debate on this mixed methods approach. Howe (1988 p.10) questions whether it is “epistemologically coherent.” This researcher will use mathematical models such as the questionnaire but there is claim that qualitative methods (such as interviews) should also be used to understand why accountants and accounting students have the views they hold. Previous research has found that there can be enormous differences in what respondents say in a questionnaire in comparison to an interview (Hanson 1980). Some academics claim that questionnaires and survey interviews can only give a very superficial view (Cooper et al 1983) but this researcher intends there to be enough attention to rigour to allow for the key matters of reliability, validity and believability as defined by Shipman (1988). There is also the matter of communication apprehension being identified in the accounting students. As a large majority of accounting students suffer with the fear of communicating, conducting interviews will potentially not generate deep enough data (as the students cannot eloquently express their actions) to draw comparisons from (Lippe and Tanggaard 2014).

Despite the acknowledgement that getting to the truth in any aspect of research may be slightly more complicated than just the creation of mathematical models, the defence for positivism remains strong, therefore this defends the choice of positivist method in this research. The positivistic based mantra of “maximization of share-holder wealth” (Roe 2000) still applies to the majority of both manufacturing and service organizations. One of its biggest advocates (Donaldson 1996) maintains that “Positivist theory explains organizations with a strength and robustness that is impressive to behold” (p.25). Donaldson suggests that anti-positivist and anti-functionalists researchers in particular Burrell and Morgan (1979) have clouded organisational thought by claiming that organisations cannot be interpreted and explained without the need to refer to theories of behaviour. Donaldson claims that empirical research of the organisation in the sixties by Burns and Stalker (1961), Chandler (1962), Woodward (1965), Thompson (1967) Blau (1970) still have relevance today and are accurate depictions of universal laws for organisations. Burns and Stalker showed that the environment determines size of the

organisation, Chandler showed that the size of the organisation determines the structure and Blau offers a structural contingency theory on organisational growth that gives a ratio correlating the size of the administration function with that of the size of the organisation.

Qualitative research can give a positive contribution to the understanding of the nature of business, the organisation and the people within. There are not universal laws that govern human behaviour (Bernstein 1978). According to Williams and May (1996) research can never be value free and the researcher must take into account all of the above. This researcher recognises that the values that influence accounting's (and an accountant's) decision making processes are deeply rooted in neoclassical economics, empiricism, positivism that has tried to create a privileged position of objectivity. This researcher's personal experience is of both mass production (Cadbury Schweppes, Smith and Nephew and Rexam) and the service sector (Alliance and Leicester, the Yorkshire Bank). This researcher has been involved in finance since graduating and holds the highest accolade that can be bestowed on a management accountant with industrial experience of Fellow status (FCMA). Cox (1982) accurately describes the role today of a management accountant as being involved in all aspects of the general financial management of the business. Accountants have been bestowed with an aura of objectivity and credibility (Richardson 1987) and this researcher has witnessed the criticisms of Bendix (1956) that accounting has moved from not only the control of the organisation, but also to the regulation of many aspects of our lives (Rose and Miller 1992), due to the ability to provide unbiased information (Solomons 1991a, 1991b) divorced from any sectional or self-interest.

Putnam (1990) argued that there cannot even in principle be a view that is the one true objective or law in business research. Any view is a view from some perspective and therefore shaped by social and theoretical location and lens of the observer Habermas (1974). This researcher believes that he can remain neutral and adopt a neo-positivist stance despite the claims of Bowman, Bowman and Resch (1984) that this stance is not possible and this research could be viewed as a defence of the profession Gettier (1963). This thesis would be better viewed as adopting the correct methodology to understand further and explore the issues that seem to persistently hound the accounting profession; perhaps even attempt to inform the business community on a solution to the on-going collective frustrations of communication apprehension. Therefore it would be preferable to take the line of Strauss (1987 p.11) who

claims that previous experience of a situation can be used for good to “mine your experience, there is potential gold there.”

In terms of qualitative methodology there also is the recognition by this researcher that accounting is a social phenomenon in a world of lived experiences (Neimark 1990). This researcher realises that reality is what people perceive it to be and how they experience the world (Taylor and Bogdan 1998). To get anywhere near the truth in accounting we need to not just understand research general patterns of behaviour (Machlup 1967) but we potentially need to explain individual behaviours (Cohen and Cyert 1975). Yet this researcher cannot move to qualitative methods in future accounting research as suggested by Johnson (1995). Hence the wish is to follow the likes of Trist (1976) whereby the world out there is separate and observable, that any research undertaken in accounting is beneficial to practice and in turn practice should inform theory.

The hardest aspects of moving away from a positivistic perspective is that this researcher would struggle to be reflexive (Holland 1999) and capturing the phenomena that is occurring in the world of accounting will be difficult (Covaleski and Dirsmith 1990). This is due to the fact that accountants' training and education is just like that of scientists, they are seen as objective observers of the world (Johnson and Duberley 2000). To suddenly switch to using such methods as interviews and focus groups would not be easy. As an accountant you are trained not to empathise as Moore (1991) warned that accountants need to be neutral and cannot be seen to side with one over the other. This research aims to be viewed as a set of neutral observations using quantitative methods rather than potentially clouded by using qualitative methods.

There is another potential challenge to the positivistic approach undertaken in this study. There is one phenomenological, qualitative approach that this researcher must be careful not to enter into. That is action research as defined by Lewin (1946). Action research is trying to find a solution to a problem. Therefore action research could be seen as consultancy rather than research (Gummeson 1991). This is partly down to the background of the researcher having twenty years industry based experience (hence always looking for solutions to industrial problems), but there are a few differences that move it away from consultancy. The differences are that this researcher is not working for a client, there is no client interaction and there is not continuous adjustment to new information and events (Gummeson 1991). There are responses

to findings in the designing of the new module, The Professional Accountant, but that is more in line with the thought of research being for improvement and involvement rather than consultancy (Robson 1993).

4.8 Research approach adopted in this study

The research discipline used in this thesis comes primarily from the scientific school of human communication. This perspective is based around a logical positivistic tradition of enquiry with an objective and independent reality that can be accessed with scientific methods of enquiry either quantitative or qualitative. With an objective perspective, the research is quantitative based with empirical methods with an exploratory design and surveys used to capture data. This data is statistically modelled, leading to evaluation, explanation, prediction, control and description of what has been observed. Other methods such as conversation analysis, interviews and focus groups are rarely used and very subjective methods such as ethnography barely exist in accounting research (Johnson and Duberley 2000). Therefore these qualitative methods will not be used in this thesis.

A researcher has to make an informed decision as to which research method to use and the way to do that is to evaluate the comparative strengths and weaknesses of all methods. The problem which needs further discussion is around the method of capturing future rich data. Is the best method semi-structured interview, to capture and re-tell the experiences of accounting students? The answer according to Brown (1991) is that the interview is the best method of capturing personal life experience. This researcher has been immersed in a particular tribe (accountants) with its various norms and language with the neoclassic economic mantra of profit maximisation and interest in the self (namely the organisation) being the key features. This researcher could adopt the classic social anthropology of Malinowski (1922 and 1935) as being a teacher and a CIMA member would allow entry into the social and symbolic world of accounting students by being able to share the same social conventions, habits and their use of language (Robson 1993). It would be practically impossible to conduct an ethnographical study as described by Delamont (2004), to enter the world of a student and be able to describe the sights, the sounds, the experiences of everyday student's life to live and breathe the experience. To record the effects as they happen would be impossible and this approach would require considerable training and to get comparative, repetitive results via a qualitative, longitudinal study would take some considerable time (Stoller 1989).

Focus groups might be good in this area, allowing students to have strength in numbers and have the courage to speak up, but it could also allow the stronger members of the groups to dominate the quieter, shy ones who are too timid to speak up yet who may have a large contribution to give (Watts and Ebbutt 1987). In terms of interviews the findings of Easterby-Smith, Thorpe and Lowe (1991) suggest that interviews are appropriate for developing an understanding of the interviewee's real world. Qualitative interviews are especially useful when there is need to "shed new light on puzzling question" (Rubin and Rubin 1995, p51).

The use of a semi-structured interview should be a conversation with a purpose, but this is actually hard to achieve as an interviewer (Powney and Watts 1987) as there is a need to create questions that can capture facts, behaviour and attitudes. There should be a mix of structured and less structured questions to let the students, relax, understand the shape of their world and gain depth and detail as described by Geertz (1973) as thick description. However, It could be very be difficult as an accounting tutor to understand an accounting student's reality (Menzel 1978). The irony is that as this researcher could potentially be interviewing accounting students with high levels of communication apprehension these students might have difficulty explaining their culture and describing their experiences anyway. Shutz (1967) suggests that sometimes individuals struggle to explain the environment they inhabit and it can be like asking fish to describe the water in which they swim.

The major concerns about interviewing include the need to maintain an individual's anonymity and allow them to talk freely (Gubrium and Holstein 2001). There needs to be exploration of other methods to allow self-expression, the interview should be structured to encourage the interviewee to tell their story in their own words (Gubrium and Holstein 2001). A researcher must not abuse a relationship just to get information to inform research (Adler, Adler, Rochford and Burke 1986). Bradburn and Sudman noted (in 1979) that if a researcher cannot create an air of trust, the students interviewed will potentially give socially desirable responses. Another one of the disadvantages associated with interview methods is based on the recall of memories. The interviewee may have forgotten important facts or timelines and that the interviewee using reflection may recount events with a certain amount of logic that was missing from the original incident (Rubin and Rubin 1995). There would be too much pressure on the student with high levels of communication apprehension due to the one to one scenario, the use of a voice recorder and the tutor/student relationship.

Therefore, in order to conduct research on accounting students there needs to be the intention to attempt a more neutral study, following the guidelines of academics such as Stenhouse (1982). There are boundaries that we cannot cross as a neutral and there are biases that the researcher must declare before undertaking this particular study. The researcher's lack of impartiality could create huge issues on the impact of this study. Focusing too heavily on the positive has even been described as a sin by Brenner (1978). Locke, Spriduso and Silverman (1993), state that researchers must ask themselves why they adopt their method of choice and answer it "honestly" (p 107).

Data in this research will be collated via a questionnaire. This type of research follows a positivistic pattern that stretches back to the early Victorian pioneers of the questionnaire such as Joseph Rowntree and Charles Booth. In terms of choosing a questionnaire or survey, the obvious advantage is that it will access a large sample at the cheapest cost (Plumb and Spyridakis 1992). There is also the benefit of potentially being able to replicate the study and findings. The intention like previous questionnaires is to give a snapshot of the feelings and attitudes of a sample from the student population to make further judgements of the entire population (Denscombe 1998). Limitations of such a questionnaire are that respondents may supply false information that is not verifiable from another source and that the group being studied is not representative of the general population (Bline et al. 2003). There is a threat as to lack of response and many researchers state that higher response rates (60 -70%) give a more accurate survey results (Babbie 1990). Recent studies by Visser et al. (1996) try to disprove that finding and state that small response rates of even as low as 20% can bring positive results.

It is often argued that a poor questionnaire could lead to poor response rates. For example a study by French (1981) in satisfaction surveys found that there is a likelihood that the people who wish to moan are more likely to fill questionnaires in as opposed to those who are satisfied with a service. As it is the student's first day at university it may create the bias of social desirability (as defined by Zerbe and Paulhus 1987) whereby students on this occasion will complete the questionnaire due to not wanting to lose face in front of tutors and fellow students. With social desirability, some students will complete a questionnaire trying to hide any issues they have with communication. They will state that they do not have a problem whereas potentially they do.

There are questions raised as to the validity of questionnaires being able to capture attitudes and beliefs. Some academics claim that questions in questionnaires that attempt to capture an

attitude can lead to wild swings in responses (Schuman and Presser 1981, Schuman and Kalton 1985 and Tourangeau and Rajinski 1988). Krosnick (1991) claimed that under pressure respondents adopt coping methods to reduce stress and fill out the questionnaire. One of those methods is called “satisficing.”(p.214).That in turn brings its own problems in that people can answer what they truly believe rather than what they feel. However, this is countered by claims that surveys offer the chance for “ecological validity” in that they ask real questions to real people and are the best way to determine attitudes and beliefs (Plumb and Spyridakis 1992 p.626). Ajzen and Fishbein (1977a) and more recently Kraus (1995) found that attitudes captured in surveys tended to point towards future behaviour if questions asked are specific rather than generic. Tourangeau et al. (2003) found that the order of questions did not affect the overall attitudes revealed in surveys. The questionnaire used in the first part of this thesis, designed by McCroskey (1982) has become viewed as one of the most accurate in capturing communication apprehension and has been viewed as being able to replicate feelings and attitudes regarding communication apprehension (Daly 1997).

4.9 Research design

Once the paradigm, methodology and method have been chosen, there needs to be a decision made on the specific research design using the suggested methods of data collection and analysis. The function of research design in a positivistic paradigm is to create evidence that answers the initial question as unambiguously as possible (DeVaus 2001). There needs to be thought now on the choice of the actual data collection methods, measurement and scaling procedures, questionnaires, samples and data analysis (Zikmund 2003). The research question and research objectives have an impact on choice of methodology, research design, data collection and results. The deductive approach starts from a theory with a statement that should be empirically tested (Hussey and Hussey 1997, Gill and Johnson 2002). Deductive testing occurs here in this thesis by first testing the hypothesis that communication apprehension is linked to self-efficacy based on previous works by McCroskey (1970) and Dywer and Fus (2002). If this link is established, then further work will be conducted on testing the variables of the antecedents of self-efficacy and outcome expectancy (Bandura 1977, 1986). From this consideration and the understanding of the other approaches used, it is clear that a quantitative approach should be used in research design.

4.9.1 Stage one: The First Investigation

In order to achieve the research objectives, the research is divided into three stages. The first stage aims to test if first year accounting students are still entering the undergraduate degree program with high levels of communication apprehension. The questionnaires used have been used before, especially the questionnaire designed by McCroskey the PRCA (Personal Report of Communication Apprehension 1970), which has been designed and used on over 100,000 subjects in its lifetime (Daly and McCroskey 1975). This questionnaire can be found in appendix one).

The questionnaire developed by McCroskey was based on the Personal Report on Confidence as a Speaker (PRCS) instrument created by Gilkinson (1942). McCroskey's initial questionnaire (created in 1970) consisted of 76 statements using a Likert scale to indicate if an individual agreed or disagreed on a scale of 1-5 respectively to having confidence in public speaking. The Likert scale with five options is a popular method of measuring attitudes and has been used by persuasion researchers for over eighty years since Likert produced his article in the "Archives of Psychology" (1932). Likert found that this scale uses a simple methodology to yield data that should in turn create normal curve statistics on attitudes. In this particular case with the five options being "Strongly Agree" "Agree" "Undecided" "Disagree" "Strongly Disagree" allowing the capture of consistent views of any particular community.

McCroskey refined his questionnaire (after some considerable testing) to a twenty-four point statement on verbal (Oral) communication apprehension (PRCA-24). A Likert scale of 1-5 in this case is used against twenty-four declarative statements. McCroskey did experiment with ten, twenty, and twenty five declarative statements but found the twenty four declarations to be the most reliable (McCroskey 1984). The PRCA-24 (Personal Report of Communication Apprehension) asks six questions in relation to four situations (communicating on a one-to-one basis, in meetings, in public and in small groups). In each situation three statements are positive and three are negative. This questionnaire has now been further developed and tested over many years by McCroskey (1970, 1978, 1982 and 2006).

In terms of capturing Written Communication Apprehension, another questionnaire is developed called the WCA-26 (Daly 1978), based on the PRCA-24 mainly due to the fact that its creator, Daly, was a student of McCroskey. Daly created a large seventy three point questionnaire with a five point Likert scale, reduced to twenty-six points with this time thirteen

negative points and thirteen positive. Daly tested this on 3,600 students in the US (Daly 1978) and these scores also created a US benchmark (Elias 1999). The WCA-26 was amended and changed into the WCA-24 by Hassall et al. (2000) who re-worded the questions and removed four of the original statements and inserted two new ones. This has since been tested and given validity by Gardner et al. (2005)

This researcher is following the advice of Oppenheim (1992) that questionnaires should be tried out and improved until it is certain they can do the job for what they are needed. Turney and Robb (1971) suggest that a questionnaire can collect facts about attitudes, opinions and feelings due to the potential sensitivity of the questions and respondents can remain anonymous. Questionnaires are the cheapest way to obtain a large sample, it does not require training of interviewers etc. (Oppenheim 1992). A questionnaire gives a respondent more time to consider their answers although the biggest threat is non-response, especially if they have no interest in the subject matter (Oppenheim 1992).

This questionnaire will also be adapted to conduct exploratory research and test a causal link: if first year accounting students have high levels of communication apprehension, they should also have low levels of self-efficacy in the task of communication. Exploratory research should be conducted when little information is available on how similar problems or research issues have been solved in the past (Easterby and Smith et al 1997, Sekaran 2000). An exploratory design aims for patterns or ideas rather than confirming hypotheses (Hussey and Hussey 1997). In this study descriptive statistics are used to try to organise and summarise large collections of data to obtain meaningful information following the work of Nachimas and Nachmias (2000). Summary properties were used such as averages and percentages for reporting the characteristics of the students and providing statistical support for the findings. The statistics will also explore different variables as the variable is the central idea in a quantitative methodology. Variables should have properties or attributes that can be clearly identified and measured (again based on the work of Nachmias and Nachmias 2000).

This questionnaire was then distributed to first year accounting students and business studies students (for comparison purposes) to complete in their first lecture on day one of starting at Sheffield Hallam University. The results of this questionnaire can be found in Chapter Five of this thesis.

4.9.2 Stage two: The Professional Accountant course design and Communication Self-Efficacy development

Once this has been tested and analysed, if the results indicate accounting students have high levels of communication apprehension (as indicated in previous studies such as Simons et al 1995), then this will influence the course design of The Professional Accounting Module in the first year of undergraduate accounting degree program at Sheffield Hallam University. It will follow the advice of Dywer and Fus (2002) that instead of using direct techniques that focus on students' communication apprehension, there will be use of interventions designed to increase the self-efficacy beliefs in communication tasks.

To explore if these self-efficacy techniques have had any effects on the student's communication self efficacy a questionnaire was developed from the work of Stone and Bailey (2007) which in turn was developed from the Theory of Planned Behaviour (Ajzen 1991). The Theory of Planned Behaviour's test instruments have been used in over a thousand studies (Conner and Armitage 1998), but the actual questionnaire developed for communication self-efficacy had never been done before. This questionnaire can be found in appendix two.

4.9.2.1 Stone and Bailey's Team-Conflict Self Efficacy model (2007)

Stone and Bailey (2007) focused on team-conflict self-efficacy and the effect it can have on future expectations and behavioural intentions to use team conflict skills. To change behaviour in an individual, there must be a focus on an individual's cognitive processes that will have a major impact on feelings of potential success in a task. These feelings should positively affect an individual's motivation, performance and feelings of their ability to achieve future tasks. These expectations were defined by Bandura in his Social Cognitive Theory as Outcome Expectancy (1982, 1986). Self-efficacy is the individual's belief that they possess the skills, the persistence and the abilities to complete a particular task. Outcome Expectancy is the belief that due to the consequence of accomplishment of a task that this will lead to towards achieving an overall future desired outcome. For example being able to conduct one conversation in another language will allow the individual to believe that they are on their way to becoming fluent in that language.

The finding of Sadri and Robertson (1993) was that there is a direct relationship between expectancy and behaviour, that one effects the other (a causal relationship). Both self-efficacy (belief in the task) and outcome expectancy (achievement in a task) will affect the future

behaviour in separate ways (either positively or negatively), but self-efficacy has the larger effect (Bandura 1986). It is these causal mechanisms between self-efficacy, outcome expectancy and future behavioural intentions that Stone and Bailey attempt to model. Stone and Bailey (2007) based their model on the traditional major antecedents of self-efficacy (Bandura 1977, 1982) of personal experience, vicarious experience, social persuasion (divided into team member and mentor persuasion) and emotional state. Five statements were then created that would test the effect these antecedents will have on an individual's team-conflict self-efficacy:

Statement 1: The level of team conflict experiences has a significant and positive impact on team conflict self-efficacy.

Statement 2: The level of vicarious team experience has a significant and positive impact on team conflict self-efficacy.

Statement 3: The influence of a team mentor has a significant and positive impact on team conflict self-efficacy.

Statement 4: The emotional state of a team member during a team conflict has a significant and positive impact on team conflict self-efficacy.

Statement 5: The amount of team member support in the team has a significant and positive impact on team conflict self-efficacy.

Stone and Bailey take their model further testing the concept of outcome expectancy and behavioural intentions based on the work of Bandura (1986). Stone and Bailey proposed that if team-conflict self-efficacy levels were increased then in turn this will have an impact on outcome expectancy and behavioural intentions to use the student's new found skills in team conflict sometime in the future. For outcome expectancy, two statements tested the students' perception that their new found skills in team conflict would be used favourably in a new team and also favourably influence their approach to team work skills in their professional career:

Statement 6: Team conflict self-efficacy has a positive impact on career outcome expectancy.

Statement 7: Team conflict self-efficacy has a positive impact on current team outcome expectancy.

These two expectancy outcomes would then impact on future behavioural intentions later in their professional life to use these new found skills they have developed:

Statement 8: Career outcome expectancy has a positive impact on behavioural intentions to use team skills.

Statement 9: Current team outcome expectancy has a positive impact on behavioural intentions to use team skills.

Stone and Bailey to explore these statements developed a questionnaire that consisted of seventy questions including six separate questions on the emotional state of an individual when they experienced disagreements and conflict in their respective teams (seventy six questions in total). The students who completed Stone and Bailey's questionnaire were business students. Although the students volunteered to complete the questionnaire, they were also offered an incentive of credit points towards their overall mark if they completed the questionnaire on team conflict self-efficacy (although these points were only worth less than one per cent). Stone and Bailey developed items in the questionnaire based on previous published scales (Stone and Henry 1998, 2003, Henry and Stone 1999, and Alper et al. 2000). The questionnaire was sent out to 173 students, with a usable 144 usable responses were received (a response rate of 81%).

4.9.2.2 Pilot Study of the Communication Self-efficacy Questionnaire

Once the first year accounting students had experienced the techniques of communication self-efficacy (explained in more detail in Chapter Six), they were then asked to complete the communication self-efficacy questionnaire developed by this researcher (explained in more detail in Chapter Seven). The Results are presented in Chapter Eight.

After designing this questionnaire the pilot study in this thesis was conducted to ensure that there were no adverse findings, that it was free of any discrepancies or misunderstandings. This pilot study was conducted in line with suggestions on the testing of new questionnaires from the work of Goode and Hatt (1952). It was deemed appropriate to evaluate the sample size (approximately one hundred and seventy students) on statistical variability, any timing issues, costs or adverse events. The results could also potentially give valuable insight into the questionnaire and its items. The results could highlight if anything is missing and therefore should be added or items removed to improve results (Hulley et al. 2007).

This testing will be done to explain the nature of certain relationships, the nature of differences between groups or the interdependence of two or more factors in a situation. This final stage will use multivariate data analysis because various dependent and independent variables are used with regard to communication apprehension. A descriptive approach will be partly used to

describe the characteristics of the students (such as gender etc), but also give descriptive information on the subjective norms, attitudes and beliefs developed by the students and their belief in using these new found levels of self-efficacy in the future.

The language of quantitative research is the language of variables and their relationship between each other (Neuman 1994). Researchers who focus on causal relations begin with effect and search for their causes. Variables are split into a three way classification in a causal relationship. The independent variable is the cause variable, the one that identifies forces or causes something else. The dependent variable is the effect or the result, the outcome of the independent variable. The confounding or extraneous variable is an undesirable variable (Nachimas and Nachimas 2000) that influences the relationship between the dependent and independent variable and the major goal of research design is to minimise or control this extraneous variable as much as possible (Marriott 1998)

The pilot study in this thesis will test a theoretical model of communication self-efficacy and will test the relationship of its antecedents using Structural Equation Modelling (SEM) which is derived from path analysis as described by Wright (1921). This model merges a measurement model that defines latent variables using observed variables and a structural regression model that links the latent variables together using simultaneous regression equations (Bollen 1988). From a philosophical position, this form of research is following a positivistic epistemological belief (Urbach and Ahlemann 2010) merging an econometric perspective (linear regression) with a psychometric approach (factor analysis) (Roldan and Sanchez-Franco 2012).

SEM is widely used in the social sciences and suits this part of the study because it goes some way to try and isolate observational error in the measurement of the latent variables. In this part of the study, this researcher will attempt to measure communication self-efficacy (the latent variable) with questionnaire items as the observed variables. Its results will not only test the overall theory but will show the strength of the relationship between the observed and latent variables, allowing insight into which antecedent is a good indicator of self-efficacy. There will also be testing to ensure the quantitative methods used here demonstrate reliability and validity. Reliability is how well the instruments can give the same results in the same set of circumstances and validity is about how well an instrument measures the concept (Bryman and Cramer 2001). If the model is reliable, it will produce the same results each time the same thing is measured (Neuman 1994). Internal reliability is important when the items in a scale are internally consistent (Bryman and Cramer 2001). This can be tested via Cronbach's alpha. A

value of more than 0.7 is considered a good measure of reliability (Nunnally 1978). Testing of relationships between communication apprehension and communication self-efficacy will be done by linear multiple regression analysis. Multiple regression analysis aims to explain the influence of several independent variables on the dependent variable (Hair et al 1992). It shows the degree to which one or more independent variable can explain and predict the dependent variable (Field 2000). Multiple regression will be used here to identify the statistical relationship between intention to use communication skills and self-efficacy antecedents.

If the results of the pilot study show signs of reliability and validity (in the recording of communication apprehension and communication self-efficacy), then the same questionnaire will be used again to form part of a second investigation. This questionnaire will be completed by first year accounting students at the beginning and end of The Professional Accountant module after being exposure to curriculum interventions designed to increase a student's communication self-efficacy and reduce their communication apprehension. This is not a longitudinal study as defined as the collection of data over a period of time to examine changes that occur in intervening periods (Jones 1996). This investigation is a sample that is surveyed and surveyed again on at least one further occasion, which allows a correlation study of repeated observations (DeVaus 2001). A longitudinal study tracks the same people and this benefit is said to make observing changes in individuals more accurate, it is an observational study. This is what this researcher intends to do with the sample of first year accounting students. They will be sampled at the start of the academic year and again at the end of the year, after having studied on the Professional Accountant module using self-completion questionnaires. The rationale is to generate quantitative data on a large number of students who are known to be representative of a wider population.

4.9.3: Stage three: Investigation on the following year of undergraduate accountants

The Professional Accountant module was run again, the following year with a new set of undergraduate accounting students. This time the students completed the McCroskey and Bandura inspired questionnaire twice. Once at the start of their studies in line with timing of the questionnaire in stage one and then again at the end of the year. This was to examine if the students' communication apprehension levels and communication self-efficacy had changed. These results are discussed in Chapter Eight and Nine.

As part of this study, the students also completed the Communication Self-Efficacy questionnaire. The students completed this alongside the second questionnaire on communication apprehension and communication self-efficacy in their final lecture on The Professional Accounting Module. This has allowed this researcher to explore what (if any) antecedents had effect on the students' collective communication self-efficacy. The results are discussed in Chapter Nine.

4.10 Ethical considerations of this thesis

Before this study was allowed to continue, there was an ethical procedure that was observed here at Sheffield Hallam University. This has meant that this researcher has applied and obtained full ethical written clearance to conduct this study. The students were willing participants and could opt-out of the study at any time.

Each questionnaire asked the student to enter their individual student name and number so that they could be contacted again to clarify points made should the statistics derived point towards any findings that are deemed of significant interest. This may have had the negative affect of reduced anonymous impact on the results. For the first stage of this thesis with the accounting first year students, 210 questionnaires were administered and 179 questionnaires were returned and found to be usable (85.2%). For the business studies students of the 235 questionnaires handed out, 212 returned were usable (90.2%).

In the second stage of this thesis testing the new communication self-efficacy questionnaire, there was a high completion rate with 168 students out of 179 returning usable data (a 93.8% completion rate). Of the 204 students who were on the course, 174 replied to the questionnaires in week one and 168 in the last week, but only 131 of the students results were deemed suitable for comparison across all three questionnaires (75% and 78% usable rates respectively).

The questionnaires were not deliberately spoiled, more due to the fact that there were too many questions for the students to complete and they did not finish answering the whole questionnaires. The students were free to not answer the questionnaire if they chose to do so. The questionnaires were again not anonymous, just so this researcher could link them together in the final study to analyse their communication apprehension levels over the course of The Professional Accountant module.

With the questionnaires not being anonymous there may be the potential effect of social desirability response bias. Social desirability has been identified in both sociology (Goffman 1959) and in psychology (Schlenker and Weingold 1989). Social desirability is where in social interactions, individuals attempt to create more favourable images of themselves, sometimes by deceit (lying). The very first test in this study of communication apprehension occurred in one of the very first lectures at Sheffield Hallam University. The students are unfamiliar with their surroundings, other students, the tutors and the potential reasons why they are completing the communication apprehension questionnaire. It could be that be that like the findings in other surveys (DeMaio 1984) the students have distorted their questionnaire to present themselves in a more socially desirable or respectable manner.

Bandura (2000) noted that questionnaires on self-efficacy that involved assessment should be conducted by different tutors in a different setting to where the task took place. Unfortunately as this researcher wanted to observe and monitor the completion of the questionnaires, the suggestion of using a different tutor was not carried out. The lecture theatre as the location was again probably not ideal, but none of the assessment tasks were held in the lecture theatre so the students were in a fairly comfortable environment and did not feel threatened. Although due to the proximity of their fellow student, their anonymity was encroached only slightly. Following the advice of Bandura (2000), this researcher verbally emphasised to the students the importance of this research and stressed how the findings of their responses will increase understanding and guide the development of the module to help future students.

There was concern that because this tutor wanted the students to do well and improve their communication apprehension levels that there would be researcher bias. There was also concern that because students over the course of The Professional Accountant would appreciate the need for them to improve their communication skills that they would present themselves in a more favourable light when it came to their communication ability.

However these fears were alleviated when the results (Chapters Five and Nine) show that overall the results for the levels of communication apprehension are not good for accounting students. It seems that in the questionnaires the students have been willing to admit their failure in the task which is what good questionnaire design should allow (Warner 1965, Himmelfarband Lickteig 1982; Paulhus 1984). There could also be more honesty in the communication self-efficacy questionnaires as the students have now been at university for nearly a whole academic year and they feel that they can truly express their fears and they reveal their true thoughts and actions.

4.11 Conclusion

This chapter has set out the paradigm this researcher belongs to and has defined the methodology (and method) this researcher is prepared to use in the examination of communication apprehension and self-efficacy in first year accounting year students at Sheffield Hallam University.

The description of the detailed development of the various instruments used in this thesis will not be described in this chapter, but will be described in the various chapters relating to each stage of the development of the study. This will allow greater discussion and analysis of the data collated, the results and the conclusions found in each particular stage of this study. The next chapter for example, will explore the possible link that individuals possessing high levels of communication apprehension will possess low levels of self-efficacy i.e. if an individual is afraid of communicating then they will have very little belief in their ability to accomplish that communication task. There will be focus on the use of the PRCA questionnaire, analysis of data and discussion of results of the levels of communication apprehension and self-efficacy in first year undergraduate accounting students at Sheffield Hallam University.

Chapter Five: COMMUNICATION AND SELF EFFICACY: THE INITIAL TEST AND RESULTS

5.1 Introduction

This chapter examines the link between communication apprehension and self-efficacy. There will firstly be an examination of the levels of communication apprehension that exist in the newly recruited students to the undergraduate accounting degree programme at Sheffield Hallam University. A questionnaire developed by McCroskey which is widely used in the analysis of communication apprehension is adapted. The same questionnaire was also given to a group of students from the undergraduate business degree programme at Sheffield Hallam University for comparison purposes. The questionnaire was distributed to both groups on their first day at university.

Built into the questionnaire is also an examination of self-efficacy as defined by Bandura (1977, 1982 and 1986). This is to facilitate an exploration of a possible link between communication apprehension and communication self-efficacy. The possible link is that if an individual has a high level of communication apprehension, then potentially the same individual will possess low-levels of self-efficacy in their belief of achieving the task of communication.

In this chapter, the results are analysed and the link between low levels of self-efficacy and high levels of communication apprehension is established. In this analysis it is also noted that accounting students possess higher levels of communication apprehension than business studies students. This observation of high levels of communication apprehension points towards previous literature that states accounting students possess higher levels of communication apprehension than other students (Simons et al. 1995). The results also reflect previous research that indicates that students choose accounting because they are matching misconceptions about the profession (not requiring communication skills) with their own limitations in the area of communication (Daly and McCroskey 1975).

5.2 Method of data capture

McCroskey (1972) suggested that there are three possible methods to use to measure communication apprehension. The first method is to use observers to measure the physiological reactions of an individual to a communication situation. The second method also involves using observers to rate an individual's levels of communication apprehension towards a given task. Both of these methods have flaws in them in that they need a high level of training for a researcher to be able to conduct these tests. There is also a need for the researcher in these first two cases to be adequately literate to capture and describe the feelings of an individual undertaking the communication task. Therefore the third and more common method of capturing communication apprehension is self-completing questionnaires and this is the method that is used in this research. The questionnaire attempts to calculate two main measures of communication apprehension; verbal communication apprehension and written communication apprehension.

McCroskey (1970) felt that a questionnaire was the best method to quantifiably capture feelings and anxiety responses in a variety of communication contexts and was also simple and cheap to administer. There are criticisms that a questionnaire cannot capture feelings but McCroskey (1997) counter argues that the best way to find out the thoughts of an individual is to just ask them. Research by McCroskey has provided substantial evidence to support reliability and validity of the instrument. The PRCA-24 in particular demonstrates high inter-item correlation (Levine and McCroskey 1990) this has also been repeated in studies of business and accounting students (Pitt et al 2000; Gardner et al 2005). The WCA-24 has a mixed review in terms of validity in capturing a single construct (Daly and Miller 1975a) as the report seems to capture two factor patterns, one on the fear of writing and one of enjoyment of writing.

Other methods such as interviews and focus groups are not the most appropriate way to capture the thoughts and feelings of an individual with high levels of communication apprehension due to the very nature of the condition they suffer from. Therefore questionnaires are the most appropriate for the task of attempting to capture the feelings of such an individual who will have no reason to fear negative repercussions for any answer given (McCroskey 1997a). This is especially the case here as students on day one of their university life maybe in fear of negative consequences for any answer given. Questionnaires in situations like this with potentially nervous respondents represent a valuable and valid measurement strategy (Howard 1994). There are the obvious criticisms that with self-reported data, individuals can give false

data anonymously and may not be representative of the general population (Bline et al. 2003). However in this case it is viewed that the potential advantages of using a questionnaire outweigh the disadvantages of not using one.

The communication apprehension score consists of two basic constructs based on formal settings (represented and explained as interview and presentation situations) and informal settings (represented and explained as conversation and group discussion situations). The responses for each section of the questionnaire as based on McCroskey's PRCA-24 will range from a total of 6 (low communication apprehension) to 30 (very high levels of communication apprehension), leading to an overall score of 24 to 120. In terms of this questionnaire's score McCroskey (1997b) found that the total mean score to be 65.6 with a standard deviation of 15.3. Stanga and Ladd (1990) refer to McCroskey's research as creating a US benchmark for scoring communication apprehension. An individual who records a mean score of less than 50 can be described as having low levels of communication apprehension. An individual who records a mean score of more than 80 can be described as having high communication apprehension. In terms of analysing the sections of the PRCA, Berger, McCroskey and Richmond (1984) found that 70% of students have high communication apprehension in public speaking situations, 50% in meetings, 25% in groups and only 10% are apprehensive in one-to-one situations. The data for The WCA-26 has a US benchmark for written apprehension with a mean score of 75.6 and standard deviation of 13.4 (Elias 1999). The lowest score of 26 indicates a low level of writing apprehension, while a highest score of 130 indicates a very strong level of writing apprehension.

As well as attempting to capture communication apprehension, this questionnaire's design includes questions to measure levels of communication self-efficacy in an individual using the guidelines set out by Bandura (2006). This was designed to measure the two main constructs of verbal communication self-efficacy and written communication self-efficacy. Verbal communication self-efficacy and written communication self-efficacy are then both divided into two subsections of communication context and communication skills. Preliminary instructions will establish the appropriate mind-set that participants should have when rating the strength of belief in their personal ability:

How sure are you that you could do the following? Rate your confidence level on a scale ranging from 0 (no confidence at all) to 10 (completely confident).

The sixteen questions (items) on self-efficacy attempt to assess the student's perceived confidence in performance of communication self-efficacy tasks (both written and verbal). Bandura (1997) states that judgments of self-efficacy are task specific and self-efficacy measures must be tailored to the task being assessed. The wording was modified to specifically relate to either a written task (e.g. " Write a one or two page essay in answer to a given question") or a verbal task (e.g. "A short individual presentation (5-10 minutes) on a given topic"). Communication self-efficacy will be measured by questionnaire items using a graded scale in relation to the demands of the particular task. This scale will represent the difficulty that individuals believe they will face. The original scale strength was recorded on a 100-point scale, ranging in a ten unit intervals from 0 (cannot do), to intermediate degrees of assurance 50 (moderately can do) to 100 (highly certain can do). These efficacy scales are unipolar and do not include negative numbers as a student expressing their feelings may not be able to associate their strength of belief in their abilities with a minus number (Bandura 1997). A simpler response format is used here which retains the same scale structure and descriptors but uses single unit intervals ranging from 0 to 10, rather than 0 to 100. Bandura (1997) claims that the scales which use only a few steps should be avoided because they are less sensitive and less reliable, but this is contradicted by the later findings of Mauer et al. (2009) who suggest that simplified scales to measure self-efficacy are still effective and sufficient.

First year students on business and accounting programmes at Sheffield Hallam University were targeted to complete the questionnaire. Permission was granted in all cases from the respective programme leaders and ethical clearance granted by the ethics committee in the faculty. It was decided to hand out the questionnaire to accounting students to complete at the very first lecture they had to attend at their very first day at university. This was completed before any other activities were undertaken in the context of the lecture, also allowing the student time to complete the questionnaire. The response rate was high and also the students completed the questionnaire before they had been influenced by any course or curriculum design that specifically focused on communication skills at either a written or verbal level. The disadvantages were that the students were completing these questionnaires alongside their peers in a crowded lecture theatre. This potentially could lead to satisficing and the students comparing answers.

5.3 Findings

The first test of the data was to test the Cronbach alpha scores to ensure the reliability of all sections of the questionnaire. Cronbach alpha values for the communication apprehension scales (table 2) ranges from 0.73 to 0.85. The values for the self-efficacy scales range from 0.818 to 0.922. These values are considered to be acceptable as they are above 0.70 which Nunnally and Bernstein (1994) quote as the minimum level of reliability. These scores are very similar to other tests carried out by other researchers on similar sets of students (Simons et al. 1995, Blue et al. 1998, Pitt et al. 2000, Gardner et al. 2005). This allows this initial study to move forward with confidence in that the questionnaire issued can be used to test this set of students' oral and written communication apprehension.

The demographics of both the accounting students and business studies students were very similar in that the majority of respondents are young British students. The results are as follows:

5.3.1 A summary of communication apprehension in accounting and business students

The table below highlights the split of both the accounting students and business students divided into two categories, either suffering from low communication apprehension or high communication apprehension using cluster analysis:

5.3.1.1 Business and accounting students' levels of communication apprehension (CA):

			Communication Apprehension (CA)		Total
			1 low CA	2 high CA	
Degree: 1 accounting	Count		91	88	179
	% of respondents		50.8%	49.2%	100.0%
2 business	Count		116	96	212
	% of respondents		54.7%	45.3%	100.0%
Total:	Count		207	184	391
	% of Total		52.9%	47.1%	100.0%

The definition of low and high communication replicates the definition provided by McCroskey (1997). The benchmark (as previously mentioned of 100,000 respondents of the PRCA) was a score of 65.6 with a standard deviation of 15.3 (Stanga and Ladd 1990). An individual who scored one point over this threshold was considered to have high communication apprehension. The table above shows a high percentage of 49.2% of accounting students labelled as suffering from communication apprehension. This is an incredibly high percentage of a population showing high levels of communication apprehension. This in line with the findings of Hassall et al. (2000), Aly and Islam (2003), Gardner et al. (2005), Arquero et al. (2007) and Byrne et al. (2009) who also found that their accounting populations surveyed also displayed high levels of communication apprehension.

The business studies students have a lower percentage of communication apprehension at 45.3% but these levels are quite high and there is not much to choose between the two sets of students. This is in line with previous research that shows that accounting students demonstrate a higher level of communication apprehension than business studies students (Simon et al. 1995). These findings are stronger than the investigation of Bowers (1986) who suggested that communication apprehension existed in university undergraduates, that only one in four suffers from verbal communication apprehension at least once a week and this apprehension was not affected by age, sex, background etc. and was more down to personal behaviours and appearance in front of others.

5.3.2 Communication self-efficacy results for all the students in the study:

As the analysis of both the accounting students and business studies students pointed towards a large percentage of both populations suffering from communication apprehension, the link with communication self-efficacy was explored. The table below shows the communication self-efficacy mean scores of both sets of students. It examines communication self-efficacy (CSE) in four key areas. It examines verbal communication self-efficacy on a formal and informal basis. A verbal formal situation is one where a student has to give a presentation and an informal situation is a conversation between friends. The table also examines written communication on a formal and informal basis. Formal written communication is writing a report, informal is writing an email to friends:

5.3.2.1 Group Statistics for communication self-efficacy (CSE):

	Degree:	N	Mean	Std. Deviaton	Std Error Mean	t-test sig
Formal Verbal CSE	1 Accounting	179	55.06	9.762	.738	.023
	2 Business	212	57.41	10.164	.713	
Informal Verbal CSE	1 Accounting	179	54.97	10.780	.815	.089
	2 Business	212	56.86	10.723	.756	
Formal Written CSE	1 Accounting	179	59.97	6.735	.506	n.s.
	2 Business	212	60.41	7.938	.548	
Informal Written CSE	1 Accounting	179	61.74	8.174	.613	n.s.
	2 Business	212	62.08	9.027	.620	

The table above shows that for all four categories of communication self-efficacy the accounting students had a collective mean score lower than the business studies students. The lower the mean score, the less belief an individual will have in their ability (Bandura 1977a). These results are starting to suggest that if people suffer from high levels of communication apprehension, then there is a potential for them to also possess low levels of communication self-efficacy (as noted by Hopf and Colby 1992, Colby Hopf and Ayres 1993 and Dwyer and Fus 2002). The initial exploration and results in this chapter showed a high percentage of accounting students with communication apprehension. This analysis of communication self-efficacy here seems to be indicating that these same accounting students have collectively lower mean scores of communication self-efficacy.

The difference in communication self-efficacy is not of statistical significance when it comes to writing tasks. Both sets of students seem comfortable with their ability in this area. This means that both sets of students believe that they have the ability to communicate in either a formal or informal setting. This should mean that they collectively possess the beliefs that they can write an email to a friend or type a formal report to an employer.

The statistical significance is in their ability to verbally communicate. The significance is found in communication self-efficacy on a formal verbal basis and an informal verbal basis. The table indicates that the accounting students are less confident to communicate than their business

student contemporaries in all verbal tasks. This means that even amongst a group of friends, accounting students doubt their ability to communicate and in giving formal presentations in a future work situation they would struggle more so than business studies students.

5.3.3 Testing the link between communication apprehension and communication self-efficacy

As the initial results are indicating that there is an inverse relationship between communication apprehension and communication self-efficacy, it seemed an obvious progression to explore this causal link. The next table below looks at the communication self-efficacy tasks in relation to the mean scores of students with communication apprehension. The suggestion in this thesis should create results showing a causal inverse relationship between communication apprehension and communication self-efficacy. If students have low communication apprehension (low CA) they should have high levels of communication self-efficacy (CSE). Equally, if the students have high communication apprehension, then they should possess low levels of communication self-efficacy. This next table examines this potential causal link in all four aspects of communication self-efficacy in relation to either high or low communication apprehension:

5.3.3.1 Group Statistics for communication apprehension (CA) and communication self-efficacy (CSE):

	cluster	N	Mean	Std. Deviation	Std. Error Mean	Levene test sig	t-test sig
Formal Verbal CSE	1 low CA	207	61.95	6.755	.479	.000	.000
	2 high CA	184	50.07	9.370	.700		
Informal Verbal CSE	1 low CA	207	61.12	6.621	.472	.000	.000
	2 high CA	184	50.32	11.62	.868		
Formal Written CSE	1 low CA	207	62.64	5.982	.419	.000	.000
	2 high CA	184	57.50	7.901	.584		
Informal Written CSE	1 low CA	207	64.25	7.351	.511	.000	.000
	2 high CA	184	59.28	9.229	.682		

This table shows that in all tasks the relationship between communication apprehension and communication self-efficacy is statistically significant in all four areas of communication tasks. Even in tasks such as writing that were not deemed statistically significant when examining communication apprehension (or communication self-efficacy) have a statistical significance of 0.000 when paired together. This reinforces the link that those defined as having low communication apprehension (in all four communication tasks) will have high levels of communication self-efficacy. This equally should mean that for the majority of accounting students demonstrating high levels of communication apprehension, they will be experiencing low levels of communication apprehension.

These results also reflect another study conducted at Sheffield Hallam that also found that students suffering from high levels of communication apprehension had corresponding low levels of communication self-efficacy (Hassall et al. 2013). Hassall's study was conducted on students of TARC college, Malaysia that visit Sheffield Hallam for a summer school. The recommendation of this study was that self-efficacy techniques should be introduced into the summer school curriculum to help students lower their communication apprehension.

Therefore in accordance with both set findings from Hassall et al. and this thesis, it seems that those accounting educators who want to address communication apprehension can look towards improving a student's communication self-efficacy. If a student's communication self-efficacy can be raised in a specific communication task, then the inverse relationship with communication apprehension should see the student's communication apprehension levels drop. This should make the student less nervous and less fearful of that particular communication task.

Previous suggestions to address communication apprehension in accounting students (e.g. Simons et al. 1995) advocate two ways to address the issue of communication apprehension that is either to use behavioural methods or pedagogical methods. The behavioural methods suggested are those of McCroskey's (1972) systematic desensitisation. Systematic desensitisation is expensive, time-consuming to administer and the results are not as good as first thought (McCroskey et al.1990). In terms of pedagogical approaches, it seems that there can be interventions to help written communication apprehension, but not verbal communication as this would require behaviour modification, such as allowing students to acknowledge their nervousness, being allowed to rehearse many times and to undertake tasks without be graded (Hirsch et al. 1994).

5.3.4 Analysis of the communication apprehension sub-tasks

Although there seems to be interventions for written communication apprehension that can be introduced into the curriculum (Hirsch et al. 1994), the initial analysis of communication self-efficacy suggests that the accounting students have less belief in their ability in all forms of verbal communication (from talking amongst friends right up to giving a presentation). High levels of communication apprehension in a formal setting have dominated results since McCroskey first identified the condition of communication apprehension in students entering an expanded US higher education in the 1960s. Students were not used to the public speaking demands of the curricula. This issue was also investigated by the “Ad Hoc Committee on Evaluation in Speech Communication” which later went on to become the Speech Association of America. This committee found that problems in speech pedagogy came from the students’ “Inhibitions rather than their inability” (Research Notes Spectra, 1969, p4). This is beginning to ring true as communication self-efficacy now points towards the accounting students’ belief in their ability rather than them not having the ability to communicate.

As the relationship between communication apprehension and communication self-efficacy has been reaffirmed, it seemed wise to explore the sub-tasks within the communication apprehension categories within the questionnaire. This analysis could potentially direct this researcher as to which areas in particular need attention when designing the new module with a particular focus on communication help for the students:

5.3.4.1 Group statistics for communication apprehension for both degree categories:

	Degree:	N	Mean	Std. Deviation	Std Error Mean	t-test sig
Written CA	1 Accounting	179	14.70	3.188	.238	n.s.
	2 Business	212	14.64	2.811	.193	
Group CA	1 Accounting	179	14.45	3.806	.284	.036
	2 Business	212	13.65	3.696	.254	
Interview CA	1 Accounting	179	16.83	4.018	.300	n.s.
	2 Business	212	16.88	3.979	.273	
Conversation CA	1 Accounting	179	14.04	3.334	.249	.084
	2 Business	212	13.49	2.925	.201	
Presentation CA	1 Accounting	179	18.73	4.349	.325	n.s.
	2 Business	212	18.01	4.670	.321	
Total formal CA	1 Accounting	179	35.56	7.602	.568	n.s.
	2 Business	212	34.89	7.713	.530	
Total informal CA	1 Accounting	179	28.49	6.413	.479	.033
	2 Business	212	27.14	6.033	.414	
Total Verbal CA	1 Accounting	179	64.06	12.190	.911	n.s.
	2 Business	212	62.04	12.267	.843	
Total CA	1 Accounting	179	78.75	14.062	1.051	n.s.
	2 Business	212	76.67	13.516	.928	

When analysing the differences between accounting and business studies students, the written communication subtask did not have any statistical significance between the two sets of students. This compliments the results of the communication self-efficacy results that indicated that both sets of students are comfortable in these areas of communication.

The key sets of results that again compliment the communication self-efficacy results is that of informal verbal communication. Accounting students are also more apprehensive about having a conversation and working in groups than their business studies counterparts. This has all kinds of implications for the accounting students both as students and future employees. There is a lot of focus on group work at university and if the accounting students are frightened to speak up then they will not get their point of view across. The same will apply in their future workplace where they will potentially be part of a team. Being confident in informal settings is also vital to allow for students to make friends or network in an office environment.

At first the results seemed surprising that there were not any statistical differences between the accounting students and the business studies students in the more formal areas measured by the communication apprehension questionnaire such as giving a presentation. This does not though mean that any communication intervention in the future curriculum should put less emphasis on this area. The lack of statistical significance here is that the business studies students are also recording an equally high mean score for the presentation subtask. This means that not only should the accounting students receive help for their formal verbal communication, but also should the business studies students.

Therefore the design of the new module called “The Professional Accountant” will now look to different techniques of communication self-efficacy that will aid accounting students in all forms of communication tasks, with a particular focus on verbal communication tasks (both in a formal and informal setting). This means that module design will now have to include not only how to give formal presentations, but also instruction to the accounting students as to how to behave in groups to ensure that that their communication ability increases in all areas.

5.3.5 Gender profile

5.3.5.1 Breakdown of students by degree by gender:

			Gender		Total
			1 male	2 female	
degree 1	accounting	Count	115	64	179
		% of accounting	64.2%	35.8%	100.0%
2	business	Count	121	91	212
		% of business	57.1%	42.9%	100.0%
Total		Count	236	155	391
		% Total	60.4%	39.6%	100.0%

The accounting population is made up of 64.2% male students and 35.8% female students. The control population of business studies students had slightly less male students of 57.1% male students and 42.9% female students. On further analysis it was discovered that gender had an effect on the results for communication apprehension:

5.3.5.2 Split of male and female students suffering from communication apprehension:

			cluster		Total
			1 low ca	2 high ca	
gender 1	male	Count	138	98	236
		% of gender	58.5%	41.5%	100.0%
2	female	Count	69	86	155
		% of gender	44.5%	55.5%	100.0%
Total		Count	207	184	391
		% of gender	52.9%	47.1%	100.0%

Chi square test sig: .007

5.3.5.2.1 Chi-square test on the effect of gender:

	Value	df	Asymp.Sig (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-square	2.085(b)	1	.149		
Continuity Correction (a)	1.797	1	.180		
Likelihood Ratio	2.091	1	.148		
Fisher's exact test				.177	.090
Linear by linear association	2.080	1	.149		
N of valid cases	391				

a Calculated only for a 2x2 table

b 0 cells(.0%) have an expected frequency below 5. The minimum expected count is 70.96.

The Fisher exact results suggests that the results for female students have a higher level of communication apprehension overall at 55.5% This continues to reflect the findings of many researchers (Simons et al. 1995, Hassall et al. 2000, Gardner et al. 2005, Arquero et al. 2007). Simons et al. for example, found in their study of accounting and business studies students that business studies students' verbal and written communication apprehension were lower than the national norm and that accounting studies students had the highest levels of communication apprehension than any other business major with females reporting significantly higher verbal communication apprehension than any other group. However what is interesting is that although they have higher levels it does not have a statistically significant impact on the results. This seems more to reflect the findings of Stanga and Ladd (1990) who suggested that there was not any gender effect on levels of communication in the individual. In terms of gender with regards to written communication apprehension, there are confusing results, with some reports stating that females are less apprehensive regarding writing tasks (Daly and Miller 1975a, Riffe and Stacks 1992, Elias 1999) while other studies reported the opposite (Cayton 1990, Simons et al. 1995, Faris et al. 1995, Gardner et al. 2005, Arquero et al. 2007).

5.3.6 Age profile

5.3.6.1 Age analysis of both degree programmes:

Degree	N	Mean	Std. Deviation	Std Mean Error	t-test sig
Age 1 accounting	179	18.93	1.625	.122	.001
2 business	212	18.50	.765	.053	

Variances are assumed not to be equal (levene test sig: .001)

Age when investigated seems to create a new avenue to explore in relation to previous studies. In this study it reveals that there is a statistical significance in the age of student in relation to accounting in particular at a significance of 0.001. The results in this thesis suggest that older students have less self confidence particularly in written self confidence and appear to be more apprehensive in informal settings. There is no real indication from this questionnaire as to why this is the case. There can only be speculation as this is Day zero for the mature students. Previous poor experiences may have clouded the judgement of these mature students and being told that writing is a weakness in their career. For the informal setting, this may not be a surprise as these mature students are surrounded by younger undergraduates and potentially will be less confident in engaging in small talk for fear of being judged by the younger student. There is contrasting literature on the communication apprehension of mature students. Reay (2008) suggests that mature students can suffer from communication apprehension. This clashes with the findings of Berger (2004) who found that mature students had lower levels of communication apprehension and stated that this communication apprehension may be reduced through age and greater life experiences.

5.3.6.2 Age correlations for communication apprehension :

		Total CA	Group	interview	conversation	presentation
Age	Pearson Correlation	.036	.133(**)	.055	.116(*)	.025
	Sig. (bilateral)	.474	.009	.277	.022	.617
	N	391	391	391	391	391
Total CA	Pearson Correlation	1	.354(**)	.330(**)	.371(**)	.304(**)
	Sig. (bilateral)		.000	.000	.000	.000
	N	391	391	391	391	391
Group	Pearson Correlation	.354(**)	1	.473(**)	.636(**)	.495(**)
	Sig. (bilateral)	.000		.000	.000	.000
	N	391	391	391	391	391
Interview	Pearson Correlation	.330(**)	.473(**)	1	.439(**)	.613(**)
	Sig. (bilateral)	.000	.000		.000	.000
	N	391	391	391	391	391
Conversation	Pearson Correlation	.371(**)	.636(**)	.439(**)	1	.374(**)
	Sig. (bilateral)	.000	.000	.000		.000
	N	391	391	391	391	391
Presentation	Pearson Correlation	.304(**)	.495(**)	.613(**)	.374(**)	1
	Sig. (bilateral)	.000	.000	.000	.000	
	N	391	391	391	391	391

** The Correlation is significant at level 0.01 (bilateral).

* The Correlation is significant at level 0.05 (bilateral)

5.3.6.3 Age correlations for communication self-efficacy:

		Formal Verbal CSE	Informal Verbal CSE	Formal Written CSE	Informal Verbal CSE
Age	Pearson Correlation	-.051	-.044	-.131(*)	-.178(**)
	Sig. (bilateral)	.320	.397	.010	.000
	N	391	391	391	391
Formal Verbal CSE	Pearson Correlation	1	.749(**)	.503(**)	.389(**)
	Sig. (bilateral)		.000	.000	.000
	N	391	391	391	391
Informal Verbal CSE	Pearson Correlation	.749(**)	1	.483(**)	.422(**)
	Sig. (bilateral)	.000		.000	.000
	N	391	391	391	391
Formal Written CSE	Pearson Correlation	.503(**)	.483(**)	1	.572(**)
	Sig. (bilateral)	.000	.000		.000
	N	391	391	391	391
Informal Written CSE	Pearson Correlation	.389(**)	.422(**)	.572(**)	1
	Sig. (bilateral)	.000	.000	.000	
	N	391	391	391	391

** The Correlation is significant at level 0.01 (bilateral).

* The Correlation is significant at level 0.05 (bilateral).

5.4 Business studies students

The findings here show that accounting students have higher levels of communication apprehension than business studies students. This thesis will now move on to attempt to help the accounting students reduce their communication apprehension levels. This is because this researcher has the ability to influence the undergraduate accounting curriculum at Sheffield Hallam University.

Although this researcher has been granted access to the business studies students, this researcher does not have enough authority to change or influence the business studies curriculum. This researcher has informed those who granted access to the students of the findings, that some business studies students do have communication apprehension. It is hoped that once the interventions on the accounting curriculum have been trialled, that they can then be rolled out to the business studies students in future curriculum designs.

5.5 Conclusion

This chapter focuses on the testing of undergraduate accounting students on day one at Sheffield Hallam University students for communication apprehension and communication self-efficacy. Using a questionnaire based on the works of McCroskey and Bandura, the results showed that Accounting students are still entering the undergraduate course here with high levels of communication apprehension and low level communication self-efficacy in relation to other students (in this case, those entering the undergraduate business programme at Sheffield Hallam).

The causal inverse relationship between communication apprehension and communication self-efficacy has now been established. This relationship can now be used to inform accounting education. In this thesis this relationship of communication apprehension and communication self-efficacy will be used to inform the teaching and curriculum design of an employability module within the first year of the undergraduate accounting degree at Sheffield Hallam. Help to overcome communication apprehension is both expensive and costly in terms of time to deliver as advocated by McCroskey. The resources required to overcome self-efficacy are less expensive and less demanding of the student, less demanding of the tutor and can be delivered to a mass market audience (Bandura 1977).

Therefore the next chapter of this thesis will explain the development of the employability module called “The Professional Accountant” and the self-efficacy techniques that were

deliberately embedded in the pedagogy to help raise the students' self-efficacy in relation to tasks that involved communication. The thinking behind this design was that if self-efficacy levels are raised, then levels of communication apprehension in individual students would be lowered. The next chapter will also explore the testing (via questionnaire) of the antecedents of self-efficacy by use of a model created by Stone and Bailey (2007). Stone and Bailey's model although designed for testing team-conflict self-efficacy in undergraduates, will be adapted here to test communication self-efficacy. The adapted questionnaire was then completed by first year accounting students who studied "The Professional Accountant" and were exposed to self-efficacy techniques that have been built into the module's curriculum.

Chapter Six: COURSE DESIGN AND MEASUREMENT

6.1 Introduction

This chapter will describe how the findings of the first communication apprehension and communication self-efficacy questionnaire (completed by Sheffield Hallam accounting students) has influenced this researcher to introduce communication self-efficacy techniques into a first year undergraduate accounting module entitled The Professional Accountant.

The Professional Accountant was a new module introduced into the first year curriculum with a remit of enhancing employability skills in the first year accounting undergraduates. As this module was brand new, it did not contain any teaching materials or guidance as to how to introduce employability skills to the first year. The overall intention was to increase key skills as desired by employers, such as business acumen and group work. The greatest focus was on improving communication skills in the students as this is the most desired skill required by accounting employers (CIMA 2009). Therefore this chapter will describe the process as to how there was a desire to create an innovative accounting course with the opportunity to include self-efficacy techniques as advocated by Bandura (1977, 1986) in the course curriculum to help students increase their communication ability. Previous techniques advocated by McCroskey (1972) to overcome communication apprehension are too expensive in terms of time and cost to administer to a module with nearly two hundred students enrolled in the first year accounting degree programme here at Sheffield Hallam University.

With the introduction of these new communication self-efficacy techniques into the curriculum in the first year, there was an obvious desire to design a test to examine which of these techniques had an effect on the student's communication self-efficacy. The desired outcome was that the students exposed to these communication self-efficacy techniques should have had their communication self-efficacy levels raised. There was also the desire to examine which (if any) antecedents of self-efficacy as identified by Bandura (1977) had actually created (or indeed perhaps been a block) to improving student's communication self-efficacy. This chapter describes how a model to test for communication self-efficacy and outcome expectancy was created based on the intricate work of Stone and Bailey (2007). Stone and Bailey created a model based on a team-conflict self-efficacy framework explaining the behavioural intentions of students to apply teamwork skills they learnt in their business studies undergraduate course. The model for communication self-efficacy takes this work, adjusts it to create a questionnaire that attempts to capture which antecedents of communication self-efficacy affect behavioural intentions to use communication skills.

6.2 Learning Styles

Before the course was designed, research was undertaken to understand the learning styles of the accounting students. This was in order to design a course that will appeal to and enhance that learning style and help the tutor understand the student's possible resistance to a particular learning style. There are two extremes in learning (or orientation). There is the description-orientation style, which suggests rote learning and memorisation with the use of surface learning approaches. Surface learning is based on memory rather than understanding and is just concerned with reproducing facts at a later date (Gibbs 1992). The other approach is the conclusion-orientation, to foster understanding and deep learning skills. Deep learning encourages students to make sense of what they have learnt, understand inter-relationships and apply underlying principles. Of the two approaches deep learning is said to be better as it will produce long-lasting results, whereas surface learning will only produce short-term results, with students forgetting what they have learnt (Biggs 1987, Watkins 1983, Trigwell and Prosser 1991).

It is this second subjective approach that accounting education must adopt in order to help accounting students meet the demands of today's business world and develop generic skills (Albrecht and Sack 2000). Accounting educators must focus on creating students with generic skills such as tolerance for ambiguity, willingness to deal with complexity and conflicting information and enhanced problem-solving skills. However, the pre-existing learning styles of accounting students and the effects of a traditional accounting education explains why there is a continuing lack of generic skills in accountants (Boyce et al. 2001). If learning and teaching accounting is just rote memorisation, with traditional teaching methods and heavy content workloads, this will lead to students adopting surface learning approaches (Booth et al. 1999). These current teaching methods are inconsistent with the development of generic skills (Inman et al. 1989, Gow et al. 1994).

Using the learning style paradigm of Kolb (1976) researchers have found that a significant number of accounting students (and professional accountants) fall in the converger category (Baker et al. 1986, Collins and Milliron 1987, Brown and Burke 1987, Sharma 1998). This means that accounting students are mainly practically orientated, adopting narrow technical approaches to problems, preferring to work with things rather than people and with a focus of acquired knowledge for specific problems (Baker et al. 1986). Another study into the personality of the accountant and the accounting student using the Myers-Briggs-Type-Indicator (MBTI)

found that a significant number were either STJ (Sensing-Thinking-Judging) or ISTJ (Introverted-Sensing-Thinking-Judging) types (Booth and Winzar 1993). This means that individuals falling into these categories, prefer to work alone rather than interact with others, to use reading as their mode of learning, prefers sequentially structured organised activities, dislikes new problems unless there are standard ways to solve them and prefers objective tests based on memorisation of facts. Accounting students will perform better at written tasks with objective, technical questions, rather than written or oral assignments with unstructured and ambiguous questions (Booth and Winzar 1993).

All of the above mirrors the finding of this researcher's first questionnaire (completed for this thesis) by first year accounting (and business) students. Accounting students can still be predisposed to displaying more the (ISTJ) type features and having higher levels of communication apprehension. Undergraduate first year accountants still inhabit a positivistic world having a maths background, placing more confidence in results reached by a logical, objective process and seeing things in a black and white manner, rather than using a subjective process in relating to the outside world (Geary and Rooney 1993). Many accounting students fall into this classification displaying negative communication traits and Inman et al. (1989) found that students who choose accounting are the least likely to expect to adopt a deep-learning approach. These students thought that they were not likely to have to develop their creative or self-directed learning skills.

Accounting courses in order to teach vocational skills must address this preferred negative learning style of the student. Student approaches to learning can be changed by introducing specific teaching and learning strategies (Schmeck 1983, Beattie et al. 1997). To create a deep approach to learning, there should not be a focus on the student, but on the development of teaching and assessment (Biggs 1994). Concentrating on learning strategies are more important than any focus on students' ability (Schmeck 1983). There will though be obstacles. Carland et al. (1994) noted that classroom strategies which attempt to use subjective and ambiguous questions in assessments to develop generic skills will be resented at first by students with a surface approach to learning. The initial focus must be on convincing students that there is uncertainty and ambiguity in accounting (Cunningham 1996). Care must be given to the intellectual maturity of the students, as those in the first year may be at the lower levels of maturity and therefore knowledge to them will be made up of facts and rules (Kurfiss 1988). The

change to the preferred learning styles will happen as students become more familiar and confident with the new style of teaching (Boyce et al. 2001).

6.3 Thoughts behind the Professional Accountant course design at Sheffield Hallam University

The final year and second year of the undergraduate accounting degree program at Sheffield Hallam both contain a module that focuses on employability. The final year module called Financial Decision Making had been designed on mini-case studies that allowed students to work on key non-financial skills such as group work, co-operation, business acumen and ethics. The second year module (Understanding and Managing Financial Resources) is designed to help students obtain a placement (a one year work experience with various national and sometimes international employers). It allows students to work with tutors to create a curriculum vitae, understanding the skills required by employers and creating real world experiences such as mock interviews. Both of these modules contain, as part of the assessment package, a reflective essay that requires the student to reflect on how to improve on their current work-essential skills.

This researcher wished to design a course that mirrored the employability modules that already existed in the undergraduate accounting program and to answer the call for an improvement in the quality of accounting education programmes so that accounting graduates are properly prepared for entering the profession (AICPA 1986). There was a desire to create a course that would educate students and remove negative perceptions that accountants are numbers based, devoid of emotional intelligence, inflexible and impersonal (DeCoster 1971). This researcher wished to impart his personal experience in various industrial and commercial accounting roles that indeed the role of the accountant had expanded from scorekeeper to include roles such as strategist (CIMA 2009).

This course aims to move away from the narrow based bookkeeping perspective and to introduce a broader base for this accounting course. It will attempt to develop judgement, emphasize the need to deal with uncertainty, teamwork, oral communication (in the form of group and individual presentations) and written communication (in the form of a reflective essay). The directive from Sheffield Hallam regarding teaching content was not very specific and this allowed this researcher to bring in techniques to increase generic skills (such as group work and guest speakers) as advocated in accounting education since the AAA's Bedford Report (1986).

Traditional accounting courses are thought to be difficult, precise and technical with students presented with one well-structured solution to one question (Subotnik 1987). This mechanical teaching leads to prospective students getting the wrong idea as to what accounting is all about and leads to the wrong type of student entering the profession (Baldwin and Ingram 1991). This course wanted to move away from this and demonstrate that future accountants needed to have three key skills (as identified by the AECC in 1990) of: general knowledge of business, accounting knowledge and communication skills. This needed to be done without the students becoming disinterested (as Foster noted in his study of his classes in 1995) by the use of innovative teaching methods or misunderstanding as to why these methods were being used. Although there are many negatives regarding the potential use of new techniques on the course, other researchers such as Saudagaran (1996) found that an innovative approach to curriculum design can have a positive effect on accounting students. There is plenty of advice as to the desired content of an accounting course but note must be made that no single curriculum design can hope to encapsulate all that is required of today's modern accountant.

Accounting education must change to be relevant to the business world (Olivier 2001, Parker 2001) so aims of an accounting course must be to help to create students that are business advisors, able to carry out a range of accounting and value adding consultancy services. This change in an accountants' role effected by IT and globalisation is leading to the decline of traditional services and the growth of consultancy (Deppe et al. 1991, May et al. 1995). Accounting pedagogy should develop a capacity for creative thinking, problem solving and an appreciation of ethical standards and conduct (The Bedford Report 1986). Kinney (1990) suggests that the understanding the process of creating accounting rules is more important than memorising the rules of an individual accounting issue. Students should not be passive recipients of information and this curriculum design has tried to correct that by following the findings of the Albrecht and Sack (2000) that accounting educators should make sure that future accountants develop effective interpersonal relations. There should be less concentration on data collection and processing (with a right answer) to set problems (Mathews 2001). Therefore this course is deliberately designed to move away from a focus on procedures to a greater emphasis on conceptual and interpretative issues in accounting.

However, before the accounting curriculum is revised Scribner (1995) suggests that accounting programs must establish objectives that satisfy as many stakeholders as possible. The Association to Advance Collegiate Schools of Business (AACSB) Assurance of Learning Standard

16 stated that degree programs should have clear learning outcomes (AACSB 2008), with the establishment of clear objectives (Boyce et al. 2001). If there is the problem of having too many conflicting objectives, then educators must decide whether to design the curriculum for the general needs of employers or for a specific sub-section of the accounting profession.

This researcher wanted to create a course that not only appealed to the innovation cry of academics in accounting education, but also appealed to employers and most importantly, the students. This appeal to students could be viewed as being too commercially focused, viewing students as customers just like other business schools and universities (Marginson 2000, Klein 2006). Choi in 1993 defends commercialisation of universities and draws academics' attention to the fact that business education is becoming more market driven. Reckers in 1996 also states that accounting academics should recognise who are their customers and which teaching methods (or production methods) are the most effective in accounting education. There is even consensus from students that universities are not helping them develop key skills that they consider important for their career (Athiyaman 2001). Radhakrishna and Bruening (1994) found that the perceptions of students and employers on skills required in the workplace actually matched. The five key areas that both students and employers found as important were: communication, interpersonal, technical, computer and business-economic skills.

There must be a balance between technical skills and generic skills in the curriculum (French and Coppage 2011). Simons and Higgins (1993) surveyed academics, practitioners, and small and large firms. They found that all groups were in agreement that the technical content of accounting courses were adequate, but more attention should be given to the development of communication and problem-solving skills. Another study conducted by Gabric and McFadden (2000) found that the top three skills of verbal communication, problem solving and listening skills were again top of requirements by employers and acknowledged as being important in future careers by students. Rather than focusing on knowledge acquisition and classroom problem-solving activities this course will focus on a design that will also include communication, leadership and teamwork skills (French and Coppage 2011). James (2008) suggests that accounting educators actually have a lot of allies in the business world in attempting to introduce generic skills into the curriculum. Support comes from both the accounting profession and academics who are actively encouraging university educators to place more emphasis on generic skill development (AAA 1986, AECC 1990, Deppe et al. 1991, Boyce 2004).

There has been concern from academics that removing completely the technical procedures and routines from a students' education will create a generalised accounting education (Dyer 1999, Boyd et al. 2000). This concern has been noted in the creation of this module, but other more technical modules still exist in the first year of the accounting programme such as Financial Accounting and Management Accounting. There is as different debate that Management and Financial Accounting should not be given separate identities because management accounting numbers produced at the month or year-end become the Financial Accounts of an organisation (Baldwin and Ingram 1991), but this thesis will not be concerned with this matter.

The current first year accounting curriculum mirrors suggestions of academics such as Choi (1993) with modules that include a foundation in economics, finance and quantitative analysis. The only thing that is currently missing (especially in the first year) is an emphasis on the development of communication and teamwork skills, hence the development of the Professional Accountant. This should allow students to maintain their sound technical base (AAA 1986) yet add creative thinking and generic skills to these techniques (Howieson 2003).

The AECC in its two Position statements (1990 and 1992), summarises neatly the objectives of accounting education for the first courses in accounting. These first courses are where students can either confirm or dispel their negative stereotype of accountants and accounting. Accountants tend to make their career choices in the first two years at university (Paolillo and Estes 1982). The Professional Accountant module will also allow students to research what type of career is available in accounting and the skills required for those particular jobs. Students will learn about how accounting is integrated into an organisation and how accounting is used to provide information to different users in the organisation. They will use given information to synthesise and come up with new knowledge of their own. This teaching will be done through a myriad of methods that include case studies, simulations, cooperative learning and group projects. All of these methods will promote and encourage interaction between students themselves and tutors.

The course design of The Professional Accountant is very similar to one created by Basu and Cohen (1994) in which they created a management accounting course that developed their students' critical thinking, problem solving, teamwork, communication and ethical skills. Students worked in groups and were required to research an actual company and give a twenty minute presentation on the company's financial statements. Basu and Cohen (1994) report positives from this form of teaching. The students who experienced their course reported that it

did at least try to do something different than the mechanical approach to teaching that students find boring and it helped to address the negative stereotype many students had of accounting as described by academics such as Cohen and Hanno (1993) and Adams et al. (1994).

6.4 Communication

There are a lot of skills embedded in The Professional Accountant module that are considered desirable for the professional practice of accounting as advocated by AAA (1986), AECC (1990), Albrecht and Sack (2000) such as basic problem solving, critical thinking, communication, leadership and the ability to work in teams. The main skill that this course aims to address is that of communication. Communication skills for future accountants are the most crucial as the AECC (1990) identified the increasing role of the accountant to include such communication tasks as:

“the ability to transfer and receive information with ease, solve diverse unstructured problems in unfamiliar settings, deal with decisions, ethical issues, conflicting demands, unexpected requirements, coinciding deadlines and work effectively in groups with diverse members.”

Survey research has shown that employers are seeking accounting graduates with strong communication skills (Ulinski and O’Callaghan 2002, Bolt-Lee and Foster 2003). Communication skills are still viewed by academics and employers alike as the most desirable skill-set in an accounting graduate and the one most lacking (Clark 1990, Deppe et al. 1991, Mangum 1996, Nelson et al. 1996, Daggett and Lui 1997, Siegel and Sorenson 1999, Leveson 2000, Borzi and Mills 2001, Jones and Sin 2003, Hassall et al. 2005, Delange et al. 2006, Kavanagh and Drennan 2008). Other studies have demonstrated that accounting undergraduates have increased levels of communication apprehension in relation to their peers (Faris, Golen and Lynch 1999, Stanga and Ladd 1990, Simons, Higgins and Lowe 1995). Accounting students’ apparent communication inability and apprehension is creating issues as employers still advocate that stronger communication skills are required for the profession (Pittenger, Miller and Mott 2004).

Therefore self-efficacy techniques with a focus on communication skills, in particular verbal communication skills, will be introduced into this module to hopefully increase accounting students’ poor levels of communication ability. It is believed that self-efficacy techniques can be used to increase the students’ communication self-efficacy and will also help to raise general self-efficacy in the students for other tasks such as leadership, teamwork and problem solving. There are studies (Meas, Eldy and Icenogle 1997, Ulinski and O’Callaghan 2002) who find that

developing verbal presentations skills in students are important as this can also help students to acquire higher levels of cognitive thinking.

It was noted by May and May (1989) that potentially there is not enough classroom time in a regular accounting course to develop an adequate program to develop oral communication skills, especially with larger classes. This may also perhaps explain why there is very little in education literature that describes efforts to improve communication skills in accounting students (Rebele et al 2002). However, one of the few studies in this area by Kerby and Romine (2009), notes that through the teaching of communication skills, if done correctly, students can improve their levels of communication ability. For tutors to teach communication skills correctly, tutors must make it clear to students that they must know what is expected of them, with students being expected to use differing types of presentation styles (such as by themselves or in groups). Students must also have constant, consistent feedback from tutors to help in their improvement of communication skills (Kerby and Romine 2009).

6.5 Self-efficacy techniques

The course design at Sheffield Hallam will also follow the advice of Dywer and Fus (2002) that it is better to create a course focusing on increasing students' beliefs and self-efficacy about their ability to communicate, rather than apply techniques that directly address communication apprehension. Stajkovic and Luthans (1998) suggest six key items that are vital to overall course design to increase self-efficacy levels in an individual. They are:

1. Provide clear and concise definitions and descriptions of specific task requirements.
2. Provide specific examples (means) of how to accomplish tasks.
3. Design training to enhance beliefs that individuals have the skills necessary to do the tasks.
4. Design training to help individuals become more task diagnostic (use incremental skills) so they do not see mistakes as personal failures and increase anxiety.
5. Provide training and examples that closely coincide in timing with the task to be performed.
6. Provide clear and objective standards to help individuals gauge the level of performance accomplishment. (Stajkovic and Luthans 1998, p.255)

If learning strategies are to be achieved it is vital that clear learning objectives are established for the course of study (Crow 1980).Tutors should also make it clear to students what is

expected of them such as full participation in class (Knechel 1992). Tutors cannot just give out the case studies and expect the students figure out what is required themselves (Gabriel and Hirsch 1992). Students must now become active participants (Carland et al 1994). Teachers need to ensure that the students have the knowledge and strategies that are required to be successful at completing the tasks (Bandura 1977a).

6.5.1 Case Studies

One of the approaches advocated to develop generic skills (including communication skills) is the use of case studies. Case studies can be viewed as a strategic resource to operationalise teaching and assessment whilst at the same time encouraging deep-learning processes (Boyce et al. 2001, Ballantine and McCourt Larres 2007). The main method for both improving skills and enhancing communication self-efficacy in this course design will be the use of case-studies as advocated by professional bodies and academics (AAA 1986, AECC 1990, Albrecht and Sack 2000, and IFAC 2001).

Case studies have become popular within accounting education (Rebele et al. 2002). When used correctly they are an invaluable tool for developing critical thinking and judgement abilities. (Kimmel 1995). The appropriateness of a case study depends on its educational objectives and implementation considerations. Case studies are particularly appropriate when they are about relevant business or accounting issues (Yin 1994). Knechel (1992) explains how cases can be used to promote active learning and discusses the need for students to be adequately prepared with the tutor controlling the discussions of the students. One of the primary benefits of case-studies is that they can be based on real-world scenarios (Dittenhofer 1992). This creates motivation and interest from the students as it provides a connection with the external world, making them aware of the ambiguities and complexities of real-world decision-making (Boyce et al. 2001). It also helps to address the issue of understanding a topic framed in the real-world. Although case-study use is popular in accounting (Rebele et al. 2002), a negative finding with regards to their use in undergraduate study came from Libby (1991). Libby found that in a survey of undergraduate students, the benefits of case studies were not truly being utilised because tutors were only using case studies to highlight a point in lectures or to prompt discussion in the classroom.

To utilise them correctly, students must become involved in the scenario, given time to absorb the detail and to ultimately role-play (Boyce et al. 2001). There was the obvious concern that

students with potentially high levels of communication apprehension would not take part in the case studies, but there have been research findings that state that students are happy to take part in role-playing case studies (Craig and Amernic 1994). The process of tackling multiple unstructured case-studies should become challenging and rewarding (Stout 1996), with students understanding that not all answers can be provided by a formulaic solutions (Crow 1980, Libby 1992, Boyce 1994, Craig and Amernic 1994). Non-financial issues can also be included in a case study such as social, political, environmental and ethical issues (Libby 1991). Case studies with real-world issues allow students to question the social and ethical implications of current accounting practice decisions (Stewart and Dougherty 1993).

The use of case studies in The Professional Accountant curriculum design was not only to gain the benefits mentioned above, but also to use case studies that would have impact on an individuals' communication self-efficacy (Bandura 1977, 1986). The first and strongest self-efficacy technique is personal mastery of a task. An individual derives personal mastery from obtaining a positive personal experience in tackling a communication task. The majority of communication tasks for the students over the course of the module were to give presentations in groups. The idea was to build the students up slowly by initially giving small low-key presentations in small groups (maximum of five students per group) and building up to the students giving a complete assessed presentation based on the case study provided by CIMA (CIMA's Global Business Challenge). This build-up of group presentation tasks was so that if an individual succeeds performing a task (in this case giving a presentation), then this will increase an individual's (communication) self-efficacy by personal mastery of a topic (Bandura 1977a).

The danger here is that repeated failure will obviously do the opposite and lower self-efficacy (Gist and Mitchell 1992). Therefore room was given to allow the students to fail. As most of the tasks were not assessed, students could learn from their mistakes. This was done by following the advice of (Dwyer 1998) creating individual mini-speeches or presentations (such as investigation into the skill base of accountants) early in the semester to help students practice specific public speaking skills. These mini presentations provided students with individual feedback on what is required in giving a successful presentation, potentially increasing their self-efficacy for future speech assignments. It was the duty of the teacher to increase a student's communication self-efficacy by providing feedback to help the student understand their level of proficiency. When providing feedback, the tutors were provided with guidelines and given specific criteria for each task in the speech making process. This is because students with high

levels of communication apprehension need structure (Booth-Butterfield, 1986). Self-efficacy (in any concept) is enhanced when tasks are broken down into smaller units and then practiced close to the actual required performance (Bandura, 1997).

The case studies also provided accounting students with an opportunity to research and understand different types of organisation and general business issues as suggested by Inman et al. (1989). Case studies also help the students to understand the accounting profession and organisations information requirements from accountants (Albrecht and Sack 2000). The more information the student receives about accounting and what it is about, the more it will help to remove the negative stereotype of accountants (Cory 1992). Students' intellectual interest has also been given a boost by the professional body CIMA. Through various contacts, CIMA have kindly given this researcher access to the case studies that form the basis their Global Business Challenge. This Challenge is a case study based on a fictional organisation in a real industry (boat building, oil and gas etc). This case study provided by CIMA was designed for accounting undergraduates and became the basis for the assessed group presentation for The Professional Accountant.

The CIMA business challenge not only reinforces the importance of communication, but also helps with the desired skills of business acumen, teamwork, leadership and ethics as advocated by various academics (Charles 1995, IMA 1999, Albrecht and Sack 2000, Parker 2001, Messmer 2001, Howieson 2003). CIMA has also managed to integrate ethics into the case studies which is becoming increasingly important in the wake of some serious accounting scandals such as Enron (Wyatt 2004). It also tackles the criticism of accounting education that ethics was not integrated into the curriculum (Price Waterhouse Coopers 2003). These cases help to emphasise to the students that they need to show as an accountant, a strong sense of professionalism, ethics, integrity, honesty and respectability (Carnegie and Napier 2010).

In the examination of an individual's emotional state there is the term "physical arousal" (Bandura 1986). Increasing an individual's arousal in this context refers to a student's intellectual interest in a task. If the student can be intellectually motivated in a task, then this again can improve their self-efficacy. The intellectual interest comes two-fold in the presentation tasks. The first task is for the students to concentrate on themselves, to work together to give a presentation on what types of accountant exist, to choose which one they would like to be and what steps and skills they require to become this particular type of accountant. Students are helped with their research and are given various internet links such as

the one provided by ACCA. This link specifically highlights the top ten skills required (including communication). The idea is that this would then allow students to understand why they have been asked to (and will continue to be asked to) give presentations. This also helps to combat the findings of researchers such as Foster (1995) that students do not perceive innovative teaching methods to be meaningful, then they will not be motivated to take part. The second part is that CIMA by using real world scenarios for their case studies have increased intellectual interest. Hopefully this will help students become interested in the module and prevent the declining attendance as it is claimed that students are becoming more and more strategic learners and with the advent of the digital age, students feel they do not have to attend seminars (Rodgers 2001). CIMA asks for students to submit a small presentation and a report, if good enough, the successful groups will be invited to take part in the UK final in London. If they are successful again they will compete in a world final (the last two finals have been held in Mumbai and Warsaw).

6.5.2 Co-operative learning

Participation in group presentations in The Professional Accountant module allows the students to be exposed to the other self-efficacy antecedents as well as the main antecedent of personal mastery. For example, vicarious experience or modelling behaviour on others who complete the task can help an individual improve their communication self-efficacy. The instruction to the tutors was to allow students to give their presentations (other than the one that was assessed) in front of the other students in the same seminar group. This meant that the students observing other students successfully giving their presentation (completing the task) could learn from the success of others and improve their own performance (as suggested by Bandura 1977a, Gist and Mitchell 1992).

The benefit of allowing other students to listen and watch other presentations is that another of Bandura's antecedents of self-efficacy, social persuasion, could come into effect. Social persuasion on these occasions occurred when the students were prompted to give each other positive feedback on their presentations, using common forms of social persuasion such as verbal encouragement (Bandura 1977a). This also links to one of the most widely cited works on co-operative learning approaches used in an intermediary accounting class by Mills and Cottell (1992). Their work claims that co-operative learning embedded in course design helps academics achieve goals of: promoting active learning, creating sense of community, ensuring that knowledge is created not transferred and bridging the gap between students and tutors.

Cottell and Mills (1993) went on to define that co-operative learning in an accounting sense meant small group work based on positive interdependence.

6.5.3 Tutors

Tutors were instructed to give the students as much positive feedback to students for taking part in their respective seminars (social persuasion). They were told to use these common methods of verbal encouragement, coaching and performance feedback to gradually improve the performance of the students in the task. For students whom are not used to these new techniques, a caring and nurturing environment should be created as this is an important part of creating motivation for students to communicate (Biggs 1989). To support the students in their respective groups, the tutor was instructed to actively encourage the students to support one another in the presentation tasks to create an atmosphere of empathy, mutual understanding and give guidance on how groups perform over time. Basic guidance was given as to how groups would form and rules for interaction, but instruction did not go as deep as respecting cultural and religious differences as suggested by Hofstede's cultural model (2001) and Gray (1988).

The presentations given by the students (in small groups of four to five students) also helped link to another communication self-efficacy antecedent, emotional state. Tutors were made aware (and had their own preconceptions) that this was the first time many students had given any sort of presentation. The tutors were instructed to praise the student for just standing up and having a go in the early presentations to try to put the students at ease. This again followed the instructions of Bandura (1977) to prevent an individual experiencing negative emotions when completing a presentation task as self-efficacy levels will fall on their perception of being unable to give presentations.

The overall approach that the tutors were to take on this module has been described as dialogical model approach (Freire 1995) as opposed to a banking approach (Boyce 2004 p.577). The banking approach is where students are just fed facts and figures from the tutor only for the students to regurgitate them during their exams. The dialogical model requires an active participative relationship between the tutor and the students to solve and reflect on problem situations such as provided in case studies (Kaidonis 2004, Thomson and Bebbington 2004). Educators have considerable influence over what and how students learn because of the potential to have frequent and direct interaction with students. It is also clear that these students who if they are used to rote-learning, potentially have only used surface-learning

techniques and are passive listeners, will not achieve these learning outcomes unassisted or undirected (Boyce et al. 2001). Tutors must promote among students an environment of collaboration and comradeship, with a set of values that includes civility, willingness to take risks and an appreciation of diversity (Barnes et al. 1994).

Active participation is an effective strategy for changing behavioural beliefs, attitude and intention (Fishbein and Ajzen 1975). In active participation, new experiences and information are gained by observing objects, people and events. This dialogical approach is said to be one of the best ways to foster generic skills development (as emphasised by the accounting profession), which include analytical and critical thinking skills, judgement and synthesis skills, interpersonal skills and the ability to adapt all these skills to a wide variety of situations (James 2008). However there is a potential of resistance from the students for this style of teaching due to the fact that the student's preconceived ideas regarding accounting education was an education only involved having to learn the technical procedural aspects, rather than using other generic skills to solve organisational issues (Boyce 2004).

One of the greatest impacts on future career decisions of students can be made by their tutor (Paolillo and Estes 1982). In terms of choice of tutors for this module, there has been criticism that first year accounting course tutors have very little or no prior teaching experience and very little understanding of the accounting profession (Baldwin and Ingram 1991). Hermanson et al. in 1996 suggested that there should be input into course design from the profession, have speakers from the business community and even to have the best full-time professors teach on the first year accounting courses. More experienced tutors are not interested in teaching the basics as it seen as uninteresting and offering little opportunity to create publishable research (Nelson 1992). Tutors who can change accounting education must be able to get students to be interested in the profession and the potential for the profession to make a significant contribution to society (Langenderfer 1987). AECC (1992) stated that just having enthusiastic and committed teachers was not enough. Teachers need to have a record of success in teaching, up-to-date with the latest professional developments and research literature.

Care must be taken when tutors are chosen to be involved in a generic skills program (Gammie, Gammie and Gargill 2002) as some tutors will not to be want to be involved and be resistant to teaching these new methods (Libby 1991). This is potentially because they too have been a previous product of this conventional, positivist rule-based accounting education and do not want to change their approach to teaching (Truan and Hughes 1999). Tutors need to lose their

authoritarian approach and adopt a more sympathetic leaning, helping students understand ambiguities of real-world problems as just leaving students to do it themselves will lead to frustration and resentment (Friedlan 1995).

The teaching team for The Professional Accountant was chosen in recognition of previous research which noted that teachers with experience of the business world will have the most credibility and influence on the students (Boyce et al. 2001). The team included two professors in accounting education and five other tutors with extensive professional accounting experience in various business roles. This line-up challenges the AACSB's (2008) recommendations that the majority of tutors should have a doctoral degree and is more in line with the thoughts of Weis (1990) and Parker (1992) that if the teaching team contained tutors with PhDs it would lead to a decline in the classroom experience. All of the tutors recruited to The Professional Accountant were prepared to be flexible in their teaching methods, with a realisation that this was a new course, but they received extensive briefings as to the design of the course and what they were required to teach in each seminar.

Tutors would play an active part in not just relaying their professional knowledge to the students, but would also try to adopt communication self-efficacy techniques as advocated by Bandura (1977, 1982). The tutors would attempt to create a nurturing atmosphere, where students were given freedom to fail in their attempted personal mastery of various communication tasks. The basic assumptions underlying the effect of any given message depend on the extent to which it is attended to comprehended and accepted (Hovland et al. 1953). It was thought that in a situation of persuasive communication, the students will be presented with informational items on their performance delivered by the tutor. However to be effective there are a number of factors that need to be taken into account, such as source, message and audience characteristics. Source of communication refers to various characteristics of the communicator such as trustworthiness, expertise, status, likeability and credibility. It was hoped that with some of the best tutors in accounting from Sheffield Hallam teaching on The Professional Accountant, that this credibility of the message would be well received by the students.

Tutors can also have an effect on a student's outcome expectancy behaviours (Bandura 1977). These expectancies are heavily influenced by the environment that they are in and who helps the observer see what a particular choice of action will lead to. For a student, the assistance and influence should come from the teacher. Instructions provided by the teacher will help the

students see what outcome a particular behaviour will lead to. It is the duty of the teacher to teach a student that when a behaviour is successfully learned, the outcomes will be meaningful and worthy to the students (Bandura 1977a).

6.5.4 Guest Speakers

As well as the introduction of case-studies and co-operative learning, there was also the introduction of guest speakers at lectures. Guest speakers were invited from the professional bodies and individuals of high status within the accounting profession who had studied accounting at Sheffield Hallam. This allowed students to again increase their communication self-efficacy levels by another example of vicarious experience. Students observed guest speakers from the profession with good communication skills noting the fact that an ex-student of Sheffield Hallam can be successful at both accounting and communicating. This should indicate to the student that they too have the potential to achieve this level of success. Guest speakers also fulfil the demands that there should be greater links between academics and the accounting profession (Howieson 2003). These links were provided by six guest lecturers. The first was given by an accounting recruitment director from recruitment firm based in the South Yorkshire region, another by a Financial Controller of a Building Society (who was a graduate of Accounting at Sheffield Hallam) and representatives from accounting profession bodies, ACCA, CIMA, ICAEW and IFA. These lectures concentrated on instructing the students as to the nature of accounting in the business world and the skills required to be successful in the workplace. This message again reflects academic research that states that carefully planned guest speaker presentations can provide very real accounting experiences to first year undergraduate accountancy students (Metrejean and Zaeseksi 2001, Metrejean et al. 2002, Fedoryshyn and Tyson 2003). This will also help to close the gap between academia and practice that is said to exist (Bowden and Masters 1993, Crebbin 1997, Wiggin 1997, Albrecht and Sack 2000). It might perhaps also allow practitioners (due to their connection with the students) to reduce their preconceived notions on the level of student abilities and reduce the expectations gap (Hassall et al 2005).

6.6 At-risk Students

Another of the possible positive side-effect of introducing self-efficacy techniques to lower communication apprehension is the potential effects these techniques have on general academic success. There are findings that students with high levels of communication apprehension are more likely to drop out of university compared to students with lower levels of apprehension (McCroskey, Booth-Butterfield and Payne 1989, Ericson and Gardner 1992). When Chesebro et al. (1992) conducted a study of at-risk students they found that forty-four per cent had low-levels of self-perceived communication competence in their ability to speak to strangers and in groups. Chesebro thought that academic success is dependent on individuals having to speak in groups and talking to strangers (teachers and others) to ask for help. Academically talented students feel less apprehension when asked to do these tasks than those with high communication levels and those judged at risk (Rosenfeld, Grant and McCroskey 1995).

Chesebro et al. (1992) suggested that communication apprehension issues need to be addressed by teachers, helping students at-risk to increase their communication skills. Therefore there is a potential that if communication skills are enhanced in students at-risk, this may give them a greater ability to ask others for help at university and potentially prevent them from dropping out of university. This is outside the scope of this thesis, but is one side-effect that deserves additional attention in a later study.

6.7 Team-conflict self-efficacy and outcome expectancy model (Stone and Bailey 2007).

With the introduction of this new module The Professional Accountant, it was viewed that a model that could measure the effects the various antecedents of communication self-efficacy had on the students' communication self-efficacy levels should be developed to examine what if any of the antecedents mentioned by Bandura had the greatest effect on an individual's communication self-efficacy. The antecedents of self-efficacy as defined by Bandura in 1977a are: personal mastery, vicarious experience, verbal persuasion and emotional state. It was hoped that if a model could show which of the antecedents had the greatest effect on the individual student, then the curriculum could be changed to enhance more of that antecedent and therefore potentially increase the individual student's communication self-efficacy.

To find such a measurement instrument or model was not difficult as self-efficacy has become to be one of the most popular concepts in psychology research. Bandura has been credited as

the fourth most influential psychologist in the history of psychology (Haggblom et al. 2002). Bandura now ranks among the top five psychologists in the number of citations in psychology texts (Knapp, 1985). Self-efficacy has been remarkably popular with more than eight hundred articles on the topic of self-efficacy have been published (Judge et al. 2007). There have been four decades of empirical research generating more than ten thousand studies demonstrating a positive relationship between self-efficacy and different motivational and behavioural outcomes. Self-efficacy has been described as “the theory heard ‘round the world’” (Smith, 2002, p. 30).

The most popular area of self-efficacy research has been in relation to performance in the workplace (Stajkovic and Luthans 1998). Research into the workplace has explored self-efficacy techniques that have been used for improving training (Kozlowski et al. 2001), leadership (Chen and Bliese, 2002), newcomer socialisation and adjustment (Saks, 1995), performance evaluation (Bartol, Durham and Poon, 2001), stress (Jex, Bliese, Buzzell and Primeau 2001, Schaubroeck, Jones and Xie, 2001), political influencing behaviours (Bozeman, Perrewe, Hochwarter, and Brymer, 2001), creativity (Redmond, Mumford, and Teach, 1993), negotiation (Stevens and Gist 1997), and group–team processes (Feltz and Lirgg, 1998).

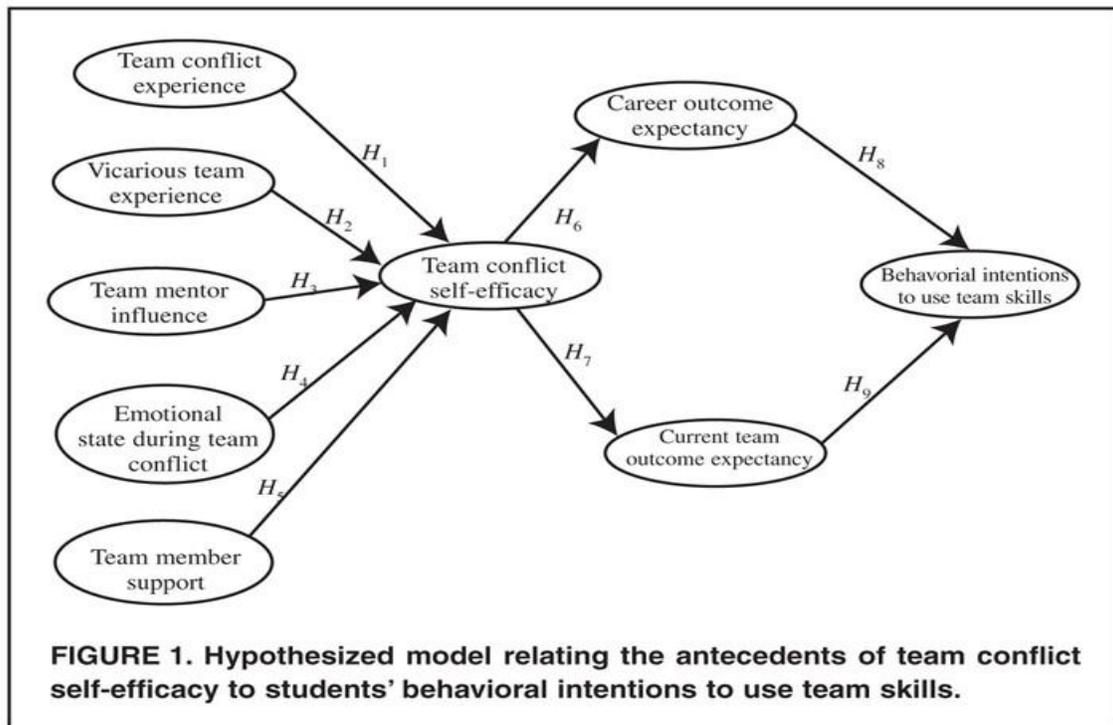
Focusing on the teaching of generic skills in an educational setting there are studies on increasing general ability of students using self-efficacy techniques (e.g. Lent, Brown and Hackett 1994) and there is even research into the productivity of members of a university faculty (Taylor et al. 1984). Of all the possibilities and models that could have been used to measure communication self-efficacy in first year students, there was one model in particular that stood out and that was one created by Stone and Bailey (2007) which tested the levels of team conflict self-efficacy in business students.

Stone and Bailey recognised that generic skills are important in the development of business students but they focused on team working skills influenced by the findings of Cohen and Bailey (1997) who found that of the business organisations they researched, over eighty per cent used teams in the workplace. Therefore it was felt by Stone and Bailey that the students needed exposure to skills and experiences of working in teams. They created a module that encouraged team working skills and created a model to test the curriculum about the effectiveness of these team working self-efficacy skills used by the students to overcome team-conflict. They tested the major variables of team-conflict self-efficacy such as personal mastery and vocational experience and what effect they had on an individuals’ self-efficacy. They also measured the

causal mechanisms that self-efficacy could have on outcome expectancy and behavioural intentions of the individual to use these new found team working skills in the future.

This newly formed model was shown pictorially:

6.7.1 Stone and Bailey's 2007 pictorial model:



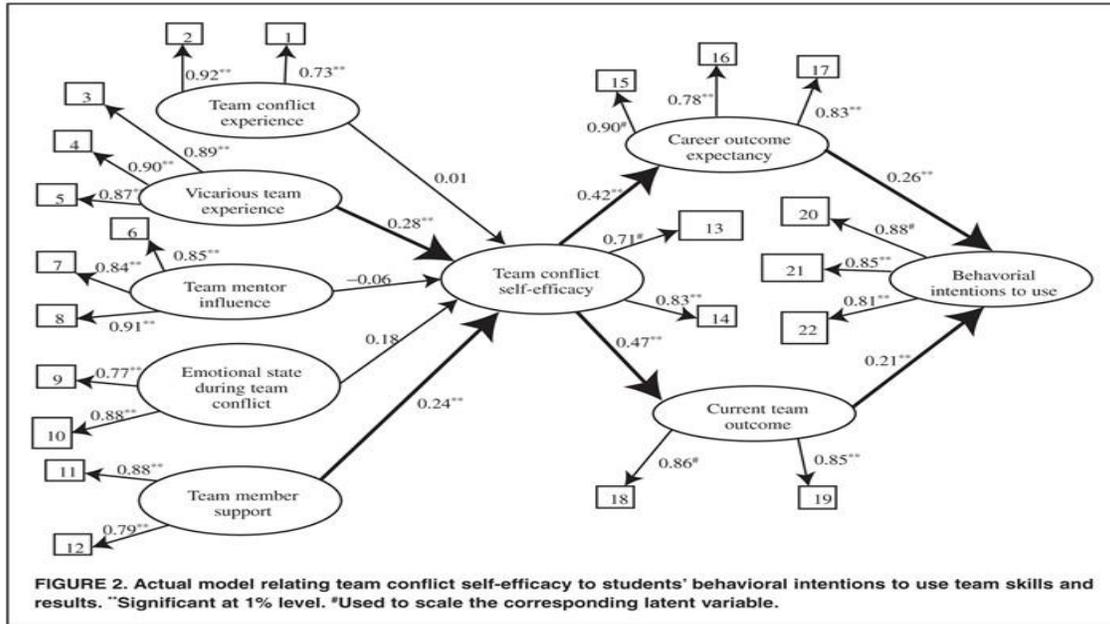
Stone and Bailey (p.259, 2007)

The way that the above model works is that Stone and Bailey's questionnaire would attempt to ascertain the strength of the five antecedents of team-conflict self-efficacy. The model then goes on to explore team-conflict self-efficacy in relation to its effect on current team and career outcome expectancy. The final section looks at the relationship between current team and career outcome expectancy in relation to at the overall behavioural Intentions of the students to use their new found team-conflict skills in the future.

6.8 Results of the questionnaire

Stone and Bailey published their results in 2007 and diagrammatically presented their findings:

6.8.1 Pictorial results:

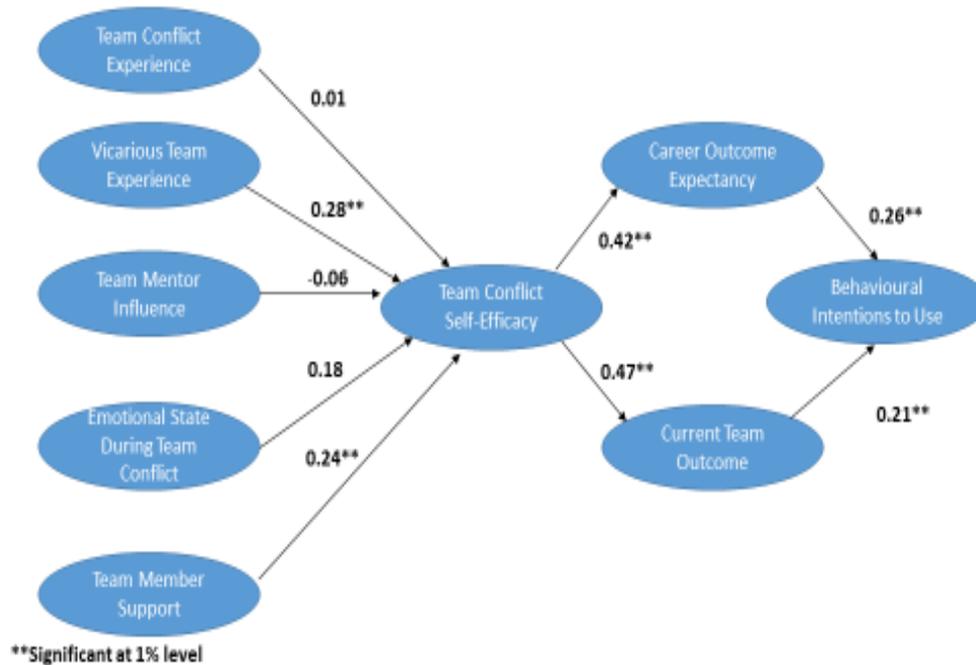


Stone and Bailey (p.262, 2007)

This diagram shows the overall latent variables in ovals linked to key measurement questions from the original questionnaire. For ease of use and simplification, this researcher has re-created the diagram to show the key variables of team self-efficacy only:

6.8.2 Simplified pictorial presentation:

• Stone and Bailey – original model design – RESULTS:



6.9 Latent variable results

In terms of the first five statements that examined the antecedents of team-conflict self-efficacy, it was found that three out of the five statements were not statistically significant (team conflict experience, mentor support and emotional state). Stone and Bailey deemed that any of the statements that had a correlation of over 0.20 had a statistically significant impact on overall team-conflict self-efficacy. Therefore the only antecedents that had a statistically significance on team-conflict self-efficacy were vicarious experience of 0.28 and team member support of 0.26. This is better than the findings of Chen, Donahue and Klimoski (2004) who found in their study of students who had taken a course in teamwork skills, that no antecedents had any effect on their levels of teamwork self-efficacy.

The positives that Stone and Bailey took from their results were that their model suggested that students can improve their team-conflict self-efficacy by creating a network of support for each other and allowing the students to observe each other resolving team conflict. Stone and Bailey

suggested that to improve team-conflict self-efficacy, educators need to encourage team member support and allow more opportunities for students to observe or listen to other teams resolve their conflicts.

Stone and Bailey suggested that to create a supportive environment tutors should put individuals into groups and those groups should work with other groups on the module to provide support and to allow for greater vicarious experience. Stone and Bailey also suggested using students who had been through the course the previous year to work with those new to the course to offer guidance and support. To encourage greater team work, there should be provisions made to allow team interaction both inside and outside of the classroom.

In terms of development of positive behaviours in groups, Stone and Bailey suggested that tutors should also provide structured experiences with regards to team formation and the development process that teams undertake. There should be teaching on how a team should have shared goals, operational rules and expectations.

Stone and Bailey also found that the positive effect of the above antecedents went on to have positive results for expectancy and behavioural intentions of the students surveyed to use teamwork skills in the future. All of these paths were found to be statistically significant. This means that positive experiences in team-conflict self-efficacy led to positive statistical impact on career outcome expectancy of 0.42 and an even stronger impact on team outcome expectancy of 0.47. The results suggest that students due to a positive experience in team-conflict self-efficacy will now consider using these skills in their next teams and future career experiences. It can be seen that both of these expectancies influence the students to have intentions to develop these new found skills in the future workplace.

To influence longer-term behavioural intentions, Stone and Bailey stated that tutors should stress the importance of having team-working skills to students. Suggestions to students of needing to work in teams in an organisation and developing greater generic skills will create positive outcomes not just in their current teams but also in their future career. This can be further enhanced by having guest speakers (possibly past graduates) to stress the importance of having good team-working skills in the workplace.

In terms of the three failed antecedents, there was not any discussion around emotional state from Stone and Bailey but there was consideration of why personal mastery and mentor support were not deemed a success. The students had experienced team-conflict but had not viewed

that experience as important. This seemed to contradict the findings of Bandura (1982) by not having personal experience as being more statistically important. Stone and Bailey concluded that this was more due to the design of the questionnaire items rather than anything experienced on the course. For team mentors, the results of the questionnaire pointed to the poor performance of the tutors rather than poor design of the questionnaire. Stone and Bailey leapt to the defence of their fellow tutors stating that it was perceived by the students that they were instructed by the tutors on how to resolve their teams' conflict rather than encouraged to resolve their conflicts. Tutors were also not effective at helping team members increase their beliefs that they could resolve team-conflict.

6.10 Suggestions for future research directions

Stone and Bailey suggested that to increase the robustness of their model it was best to re-run the questionnaire using a different sample to validate their results. Another idea was to perhaps run the test again, but this time in an organisation with individuals who worked regularly in teams. They also suggested linking the results of self-efficacy with the actual performance of the students to examine if those who showed high levels of team-conflict self-efficacy had better marks than those who exhibited low levels of self-efficacy.

This researcher will attempt re-run the team-conflict questionnaire and model again, but will change the focus to communication self-efficacy rather than team-conflict self-efficacy. This researcher had already reflected some of the suggestions of Stone and Bailey in the curriculum design of The Professional Accountant module by having multiple team member support and vicarious experience opportunities for the students. Tutors on The Professional Accountant module have been debriefed to offer increased encouragement (rather than instruction) to improve communication skills. Guest speakers invited to speak in The Professional Accountant's lectures have also helped by emphasising the importance of generic skills in the workplace.

What will also be carried forward is Stone and Bailey's suggestions in regard to the possible future design of the existing questionnaire items (questions). Stone and Bailey found that their personal mastery questions had restricted individuals who completed the questionnaire on the impact that personal mastery had on team-conflict self-efficacy. The wording of questionnaire items need careful attention in this personal mastery section as Stone and Bailey on review thought that the questions asked the students about their experiences about resolving conflict rather than experiencing conflict.

6.11 Conclusion

This chapter has seen the development of a module in the first year of the accounting degree course entitled “The Professional Accountant.” The design of the module tried to absorb the recommendations, conclusions and directions for creating a new and innovative pedagogy from extensive academic research into accounting education. In the creation of this module, attention was also paid to the techniques associated with increasing levels of communication self-efficacy to potentially enhance the students’ communication ability and reduce the students’ communication apprehension.

Previous techniques advocated to reduce levels of communication apprehension in an individual are expensive, time-consuming and therefore almost impossible to deliver in a mass-market education system. After testing and empirically proving a link between communication apprehension and self-efficacy in the first questionnaire results on Sheffield Hallam’s accounting students used in this thesis; it was decided to introduce self-efficacy techniques into the curriculum design as these techniques are meant to be cheaper and more effective to curing fears (Bandura 1986).

Once the communication self-efficacy techniques such as personal mastery, vicarious experience and mentor support had been introduced into The Professional Accountant, then there was a need to measure the potential effects of these techniques on the individual accountancy students. The model that was chosen to measure these effects was the work of Stone and Bailey (2007). Although this model was first designed for measuring team conflict self-efficacy and its antecedents, it also tested for outcome expectancy and future behavioural intentions in their relationship with self-efficacy. This next chapter will go on to explain the development and adaptation of this model to now test for communication self-efficacy.

Chapter Seven: MODEL DESIGN AND TESTING FOR COMMUNICATION SELF-EFFICACY

7.1 Introduction

This researcher's next step is to take Stone and Bailey's 2007 model, use the same self-efficacy framework and create a theoretically sound model to explain the behavioural intentions of students to apply communication skills they have learnt in Sheffield Hallam University's first year accounting course. This means doing two things. The first thing is to understand the statements which join the team-conflict model together and change these statements to focus on communication self-efficacy. The second change is to look in detail at the questionnaire items (questions) and again either change or remove them to get this new model to reflect communication self-efficacy as opposed to team-conflict self-efficacy.

Once the model and questionnaire are redesigned, then the new model of communication self-efficacy needs to be tested. The testing is done by having a pilot study, getting the students who have studied on the very first running of The Professional Accountant module to fill in the newly created communication self-efficacy questionnaire at the end of the module. This is because they have been exposed to methods of teaching in that module that are supposed to increase an individual's communication self-efficacy. Examples of this include many opportunities to present in small groups. This opportunity to present, should allow an individual to increase their personal mastery ability.

The decision to introduce into the curriculum of The Professional Accountant, communication self-efficacy interventions was deliberate. It was hoped the students would gain a new potentially improved level of communication self-efficacy which the students would then go on to use (and feel confident about using) in their future study and future accounting career. The Stone and Bailey model although concentrating on team-conflict self-efficacy recognised the importance of students having certain generic skills in the future workplace. Therefore it was thought that this model could be adapted to consider and capture the skill of communication as this is still thought to be the skill most lacking in accountants (CIMA 2009).

The chapter then presents an analysis of data collected from the pilot study conducted at Sheffield Hallam. Stone and Bailey's major findings were that team conflict self-efficacy was significantly affected by vicarious experience and team member support. The results at Sheffield Hallam suggest that personal mastery, team member support and emotional state play an important role in influencing students' communication self-efficacy. The results are important because tutors and instructors involved in accounting education can potentially replicate these

communication self-efficacy antecedents in their courses and ultimately increase students' behavioural intentions to use new found communication skills in the future.

7.2 Covariance-based Structural Equation Modelling (CB-SEM)

The design of the team conflict self-efficacy model was very complicated with Stone and Bailey (2007) using a Covariance Based Structural Equation Modelling (CB-SEM) approach, which is intricate and requires the questionnaire used to be extremely precise and reliable. It is a method that tests in several steps the reliability and validity of the questionnaire. The first step that Stone and Bailey took was to firstly have every antecedent supported by theory. These statements were tested by analysing of the data from the questionnaires using goodness of fit indicators (CB-SEM analysis). Their results confirmed the proposed structure and theory of the team-conflict self-efficacy model.

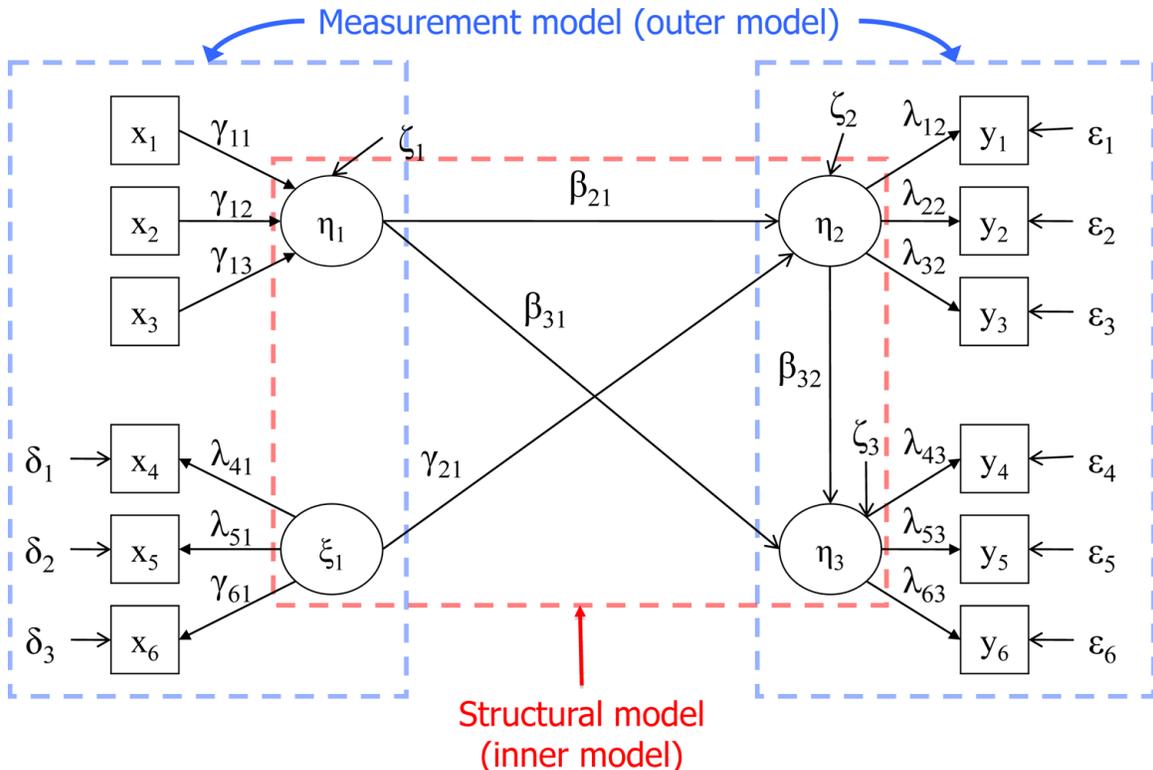
Stone and Bailey (2007) questionnaire's data analysed by CB-SEM which is based on an overall method called factor analysis. Factor analysis originated in psychometrics and is used in behavioural sciences, social sciences, marketing, product management, operations research, and other fields that deal with data sets where there are large numbers of observed variables (questionnaire items) that are thought to reflect a smaller number of underlying latent variables (theory). This factor analysis evaluates the relationships between observed variables (questionnaire items) and unobserved variables (theory) (Gefen et al. 2000). CB-SEM is a highly inflexible, yet comprehensive methodology and is viewed as appropriate for testing established theories (or phenomena) such as self-efficacy.

There are two types of factor analysis: Exploratory Factor Analysis (EFA) or Confirmatory Factor Analysis (CFA). EFA is used to explore and test new ideas and theory, but Stone and Bailey decided to use CFA to confirm their team-conflict self-efficacy model's reliability and validity. Both EFA and CFA are complex approaches that tests and confirms that questionnaire items are associated with specific factors (latent variables).

Stone and Bailey's attempts to provide evidence between the latent variables of self-efficacy, outcome expectancy and behavioural intentions and observed measures or in this case results from a seventy-six item questionnaire. This Confirmatory Factor Analysis using a Covariance-Based Structural Equation Modelling (CBSEM) approach, that in several steps, uses a factor analysis and linear regression, tests the reliability and validity of questionnaire item measures (the outer measurement model) and the proposed relationships between the theoretical latent

variables (the paths between the circles) that is the structural model. This is a very powerful analysis and has been described as “hard modelling” by Wold (1980) because it requires a specified model based on theory and research and is a multivariate technique incorporating measured variables and latent constructs. SEM also has great appeal in that it uses graphical language to provide present complex relationships, creating a diagram of the model and its hypothesised statements transformed from the set of equations. (Suhr 2010).

7.2.1 Diagram of SEM



Roldan and Sanchez-Franco (p.195, 2012)

SEM is the merger of two approaches, factor analysis tests measurement model (factor analysis) and the structural model (path analysis) (Lee et al. 2011). The measurement model tests the relationship between the questions in the questionnaire in relation to the individual statements. The structural model measures the strength of relationship between the statements. SEM uses the multiple Pearson coefficient of determination (R^2). Similar to Pearson's r , the squared factor loading is the percent of variance in that indicator variable explained by the factor. To get the percent of variance in all the variables accounted for by each factor, add the sum of the squared factor loadings for that factor and divide by the number of variables. The covariance-based analysis here will attempt to study correlations between a number of interrelated variables,

which then be combined to produce a few meaningful factors which in turn become interpretable (Kline 2000). This in essence will take the questionnaire items (the observed variables), narrow them down into the antecedents of self-efficacy (derived variables) and provide operational definitions for the process (in this case self-efficacy, outcome expectancy and behavioural intention). Each questionnaire item (survey question) will examine the highest (positive or negative) loadings to determine which factor affects that question the most. Loadings can range from -1 to 1 indicating that the factor strongly affects the variable either negatively or positively. Therefore, the larger the R^2 the more the latent variable is associated with the item measure. The R square provides an indication of the explanatory power of the model. In confirmatory factor analysis, loadings should be 0.7 or higher to confirm that independent variables are represented by a particular set of items (Nunnally 1978). Loadings closer to zero indicate that the factor has a weak effect on the variable.

7.3 Development of Statements for communication self-efficacy

To design any model on self-efficacy Bandura (1997) recommended that to construct regulatory self-efficacy scales suitable for a questionnaire, there must be initial work undertaken to understand the challenges and impediments that an individual faces in a task (such as communication). The test for self-efficacy, outcome expectancy and behavioural intentions created by Stone and Bailey was focused on team conflict self-efficacy, not communication. Therefore the questionnaire items needed to be changed to focus on the measurement of factors that influence communication not team conflict.

On trying to change, yet maintain the integrity of the Stone and Bailey model, the statements were created in order to answer and to meet the research objectives of the study on communication self-efficacy. The statements are trying to explore how two or more measurable variables are related (Churchill 1999). Nachmias and Nachimas (2000) identified four important common characteristics that research must possess. The statements must be clear and defined, value free, can be tested, with the conditions holding under testing. It is incredibly difficult to ensure that these statements are free of personal biases. Once the statements were created, there was a need to match the statements with the corresponding questionnaire item with each factor of communication self-efficacy. Each factor (antecedent) of self-efficacy will then build to create an overall result for communication self-efficacy. The final Stone and Bailey model had seventy questions and is very delicate in terms of ensuring the paths flow. Therefore to try to maintain the communication self-efficacy models' delicate integrity, it was thought best to keep

the nine statements of the investigation into team-conflict self-efficacy the same for the investigation into the antecedents of communication self-efficacy. There is very little change to the overall statements, simply replacing words such as “team-conflict” with that of “communication:”

Statement One: The level of communication experience has a significant and positive impact on communication self-efficacy.

Mastery experiences are seen as the most effective way of developing self-efficacy and occur when a student is given the opportunity of mastering an idea or concept (Chowdhury et al. 2002). However it was here that Stone and Bailey encountered the most difficulty in measuring team-conflict self-efficacy. It was here that they felt they had designed the wrong questionnaire items. The questions tried to gather responses on how the student managed the conflict rather than experienced it. Bandura (1997) writes that poor items will generate poor results. If self-efficacy questions are targeted to factors that have little or no impact on the mastery of the task, then the results cannot create a predictive relation between the item and the overall testing of the overall variable of communication self-efficacy experience. Bandura goes on to note that if negative findings are created these will reflect faulty questions rather than limitations of self-efficacy beliefs. Therefore great care was taken to ensure that the students wrote about their ability and experience in trying to master the task of communication. In the pilot study at Sheffield Hallam, a lot of the questions were either completely rewritten or removed to ensure that the self-efficacy scales were correctly tailored to communication experience and the assessment of the many ways in which efficacy beliefs operate.

Statement Two: The level of vicarious experience has a significant and positive impact on communication self-efficacy.

In this section, the students will be tested on the effect vicarious experience has on their own levels of communication self-efficacy. The definition of vicarious experience is that it should enhance an individual’s self-efficacy through observation and social comparison (Tucker and McCarthy 2001). Observation provides individuals with the opportunity to see how others have managed difficult situations. Social comparison allows individuals to watch similar individuals that they identify with to succeed and to allow the second set of individuals feel confident enough to replicate this success.

Statement Three: The influence of a team mentor has a significant and positive impact on communication self-efficacy.

Another way of developing self-efficacy is through verbal persuasion from a mentor. In the case of Sheffield Hallam, verbal persuasion was provided through the individual tutors assigned to the seminar groups. During the time the students spend in class and in lectures they will receive encouragement for attempting communication tasks from their specific tutors. The tutors were selected not only on their ability to nurture and encourage the student, but also on their previous experience in the workplace. It was hoped that these tutors, alongside guest lecturers would mirror the advice that the more credible the source of verbal persuasion the stronger the development of the individual (Wood & Bandura, 1989). Students who are able to observe and gain feedback from mentors and senior professionals in the field are likely to have a significant effect on their understanding and self-efficacy. This is supported by the findings of Coll et al. (2001) in their study of co-operative education, where domain-specific knowledge and feedback from work supervisors were found to increase self-efficacy of students in science and technology.

Statement Four: The amount of team member support in the team has a significant and positive impact on communication self-efficacy

This was found by Stone and Bailey in 2007 to be the strongest antecedent of team-conflict self-efficacy. This may be due to the fact that the students in resolving team-conflict self-efficacy did not act independently and the desired outcomes are achieved through their collective efforts, working together to achieve what they cannot do on their own. A group's achievement is through shared knowledge, motivation, skills and their beliefs in their collective power to achieve the set task (Bandura 2000). Therefore it made sense to follow the recommendations of the study to create for the students the opportunity to work in teams. Lectures and seminar tuition in The Professional Accountant would also focus on the creation of teams and how they should operate using classical theories such as Tuckman (1965). Students would also be given an insight into the type of role they might play as an individual within that team as defined by Belbin (1996).

Care was again taken here in the writing of the questions on team member support. This is because perceived communication efficacy can be more centred round an individual's beliefs in the group's collective ability (Bandura 1997) rather than their own. Question design has to take

into consideration whether the questions are concerned with the communication self-efficacy of an individual or the group. There are two methods that can be used to measure a group's perceived communication self-efficacy. The first method is to examine the individual's performance in the group, the second is to measure the individual's communication performance as part of the whole group. The first method has been chosen as this examines the group's collective motivation and co-operation within groups. Some researchers suggest that a group should be measured by examining how the group arrives at a single decision (Guzzo, Yost, Campbell and Shea 1993) but the decision was taken to keep the questions at an individual level. Examining group performance as a whole can give skewed results as individuals of the group who are potentially weaker at communicating can be led to believe they are better at communicating than they are by the better performance by the more vocally dominant group members (Earley 1999). However, no matter which method is chosen, an individual's personal perception of self-efficacy is difficult to isolate from the rest of the group.

Statement Five: The emotional state of a team member during a presentation has a significant and positive impact on communication self-efficacy.

Finally, an individuals' self-efficacy can be also be developed through increasing their awareness of their physiological state when confronted with attempting a task. For example as the individual could be suffering from nerves, they could interpret this as the reason for their poor performance. If individuals can modify their physiological state, by reducing stress levels, self-efficacy may be increased (Wood & Bandura, 1989). Also included in here are thoughts of the student's emotional (intellectual) arousal. If they were interested in the task, this would create a deep-learning environment (Boyce et al. 2001)

7.4 Development of statements for outcome expectancy and behavioural intentions

Once the statements of the antecedents for communication self-efficacy had been created, there was a decision by Stone and Bailey to also include Bandura's definition of outcome expectancy. Self-efficacy is the individual's belief that they possess the skills, the persistence and the abilities to complete a particular task. Outcome Expectancy is the belief that due to the consequence of accomplishment of a task that this will lead to towards achieving an overall desired outcome (Bandura 1977). These definitions remain the same for communication self-efficacy.

If Stone and Bailey had been testing with strict adherence to the work of Bandura, they would have finished their modelling after testing for self-efficacy and outcome expectancy. However, they decided to also include the term Behavioural Intention. Behavioural intention comes from Stone's earlier work (Henry and Stone 1993) on the use of IT self-efficacy referring to the Theory of Reasoned Action (TRA) by Fishbein (1975). Behavioural Intention is the formation in the mind that an individual has gathered enough information to act (Ajzen 1991). Therefore this new communication model will also try to capture an individual's intentions to communicate in the future with the adaptation of four more exploratory statements:

Statement Six: Communication self-efficacy has a positive impact on career outcome expectancy.

Statement Seven: Communication self-efficacy has a positive impact on current team outcome expectancy.

Statement Eight: Career outcome expectancy has a positive impact on behavioural intentions to use communication skills.

Statement Nine: Current team outcome expectancy has a positive impact on behavioural intentions to use communication skills.

Stone and Bailey recognised that self-efficacy is concerned with an individual's own perceived ability to achieve a task, therefore creating question items that is all about whether an individual "can" achieve a task, not about how "will" an individual achieve a task, as will is a statement of intention. Once that task is achieved, outcome expectancies are an individual's judgements on how certain outcomes will come from such achievements. The outcome expectancies can either be positive or negative depending on the level of self-efficacy either lowered or raised by the performance in the task. The outcomes people anticipate depend largely on their judgments of

how well they will be able to perform in given situations. If the student feels that they have done well at a communication task, they will expect a positive outcome when repeating a similar communication task in the future.

Likewise, if the outcome is negative, there will be an expectation by the student that they are poor at the task and cannot expect to go on and improve their performance with the new found skills of communication. The positive expectations serve as incentives, the negative ones as disincentives (Bandura, 1986). Perceived communication self-efficacy, can not only effect an individual's outcome expectancy, but it also directly influences an individual's behaviour and impacts on other determinants such as goals and aspirations, perception of obstacles and opportunities in the social environment (Bandura, 1995, 1997). Efficacy beliefs influence whether people think erratically or strategically, optimistically or pessimistically. The level of an individual's general self-efficacy can also influence the courses of action people choose to pursue, the challenges and goals they set for themselves and their commitment to them. Improvement in any form of self-efficacy can improve an individual's quality of their emotional life, can reduce how much stress and depression they experience in coping with taxing environmental demands, the life choices they make and the accomplishments they realise (Bandura 1997).

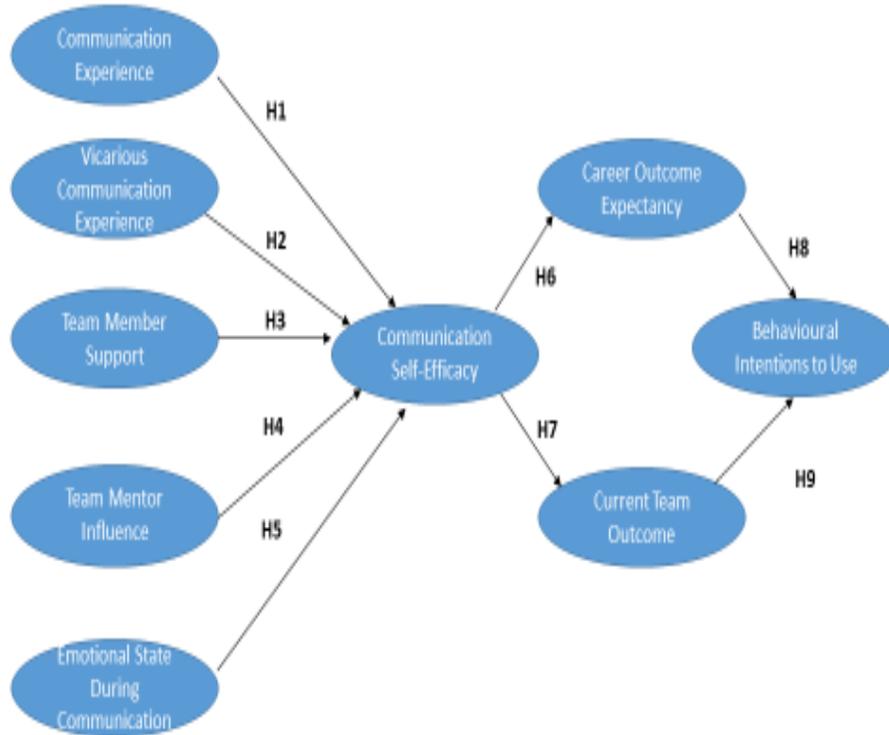
The results of these final sets of statements on behavioural intentions can be dangerous (if taken at face value) as individuals are asked to judge their future capabilities in future communication situations. It is potentially easy for an individual to imagine that they will be good at communicating in a hypothetical future working life. The questions in this pilot were set to try to avoid this by asking the student questions in the context of their next communication task or first job. The students should be capable of understanding their communication ability as of now and their expected future communication abilities in a university and possible first job perspective. It is potentially too easy for the students to imagine themselves to be fully capable in communication skills in some hypothetical future.

7.4.1 Communication Self-Efficacy model

On completion of the redesign, the communication self-efficacy model now looks like this:

7.4.1.1 Communication Self-Efficacy pictorial model:

• Revised Model Design:



The model should reflect the strength of measurement of communication self-efficacy for the total group of students surveyed by questionnaire. It should also indicate which of these antecedents are statistically significant in influencing the student group's communication self-efficacy. The model will also show how likely communication self-efficacy will affect student's future communication tasks in teams and in their future jobs. Finally, it will look at the student's overall behavioural intentions to continue to use their new found communication abilities. Now that the overall statements have been created, thoughts must now turn to the specific questions that will capture the communication self-efficacy thoughts of the students.

7.5 Questionnaire Item Design

For the test of communication self-efficacy at Sheffield Hallam University the initial questionnaire had fifty-six questions (items). The questionnaire has been designed slightly out of the order as created by Stone and Bailey, but the question re-ordering was more to do with the logical flow of the questionnaire and to group ideas together to allow for more considered responses. This re-ordering is in line with general questionnaire design suggestions as advocated by Willis (2004). Therefore team and mentor support questionnaire items were brought together and emotional state questions were not left until last, but were placed just after when the communication self-efficacy antecedent questions ended. This was in the hope that the students had the experiences of the group presentations at the forefront of their minds whilst completing the questionnaire. The emotional state questions were the easiest to replicate as they were just statements around feelings that could be easily applied to presentations as well as team conflicts:

“When my team had a disagreement I felt anxious”

Became:

“When I had to present I felt anxious”

To reduce the possible statistical impact of differently worded questions, it was decided to take the questions from the team-conflict questionnaire and adapt them where possible for communication self-efficacy. For example a team-conflict, mentor support item:

“A mentor helped my team resolve disagreements or conflicts”

Became:

“A tutor/mentor helped me improve my presentation skills”

The addition of the word “tutor” in this case was an attempt to point the question towards the effect the tutor had on their improving communication skills. It was hoped that each statement would have the same number of questions as the original model, but this was found impossible to replicate because of the nature of the questions asked. These questions were very specific to team-conflict and could not be easily translated into communication self-efficacy. The main reason was that there were questions about collective behaviour. For example there were questions such as:

“We worked so that to the extent possible we all got what we really wanted.”

“My team had frequent disagreements and conflicts”

Whilst this research is still interested on the effect of teams on an individual’s communication ability, there needed to be greater focus on the individual, so these questions about group behaviour were thought to be superfluous. There was a potential that this removal of questions could ruin the statistical analysis, but these questions did not make sense and could not be easily replaced with a communication theme. Stone and Bailey in terms of results only highlighted questionnaire items that gave the strongest correlations to the constructs (statements). They claim that none fell below the range 0.7 for reliability, so losing some of the questions was a difficult choice.

The reduction of questions from a questionnaire is backed by other academics who state that having too many questions will lead to the respondent getting bored and not filling the questionnaire in correctly, with thoughts more on satisficing and completing quickly rather than revealing their true thoughts and feelings (e.g. Krosnick 1999). The only concerns Stone and Bailey had regarding questionnaire items were over Personal mastery, the first set of questions asked. This was due to their findings indicating that personal mastery was not important in improving team-conflict self-efficacy. Bandura (1977) stated that personal mastery should have the greatest impact on any type of self-efficacy. Stone and Bailey thought that their poor result in this area was down to poor questioning and something that needed work on in future questionnaires. This was noted by this researcher and questions were created with thought to key phrases such as experience and participation:

“Through my presentation experiences I was able to develop my skills in verbal communication.”

“Participation in assessed presentation increased my verbal communication skills.”

In order to prevent confusion in the students’ responses, the language used in the questionnaire was kept clear and concise (Bandura 2006). This safeguard included removing any mention of the term self-efficacy and any other possibly confusing terms such as vicarious experience that the students might not readily understand. A fairly benign title on communication and presentations will be used. The initial questionnaire design had headings at the start of each section that was to focus the student’s thoughts on each particular section of theory to potentially prevent misinterpretation of the questions, following guidelines created by Willis

(2004). The initial questionnaire would have introductions at each new section, introducing students to specific communication self-efficacy terms. For example:

Section A Part 1: This section will ask questions on Vicarious Experience which means from the observation of others

This was thought as too complicated and may actually lead to more confusion, so each title was removed and each section was introduced without any commentary e.g.:

Section A Part 1:

In the final statements of Behavioural Intention there is also danger that the question items may not work. This is because the instruction of Bandura (2006) clashes with the instruction of Ajzen (1991). Ajzen whose work on the TRA (Theory of Reasoned Action) created behavioural intentions suggests that designing questions with thoughts of future behaviours should use the term “will.” Bandura suggests the term “can” is replaced by “will” in the item design. However as Ajzen has a stronger focus in this particular area, this researcher chose to use Ajzen’s design:

“I will not be afraid to give future presentations.”

“I will help my future team find ways to improve their collective presentation skills.”

To prevent response bias questionnaires should be answered anonymously. Therefore attempts will be made to provide each student with as much privacy as possible, but with such a large cohort of students (nearly two hundred students are registered on the undergraduate programme) for the students to complete the questionnaire the only suitable location will be the lecture theatre. This means that although the students will complete the questionnaire individually, the students will be very close to each other. The other problem is that for identification purposes, the students will either have to put their names or at least their student number on the questionnaire. It is not the ideal anonymous scenario as demanded by Bandura (2006) but this method enabled a gathering of large number of students together.

7.6 Response Scaling

In simple terms, the new model of communication self-efficacy replicates the Stone and Bailey model of team-conflict self-efficacy, with hopefully the desired impact of measuring the effect of the antecedents of communication self-efficacy, communication outcome expectancy (team and career) and finally the effects on behavioural intentions to use the new found or improved communication skills in the future. There are potential issues with the seventy six items (or questions) of the Stone and Bailey model, being reduced to fifty seven, but it was thought that this loss could be replaced by potentially greater accuracy by removing the five-point Likert scale used by Stone and Bailey (2007) and replace it with a response scale as created and recommended by Bandura (2006) to measure self-efficacy.

Communication self-efficacy will be measured by questionnaire items using a graded scale in relation to the demands of the particular task. This scale will represent the difficulty that individuals believe they will face. The events over which a person can be influenced in relation to a task or an antecedent can vary enormously. Questions will focus on motivation, thought processes, performance level, environmental conditions and emotional states. These questions will correspond to the antecedent they wish to test. The scale will allow the gradient to correspond to levels of exertion, accuracy, productivity, threat and self-regulation. Individuals will rate the strength of their belief in their ability to achieve the question items asked. This strength is recorded on a 100-point scale from 0 (cannot do) to intermediate degrees of assurance 50 (moderately can do) to 100 (highly certain can do) (Bandura 1997). Findings have shown that people's motivation, reactions and achievements are not effected by being ask to record their thoughts on self-efficacy. It is also claimed that social-desirability does not affect the responses on self-efficacy questionnaires (Bandura 1997). There is no increased congruence between perceived efficacy and social-desirability (Telch et al. 1982).

Bandura's efficacy scales are unipolar and do not include negative numbers, as Bandura felt that an individual is not able to give their feelings a negative number on a Bipolar scale. A simpler unipolar response format has been used in the previous communication apprehension questionnaire (when asking on communication self-efficacy in relation to communication self-efficacy) which retains the same scale structure and descriptors but uses single unit intervals ranging from 0 to 10. This is in line with the findings of Mauer and Andrews (2000) who suggest that simplified scales measuring self-efficacy are just as effective and sufficient. In this pilot study, it was thought better to use the original scales as advocated by Bandura (1997) as he

7.7 Statistical Modelling choice

This pilot model of communication self-efficacy will use a structural equation modelling (SEM) approach like that of Stone and Bailey (2007). In several steps SEM will test the reliability and validity of the questionnaire (the outer measurement model) with consideration of the proposed relationships between the factors (the paths between the circles) that is the structural model. Every path has a hypothesis that is supported by communication self-efficacy, outcome expectancy and behavioural intention theory, which in turn will be confirmed (or not) by analysis of questionnaire items. This model tested here will not have an overall goodness to fit, but will instead focus on the model's power of prediction with the result being R^2 as in regression analysis when explaining a variable.

There are two approaches to SEM that can be used here. The choice is either Covariance-based SEM (CBSEM) or Partial Least Squares SEM (PLS-SEM). The choice of which one to use is dependent on the aims and objectives of the study (Gefen et al. 2000). The team-conflict model used Confirmatory Factor Analysis (CFA) in the form of Covariance-Based Structural Equation Modelling (CBSEM), whereas here the results will be Exploratory Factor Analysis (EFA) via Partial Least Squares Structural Equation Modelling (PLS-SEM). The CBSEM method is best suited for confirmatory research (Gefen et al. 2000) as Stone and Bailey wished to confirm the strength of the latent variables in relation to the questionnaire items. This study will also choose the PLS-SEM analysis method as it takes a more explanatory route and is better designed to test the robustness of a new model and new question items. There is little difference between the two methods as both can be used for theory confirmation (Chin 2010), but there is concern with CBSEM as to the general applicability to the field of social sciences (Fornell and Cha 1994). PLS-SEM's type of mathematical modelling is known as soft modelling (Wold 1980), not because PLS-SEM's statistical procedures are any less robust, it is just better suited to this type of study, with its emerging theories and small sample size (Sosik, Kahai and Piovosio 2009). PLS-SEM is designed with its sole aim to test Exploratory Factor Analysis (EFA) and reflect more the theoretical and empirical conditions in social sciences (Wold 1980). PLS-SEM is exploratory in nature and the main objective is to explain as much as possible of the variance of the dependent variables, maximising the explained variance of the dependent variables and minimising the unexplained variances (Mora 2012).

These results will be processed through the software SMARTPLS (Version 2). This software allows the results of this initial study to be presented in a graphical format. The graphical results

of SMARTPLS are detailed so this researcher will initially present a diagram of the overall results of the findings. This will just show the main latent variables, in this case the total effect of each antecedent on self-efficacy, the self-efficacy effect on outcome expectancies and the final effect on these expectancies on behavioural intentions.

7.8 Testing of the Communication Self-Efficacy prototype

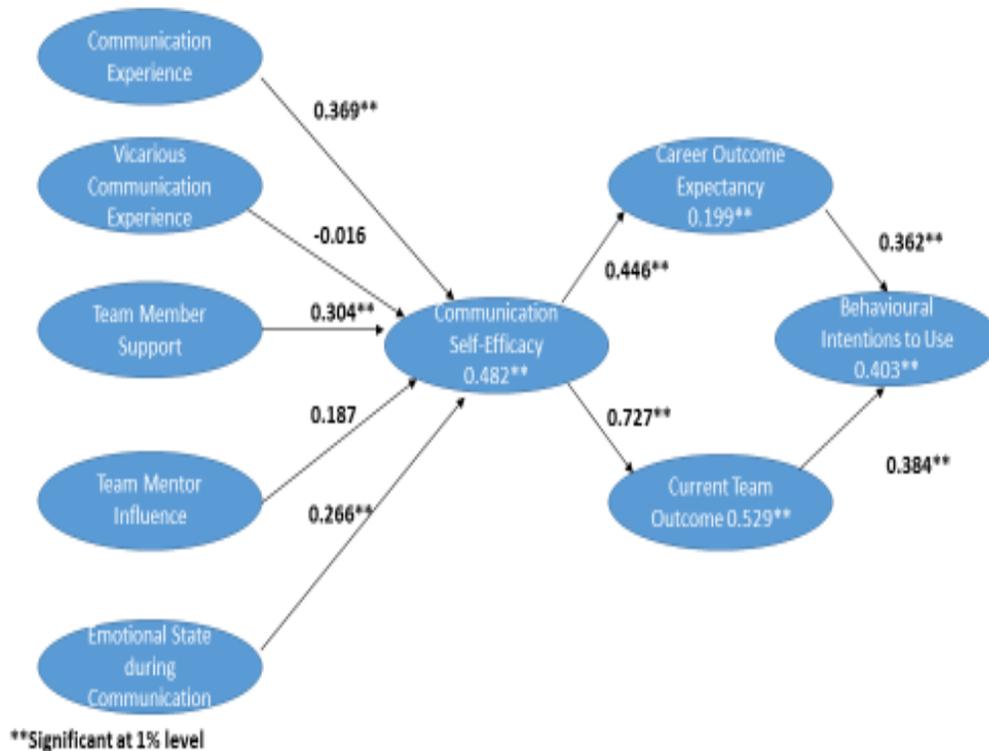
The newly designed questionnaire on communication self-efficacy was completed by first year undergraduate students who had completed the year of first running of the new module The Professional Accountant. They were the first students exposed to deliberate communication self-efficacy interventions in the curriculum. These deliberate interventions were based on the collective research that have identified and explored the four antecedents of self-efficacy: mastery experiences, vicarious experiences, social persuasion and judgments of own physiological states (Bandura, 1977, 1983, 1986, Chowdhury et al. 200, Wood and Bandura 1989).

The questionnaire was completed using the traditional pen and paper approach, which again was the same method adopted by Stone and Bailey. The questionnaire was handed out in the final lecture of The Professional Accountant, just before the students' results were handed out for the last presentation (the assessed group work based on CIMA's Global Business challenge). The reason for doing this was that there are suggestions by Bandura (1997) that individuals make better judgements on their self-efficacy after attempting a full range of tasks (in this case presenting) rather than at the start, so it was decided to hand the questionnaire out in the final lecture of the module. There was a concern here was that as the students were waiting for their results, they may be distracted from the completion of these questionnaires, but it was the best method of gathering all the students together.

The questionnaires had high completion rates with 168 students out of 179 returning usable data (a high 93.8% completion rate). This high level of completion suggests that interest levels were maintained and the students were keen to answer the questions set. Research by Oppenheim (1992) suggests that high completion should indicate that the questions set were properly answered. After the students filled in the questionnaires, the questionnaires were gathered up, were processed via SMARTPLS version 2 and the key results are as follows:

7.9 Overall pictorial results from the Sheffield Hallam sample

• Revised Model 2014 RESULTS:



The initial results are pleasing, as this diagram shows the highlighted overall strength of relationships between the latent variables (the results in the ovals) being 0.482 which is statistically significant. What is different and more advantageous by using Partial Least Squares Structural Equation Modelling rather than using a Covariance Modelling is that PLS-SEM measures the overall results between the latent variables using the multiple Pearson coefficient of determination, R^2 . This gives an indication of the overall explanatory power of the model, indicating the amount of variance in the construct, which in turn are explained by the antecedent variables in the model (Roldan and Sanchez-Franco 2012). The range of results from R^2 can be from 0 to 1 with 1 being the perfect fit. The R^2 values should be high enough to achieve a minimum level of explanatory power (Urbach and Ahlemann 2010) with the value of R^2 to be at a minimum of 0.10. Chin (1998) created a range of marks that explained the explanatory power, with anything between 0.19 and 0.33 should be considered weak, between

0.33 and 0.67 moderate and 0.67 and above considered a substantial predictor. The overall result for this model is one of a moderate explanation of students' behaviour. This is due to an overall result of 0.482 for communication self-efficacy, Behavioural Intentions of 0.403 and the strongest Current team outcome expectancy of 0.529. The weakest result is Career Outcome Expectancy at 0.199 and could well be explained by the fact that these students are first years and a long way off from understanding the impact these new found skills will have on their future careers.

The results show that three antecedents are statistically significant and large enough to have an impact on the communication self-efficacy of the students. These are communication experience 0.369, team member support 0.304 and emotional state 0.266. These results have one antecedent in common with the findings of Stone and Bailey that of team member support.

Communication experience (personal mastery) has been found to have the strongest influence on communication self-efficacy. After paying specific attention here to the conclusions of Stone and Bailey that their questions must be changed, it seems that these new question items on communication are working. The results now replicate the findings of Bandura and others (Chowdhury et al. 2002) that personal mastery has the strongest effect on and individuals' self-efficacy to achieve a task (in this case the task of communication). Personal mastery is an increasingly recognised psychological variable of the construct of self-efficacy. People's beliefs in their previous experiences control their actions in ways that produce desired outcomes. Unless the students believe that they can gather the necessary behavioural, cognitive, and motivational resources to successfully repeat the task in question (in these cases, presentations in a group exercise), they will most likely dwell on the more difficult aspects of the task. They will begin to feel that they cannot achieve the task therefore giving up, not exerting enough effort, and, therefore fail the latest task (Freeman, 1997).

Team member support is now a strong result in both tests (conducted by Stone and Bailey and here at Sheffield Hallam). There has been deliberate intervention in the curriculum design of The Professional Accountant module to ensure that there were opportunities for full support between members of the group. There were, (following the suggestion of Stone and Bailey) seminar classes in which tutors instructed the students on the formation of groups and how groups would develop using classic theory as developed by the likes of Tuckman (1965) and Belbin (1996). There is an interesting body of work that explores the effect of students working in teams. It seems that team members can inspire, motivate and support each other in an

attempt to achieve a task. The higher the individuals in the groups collectively perceive their ability to do well in a task, the greater the groups' motivation, staying power in the face of difficulties and the greater their final achievements. (Gully et al.2002, Stajkovic and Lee 2001).

The accounting students' vicarious experience results were disappointing. The Professional Accountant module was designed with opportunities for the students to observe other student groups' performance. However, it seems that the students do not gain enough from observing or listening to other students for it to have an impact on their communication self-efficacy.

It is perhaps of no surprise that emotional state was statistically significant, with the previous study in this thesis suggesting that students enter the accounting undergraduate degree programme with high levels of communication apprehension. Therefore most individuals should be (and indeed were) displaying signs of stress and anxiety as described by Hancock et al. (2010) in their study of students undertaking communication tasks such as presenting in front of the class and their tutors.

The effect of team mentor was disappointing, the tutors had an impact, but not strong enough to be statistically of importance. However, the findings of (Paolillo and Estes (1982) stated that one of the greatest impact on students was by their tutor. The tutors had been specifically instructed to be as supportive as possible. A caring and nurturing environment should be created as this is an important part of creating motivation in students to encourage an environment of deep learning (Biggs 1989). The tutors that taught on The Professional Accountant module were deemed strong due to either their previous experience using subjective rather than positivistic teaching methods (Hassard 1990) or via extensive previous work as accountants before they became teachers.

It must be noted that these tutors are new to the material, the timings of the class and even some of the ideas of The Professional Accountant. It is therefore harsh to judge their performance on one year's performance or indeed the lack of positive results in the communication self-efficacy questionnaire. To teach generic skills, there must be a rejection of this objectivist mind-set (Hassard 1990) and the tutor must adopt many different roles such as moderator, planner, fellow-student, all within the same class (Barnes et al. 1994). These are not easy teaching ideas to grasp and it may mean it takes a while before both the student and the tutor becomes confident in the subject matter. Therefore, because of this difficult subject

matter, the same team will continue in the following year's teaching of The Professional Accountant.

7.9.1 The measurement model - Questionnaire items

The structural model has shown the results are a moderate indicator of the main influences of communication self-efficacy, outcome expectancy and behavioural intention in the overall latent variables. There now needs to be a closer examination of the results of the individual questionnaire items in the measurement model. This first pass will just look at the questionnaire items like Stone and Bailey did, from a psychometric viewpoint. This means there will be exploration of the strength of relationship each individual question had with the overall theoretical construct (hypotheses) using standardised path coefficient results (R^2). Ideally individual scores should be above 0.7 for question (item) reliability (Nunnally 1978). Of items that scored less than 0.7, there are several guides in creating PLS-SEM models that state that items such as this with a score of less than 0.7 should be re-written (Carmines and Zeller 1979). There are some academics such as Hair et al. (2010) who state that questions which score less than 0.40 should not be re-written but taken out completely from the questionnaire to strengthen the reliability of the overall model (Hair et al. 2010). However other academics counter-argue this, stating that total removal of questions is viewed as dangerous and could undermine future results of the questionnaire as this type of PL-SEM modelling it allows for negative correlations. A negative correlation can still be and indicator towards of potential feelings and intentions of an individual (Roldan and Sanchez-Franco 2012).

7.9.1.1 A table of questionnaire items (questions) below 0.4

<u>Questionnaire Items</u>	<u>Coefficient:</u>
<u>Section A Part 1: Personal Mastery</u>	
Members of the team I was in exhibited communication problems.	0.265
I worked in a team that had team members who could not communicate in presentations.	-0.177
<u>Section A Part 3: Member Support</u>	
Friends not in my team encouraged me to speak out in a presentation.	0.275
Team members avoided trying to solve any verbal communication issues we had.	0.170
Working in a team forced me to improve my communication skills in order to gain acceptance from my team members.	0.374
<u>Section A Part 5: Emotional State</u>	
When I had to present I felt anxious.	-0.354
When I had to present I felt stressed.	-0.348
When I had to present I felt frustrated.	-0.362

The table highlights that there are only a few items (eight questions out of fifty-six) that potentially should be removed or reworded according to theory. However as these eight questions are not measuring causality, more the ability to predict behaviours, they may actually potentially giving a particular message about the experiences of the students. This means that for example the emotional state questions scoring negatively might indicate that instead of the results indicating a strength of anxiety when giving a presentation, the students may feel the opposite of this and actually not feel anxious when undertaking a communication task.

On the advice of Stone and Bailey (2007) the wordings were changed in the Personal Mastery section before the communication self-efficacy questionnaire was handed out and these results compiled. This did give a statistically stronger results overall of 0.369 (as opposed to the Stone and Bailey model not being significant at all), but it seems that two of the questions are still

potentially causing a problem. The first question that could potentially be removed from the communication experience (personal mastery) section was an item that scored only a strength of 0.265:

“Members of the team I was in exhibited communication problems.”

This does not on reflection question personal mastery, it is more just a question about the team, than the person. The other question in that section it could also be claimed to have nothing to do with the overriding construct, but its negative number of (-0.177) is potentially indicating that the students felt the opposite. The students felt that they did not have any team members who had trouble with their communication ability in the presentations.

“I worked in a team that had team members who could not communicate in presentations.”

This does not refer to personal experience or mastery, but its negative score does seem to suggest that students collectively did not feel that they had members in their team who could not communicate. This is an encouraging sign for many of the accounting graduates were suffering from communication apprehension, but were still able to overcome their fears and take part in the seminar work.

As mentioned in the above example on negative correlations, there was in the data a moderate negative correlation in the emotional state section. This also potentially indicates opposite thoughts to the question asked, that the students did not feel anxious when giving presentations. On further analysis, this may indeed be the case as the results for the other items in the emotional state section point towards students not feeling anxious. The two strongest item results in the emotional state section indicate that the students felt confident (at 0.748) and comfortable (at 0.712). This could actually indicate that the students' apprehensions in giving presentations are dropping (and therefore the self-efficacy techniques are working).

The final set of questions with coefficient scores below 0.4 are found in the vicarious experience section. The results for this section are not strong, but there are only two items that are causing concern and potentially needing re-wording or removing from the questionnaire. The first item is the item:

“Working in a team forced me to improve my communication skills in order to gain acceptance from my team members.”

There is potential here that the word “forced” is too strong. It would suggest almost bullying rather than a nurturing and encouraging atmosphere and the low score suggests that this was not the case for many.

The other question with poor results in this section is more concerning. This is because its results indicate poor design of The Professional Accountant module. In the module there were specific instructions to all the tutors teaching on the course to create a supportive environment between the students. This was meant to extend to students both inside and outside the classroom specifically when the students were meeting in their teams to work together on their coursework tasks. It seems according to the results of this question that this encouraging atmosphere only extends to those in the same team.

“Friends not in my team encouraged me to speak out in a presentation.”

This low score suggests that this did not happen amongst students. This is disappointing as students were not allowed to pick their own teams and were not (in most cases) grouped with their friends. Therefore it was hoped that the students would then talk about their experience, share their knowledge and ultimately encourage one another when they got back with their friends. It seems that this only occurred on a low level.

As there were only eight items out of fifty-six that scored below 0.4 it was decided to keep all the items in the questionnaire for two reasons. Firstly to see if the same questionnaire used on another set of students generated the same results and secondly (possibly even more importantly) there is a danger that removing the items would weaken the model of communication self-efficacy’s results. It could be that the weaker indicators contribute to the overall content validity as in the findings of Hair et al. (2010). Other researchers have also indicated that rigid rules of item reliability (the removal of questions) should not be applied in the early stages of item and scale development (Chin 1998). Stone and Bailey (2007) as they were testing their model via CBSEM potentially means that they have previously unpublished versions of their model, using PLS-SEM modelling to remove questions that scored below 0.4. In this researchers case, as this model of communication self-efficacy was in an exploratory stage (using PLS-SEM as opposed to CBSEM) meant that these weaker questions did not have to be removed. This allowed the questions to stay and be tested for a second time. The inclusion of these weaker questions could help to extract what useful information is available from the

accounting students to create a better result overall as suggested in another study of questionnaire construction tested by PLS (Roldan and Sanchez-Franco 2012).

7.10 Conclusion

This chapter described how the model of Stone and Bailey (2007), which measured the antecedents of team-conflict self-efficacy, was changed with the effect of creating a new model that would measure communication self-efficacy in The Professional Accountant module. This new model on communication self-efficacy was constructed, tested and the results are analysed in comparison to the findings of Stone and Bailey (2007). The modelling undertaken by Stone and Bailey involved confirmatory Covariance-Based Structural Equation Modelling (CBSEM) that is complicated, but allows for claims that the statistics produced are precise and reliable. The new communication self-efficacy model was designed and tested using exploratory Partial Least Squares Structural Equation Modelling (PLS-SEM) and provided a model with a moderate explanation into the antecedents, outcome expectancy and behavioural intentions of the students who were exposed to the communication self-efficacy techniques of the Professional Accountant module. It seems that personal mastery, team-member support and emotional state are important antecedents for students' communication self-efficacy.

These results are only after one running of the Professional Accountant module and one test of the communication self-efficacy model. The next chapter looks at the progress of the development of The Professional Accountant and the longitudinal measures used to examine the progress of a new batch of students over the course of the next academic year. The students will be tested on their communication apprehension at the start and end of the academic year and as the results of this initial pilot-study were deemed statistically significant and empirically rigorous enough, it was therefore decided that this communication self-efficacy questionnaire exercise could be repeated again.

Chapter Eight: THE SECOND INVESTIGATION: PART ONE (CA and SE RESULTS)

8.1 Introduction

This thesis has tested students entering the first year undergraduate accounting programme at Sheffield Hallam University. It has found that a large proportion of these accounting students have high levels of communication apprehension. The same survey also pointed towards the fact that students with high levels of communication apprehension also had low levels of communication self-efficacy (and vice versa). In response to this, deliberate curriculum interventions to raise communication self-efficacy in accounting students were built into a first year module entitled The Professional Accountant. To measure the effect of these self-efficacy techniques a model and questionnaire was built and tested on the first set of accounting students ever to experience The Professional Accountant module.

After the successful results and validation of this communication self-efficacy model, it was decided by this researcher to conduct a second investigation to examine the effects the communication self-efficacy techniques had on the communication apprehension levels on the next intake of first year accounting students who will study The Professional Accountant module at Sheffield Hallam University.

This next intake of first year accounting students will answer three questionnaires. Two will examine the levels of communication apprehension and communication self-efficacy in the students, the third will look at the antecedents of communication self-efficacy. This third questionnaire will be analysed in chapter nine of this thesis.

This chapter will examine the results of the two questionnaires on communication apprehension and communication self-efficacy. The first questionnaire will examine their levels of communication apprehension and communication self-efficacy on their first day at university. They will then as part of their studies, be exposed to the communication self-efficacy techniques embedded in The Professional Accountant module. The accounting students will then answer again the same communication apprehension and self-efficacy questionnaire but at the end of their first year study also including study of The Professional Accountant. The completion of the two communication apprehension questionnaires will allow comparison. The students will answer the same questions twice (once at the start of their course and once at the end of the course). Analysis comparing the results of the two questionnaires will potentially give an indication as to the effect communication self-efficacy techniques embedded in The Professional

Accountant module had on the levels of communication apprehension in the first year accounting students.

8.2 Methods of testing

The communication apprehension and self-efficacy questionnaire was handed out in the same manner as the previous sample, albeit to a new selection of students. It was handed out and completed in a pen-and-paper style in the first lecture of The Professional Accountant module in October 2014. The timings are not exactly the same as the prototype testing. The questionnaire was this time not handed out on day one, but it was in the first lecture of The Professional Accountant, a few days into the term. In the very last lecture of The Professional Accountant in April 2015, the students then completed the communication apprehension and self-efficacy questionnaire again, along with the communication self-efficacy questionnaire (based on Stone and Bailey's work in 2007). The students were again awaiting the results of their summative group exercise based scenario created by CIMA for their Global Business Challenge 2015. Of the 204 students who were on the course, 174 replied to the questionnaires in week one and 168 in the last week, but only 131 of the students results were deemed suitable for comparison across all three questionnaires (75% and 78% usable rates respectively). All the students were UK based and the split on gender was 91 males (69.5%) and 40 females (30.5%). The communication apprehension results were analysed using SPSS and the results are discussed in this chapter.

8.3 Communication apprehension results compared to the previous study at Sheffield Hallam

The first use of the communication apprehension and self-efficacy questionnaire in this thesis discovered a causal inverse relationship between communication apprehension and self-efficacy. Students with high levels of communication apprehension were found to have low levels of communication self-efficacy (and vice-versa). It was also found that students entering the undergraduate accounting programme had higher levels of communication apprehension in general compared to a control sample of business studies students at Sheffield Hallam.

There was an initial comparison of results for communication apprehension between the very first set of accounting students tested and the latest batch of first year accounting students. The results (found over the page) are remarkably similar. The test found that again a new batch of accounting students entering the undergraduate first year accounting degree programme have high levels of communication apprehension.

8.3.1 Percentage of students with communication apprehension (CA):

		Cluster		Total
		low CA	high CA	
Degree: 1st intake of the accounting course	Count	91	88	179
	% of degree	50.8%	49.2%	100.0%
2nd intake of accounting course	Count	85	89	174
	% of degree	48.9%	51.1%	100.0%

The definition of low and high communication replicates the definition provided by McCroskey (1997). The benchmark (as previously mentioned of 100,000 respondents of the PRCA) was a score of 65.6 with a standard deviation of 15.3 (Stanga and Ladd 1990). An individual who scored one point over this threshold was considered to have high communication apprehension. An individual who scored one point under this threshold was considered to have low communication apprehension. This thesis has now recorded two sets of students entering the first year undergraduate accounting degree programmes in two separate years that are showing a large percentage of the accounting students with high levels of communication apprehension (49.2% for the first intake, 51.1% for the second intake). On analysis of the demographics of this second set of accounting students, the results that were of interest focused on the female students. In this instance a high percentage of female accounting students are suffering from communication apprehension:

8.3.2 Gender crosstabulation for the communication apprehension (CA) levels for the second intake:

2 nd Intake of the accounting course			Communication Apprehension (CA)		Total
			Low CA	High CA	
Gender: 1 male	Count	65	60	125	
	% of gender	52.0%	48.0%	100.0%	
2 female	Count	20	29	49	
	% of gender	40.8%	59.2%	100.0%	
Total:	Count	85	89	174	
	% of Total	48.9%	51.1%	100.0%	

Analysis of the first intake of accounting students here at Sheffield Hallam indicated that the greater percentage of female students had high levels of communication apprehension than the male accounting students. Analysis of the second questionnaire indicated that again more females than males have high levels of communication apprehension. The result for female students is again not good and compares to the results of other studies that show that accounting female students have high levels of communication apprehension compared to males (Simons et al. 2000, Hassall et al. 2005, Arquero et al. 2007).

On further analysis of communication apprehension sub-tasks (see the table on the next page) the total first intake of accounting students had the total mean score for communication apprehension of 78.75 and the next intake of accounting students to Sheffield Hallam University had a total mean score of 78.73. This is very close mean score to the results of McCroskey who suggested that a highly apprehensive student will achieve a mean score 80 or more (McCroskey 1997). This is a replication of numerous studies both here and abroad that accounting undergraduates have high levels of communication apprehension (Simon et al. 1995, Hassall et al. 2000; Aly and Islam 2003, Gardner et al. 2005, Arquero et al. 2007, and Byrne et al. 2009).

8.3.3 Original survey results (first intake) versus the first survey in the second intake:

Communication Apprehension (CA) levels	Accounting students	N	Mean	Std. Deviation	Std Mean Error
Written CA	1 st Intake	179	14.69	3.189	.238
	2 nd Intake	174	15.55	3.206	.280
Group CA	1 st Intake	179	14.45	3.806	.284
	2 nd Intake	174	14.02	3.780	.330
Interview CA	1 st Intake	179	16.83	4.018	.300
	2 nd Intake	174	17.37	3.863	.338
Conversation CA	1 st Intake	179	14.04	3.334	.249
	2 nd Intake	174	13.34	2.950	.258
Presentation CA	1 st Intake	179	18.73	4.349	.325
	2 nd Intake	174	18.45	4.254	.372
Total Formal CA	1 st Intake	179	35.56	7.602	.568
	2 nd Intake	174	36.81	7.983	.697
Total Informal CA	1 st Intake	179	28.49	6.413	.479
	2 nd Intake	174	27.36	6.088	.532
Total Verbal CA	1 st Intake	179	64.06	12.190	.911
	2 nd Intake	174	63.18	11.434	.999
Total CA	1 st Intake	179	78.75	14.062	1.051
	2 nd Intake	174	78.73	13.165	1.150

This again confirms the view that the wrong type of student required for the accounting profession is being recruited to the accounting degree here at Sheffield Hallam. They are attracted to accounting because their perception of accounting is incorrect; they think that they will not require a high level of communication ability. This was mentioned as early as 1975 by

Daly and McCroskey that students were choosing accounting courses in relation to their perception of accounting as not requiring a great level of communication ability.

This still means that potentially students are basing their decision on old stereotypes of the profession that it is based on bookkeeping as noted by Howeison 2003 and Hunt et al. 2004. The negative stereotype of the accountant (defined by Decoster in 1971) as being introverted and numbers based still exists in today's external environment. This attraction is also in line with the trait theory of Holland (1963), who observed personality traits playing a major role in which type of career people chose. It also points to the work of Richmond and McCroskey (1985) who found that students with high levels of communication apprehension were being attracted to accounting because it was thought of as a boring, safe (calculating numbers all day on a spreadsheet) and therefore is viewed as an occupation that does not have or need high communication requirements. This also highlights work by Bandura (1986) who stated that individuals are attracted to accounting due to preconceived beliefs of the profession. Marriott and Marriott (2003) also saw students' attitudes towards the accounting profession as being the fundamental factor in their choice to read accounting at university.

These preconceived ideas about accounting as a profession being boring and safes potentially still exist, despite warnings from the likes of Albrecht and Sack (2000) that there is not enough information being supplied to external environment as to what accountants do. It could also still be that accounting degree programmes could be the cause of the problem in that accounting degrees still conform to positivistic roots, maintaining a narrow focus on vocational study (Previts and Mereno 1979). However it goes much further than this in that the current A-level in accounting is focused on the mechanics of bookkeeping. This goes against the recommendations of the IMA (2000) by allowing accounting to be viewed as a narrow field of study and accountants are only portrayed as scorekeepers. All of the above are allowing these false preconceptions of accountants and the accounting profession to remain firmly entrenched in the minds of prospective students.

8.4 The second investigation: The communication apprehension questionnaires at the start and end of the module compared

As previously stated the questionnaire on communication apprehension and self-efficacy was distributed and completed by students on The Professional Accountant module in the very first lecture (2014) and the very last lecture (2015) of the academic year (the communication self-efficacy antecedent questionnaire was also completed in this last lecture). The timings of the completion of the questionnaires by the students were the same (at the start of the lectures). The initial results of the two questionnaires on communication apprehension when compared against each other (October 2014 versus March 2015) were surprising considering the students had undertaken The Professional Accountant module embedded with communication self-efficacy techniques:

8.4.1 Paired sample statistics comparing the results of first communication apprehension questionnaire (2014) against the results of the same communication apprehension questionnaire taken by the same accounting students in their last week (2015) at Sheffield Hallam University:

Communication Apprehension (CA)	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 2014 Written CA score	15.55	131	3.206	.280
2015 Written CA score	15.94	131	3.494	.305
Pair 2 2014 Interview CA score	17.37	131	3.863	.338
2015 Interview CA score	18.05	131	3.951	.345
Pair 3 2014 Presentation CA score	18.45	131	4.254	.372
2015 Presentation CA score	18.76	131	5.111	.447
Pair 4 2014 Conversation CA score	13.34	131	2.950	.258
2015 Conversation CA score	13.81	131	3.625	.316
Pair 5 2014 Group CA score	14.02	131	3.780	.330
2015 Group CA score	14.35	131	4.158	.363
Pair 6 2014 Total Informal CA score	27.36	131	6.088	.542
2015 Total Informal CA score	28.16	131	7.097	.620
Pair 7 2014 Total Formal CA score	35.14	131	6.949	.609
2015 Total Formal CA score	36.81	131	7.983	.697
Pair 8 2014 Total Verbal CA score	63.18	131	11.434	.999
2015 Total Verbal CA score	64.97	131	13.388	1.170
Pair 9 2014 Total CA score	78.73	131	13.165	1.150
2015 Total CA score	80.91	131	15.111	1.320

The overall mean score for communication apprehension for the students in this second investigation had actually increased from 78.73 to 80.91. This means that the students' overall communication apprehension levels had increased not decreased as was first hoped. It is to be noted that, in almost all variables, the second value (2015) of communication apprehension is higher than the initial value. This at first seemed very strange as the students had just gone through the full course of a module that was designed to lower their communication apprehension and increase their self-efficacy. The table below highlights the differences in greater detail between all the sections of communication apprehension questionnaires:

8.4.2 Paired samples test for the differences in the two questionnaires involved in the second investigation:

		Paired Differences					Sig. (2-tailed)
		Diff in means	Std. Dev	Std.Error	95% Confidence Intervals		
					Lower	Upper	
2015-2014 Communication Apprehension (CA) Questionnaires							
Pair 1	Written CA difference	.39	2.825	.247	-.098	.877	.117
Pair 2	Interview CA difference	.68	3.613	.247	.055	1.304	.033
Pair 3	Presentation CA difference	.31	4.618	.403	-.485	1.112	.439
Pair 4	Conversation CA difference	.47	3.136	.274	-.076	1.008	.092
Pair 5	Group CA difference	.34	3.226	.282	-.222	.894	.236
Pair 6	Total Informal CA difference	.80	5.186	.453	-.095	1.698	.079
Pair 7	Total Formal CA difference	.45	7.353	.642	8.18	10.721	.021
Pair 8	Total Verbal CA difference	1.79	9.695	.847	.118	3.470	.036
Pair 9	CA Total difference	2.18	11.106	.970	.263	4.103	.026

These results do indicate an increase in total communication apprehension mean scores and in all areas. It was the same questionnaire, the same sample of students, the questionnaire was just completed at a different time of the academic year. At first it felt like defeat to this researcher,

just like the findings of Foster (1995) who also found that innovative pedagogical accounting courses did not have any different effect on students who studied traditional accounting courses. In fact, Nelson (1992) found that student attitudes towards innovative accounting courses were poor. There is also the potential realisation from the students that what they are experiencing in the classroom is a lot different than what they thought would be experiencing as potential accounting students and future accounting professionals. This again potentially highlights that students are being attracted to Sheffield Hallam's accounting courses due to misinformation. They either think that accounting is all about bookkeeping or are being attracted by misinformation supplied to them by either their parents, peers or careers advisors (IMA 2000). They are not expecting to be asked to give formal presentations in groups.

It could well be that, as has been noted by May and May (1989), that potentially there is not enough classroom time in a regular accounting course to develop an adequate program in developing oral communication skills, especially with larger classes. However McCroskey (1980) states that communication skills training can help people improve their communication ability, but warns (McCroskey 1977) that it may not help those with high levels of communication and that these individuals might increase their communication apprehension (this was confirmed by the research of Newburger and Daniel 1985). This was also found in the longitudinal study undertaken by Rubin et al. (1990) that communication apprehension actually increased in the accounting student's first year of study. The more positive finding in the study of Rubin et al., was that education with a continued focus on students' communication skill training, enabled the student to considerably reduce their communication apprehension levels over their remaining years of study.

These initial results seemed strange in relation to what was expected (communication apprehension lowering not rising). Therefore consideration turned to the methods used to capture the results as to whether these methods may have caused any problem in the questionnaire responses. On reflection perhaps it was not desirable that the students were asked to complete two large questionnaires at the start of the lecture (one of which they had seen before at the start of the year). Research suggests that long questionnaires should be avoided at all costs. Failure to observe this rule can produce a decline in the number and quality of response rates (Burchell and Marsh 1992). This is because the individual is less willing to respond (Festinger and Katz 1965) and the quality of the responses from individuals tends to decline as they become fatigued and less motivated to complete the questions (Goode and Hatt

1952, Festinger and Katz 1965, Cannell and Kahn 1968, and Sheatsley 1983). Potentially, because the students had another reason to attend this lecture (the release of their group mark) they did not give a quality answer leading to satisficing as identified by Krosnick (1991, 1999).

Krosnick's satisficing theory is based on the fact that to give answers to questionnaires requires a lot of effort by the respondent. If those respondents are fatigued or more importantly, lose motivation to answer the questions set, then they will not put in the required effort. The best responses should come from those who agree to be questioned (Cannell, Miller and Oksenberg 1981, Tourangeau, Rips and Rasinski 2000). Those respondents whom have reluctantly agreed to be interviewed may do so with no intention of thinking carefully (Holbrook, Green and Krosnick 2003). Respondents' dispositions are thought to interact with situational factors in determining the degree to which any given person will satisfice when answering any given question. That is most likely to happen when a person is disposed to do so and when circumstances are right (Krosnick 1991, 1999, Krosnick, Narayan, and Smith 1996).

The timing and nature of the communication apprehension questionnaire may again have taken the students by surprise and the students were not given enough time to reflect on their tasks involving communication. One of the key aspects of the many presentation tasks was so the student could learn and develop from experience, as this is a key aspect of learning (Senge 1990). As Dewey wrote as early as 1916, that experience involves change and for it to be meaningful it must be connected with the consequences that flow from it. Schon (1983) suggest that the act of reflecting-on-action enables individuals to spend time exploring why they acted in a particular way. Boud et al. (1995) describe reflection as an activity in which an individual thinks about a past experience and evaluates their performance. Kolb in the creation of his learning cycle (1984) focuses on different styles of learning as a continuous cyclical process with four elements: concrete experience, observation and reflection, the formation of concepts and testing in new situations. Learning can occur at any point of this circle and to be successful, an individual must display the four attributes at any point in the cycle. However Schon (1987) also suggested that asking an individual to reflect on their experiences can lead to that individual having feelings of vulnerability, disorientation and loss of confidence before gaining an understanding of what they are doing is achieved. This reflective approach can be risky and some individuals can find it difficult to analyse and articulate their thoughts and actions (Usher 1997). Therefore getting the students to reflect on their experiences without prior warning or without proper training on the very nature of reflection could lead to negative or sub-optimal responses.

However considering the high level of response rates (75% and 78%) there is suggestion that the results are fine and the quality of the data is good. Oppenheim for example (1992) suggests a high response rate indicates that keen interest in a subject being surveyed and a willingness to complete the answers to the questions fully. Therefore more analysis must be conducted to consider what factor is causing the results on communication apprehension in the second investigation

8.5 Further analysis of the demographics of the student

The other variables that were inserted at the start of the questionnaires included age, ability and gender. To better study the connections in the two questionnaires, the difference in communication apprehension were reclassified into 3 equal intervals. This means that the 37 (28.2% of the total 131) students with little change recorded to their communication apprehension were removed from this further study. This left 94 (71.8%) students to be examined at the extremes of either end of the scales (have either increased or decreased their communication apprehension). In the analysis of demographics, initially there was little to be gained. The differences in the sample population show such little difference in terms of age and educational background, that nothing could be inferred from the results. For example, when investigating the students' educational background, there are so few students with an arts background that little information could be gathered:

8.5.1 Contingency table of communication apprehension (CA) in relation to A-level background:

Educational Background:			Communication Apprehension (CA)		Total
			CA increasing	CA decreasing	
Background Science	Count	46	42	88	
	% Background	52.3%	47.7%	100.0%	
Arts	Count	4	2	6	
	% Background	66.7%	33.3%	100.0%	
Total	Count	50	44	94	
	% Total Background	53.2%	46.8%	100.0%	

These statistics again show that the students being attracted to the accounting degree courses are science or maths based, whereas academics are stating that to arm students with the right skills for the profession they must draw their learning from the arts, social sciences and humanities (Sale 2001). It shows that students are attracted to the professions due to misconceptions about the role of an accountant (AICPA 1991). The students' perception of accounting is potentially still one of being maths based reflecting the research of Inman et al. (1989).

There was another question in the questionnaire that allowed the students to compare themselves against their peers in terms of whether they thought that they were better, average or worse in terms of academic ability compared against the other students in the subject group. Most students in this sample rated themselves as average, but this analysis did not give any insight into communication apprehension, other than it was increasing in most cases:

8.5.2 Contingency table of levels of communication apprehension (CA) in relation to how students rate their own ability in relation to others:

How the students rate themselves compared to others:			Communication Apprehension (CA)		Total
			CA increasing	CA decreasing	
RateYourself	Much Better	Count	0	1	1
		% RateYourself	.0%	100.0%	100.0%
	Better	Count	10	8	18
		% RateYourself	55.6%	44.4%	100.0%
	Average	Count	40	35	75
		% RateYourself	53.3%	46.7%	100.0%
Total	Count	50	44	94	
	% RateYourself	53.2%	46.8%	100.0%	

The difference in age of the students was of significance in the first study in this thesis. This significance is not present in the second study. This is not due to the fact that mature students should have lower levels of communication apprehension because of their life experiences (Berger 2004). It is more due to the fact that there isn't a correlation between communication apprehension and age as most of the undergraduate students (90% of them) are between 18 and 19 years old. There are less mature students in this year's undergraduate accounting intake. This may be due to the impact of the new fee structure for universities, increasing from £3,000 per year to £8,000 per year.

8.5.3 Group statistics of age analysis on communication apprehension:

Communication Apprehension (CA)		N	Mean Age	Std. Deviation	Std.Error Difference
Age	CA increasing	50	18.74	2.058	.291
	CA decreasing	44	18.64	2.221	.335

8.5.4 Age correlation in relation to difference in communication apprehension:

		Age	CA Difference
Age	Pearson Correlation	1	-.086
	Sig. (2-tailed)		.327
	N	131	131
CA difference	Pearson Correlation	-.086	1
	Sig. (2-tailed)	.327	
	N	131	131

8.6 The communication apprehension results for female students in the study

The really statistically significant finding when analysing the communication apprehension questionnaires in the second investigation was the discovery of the effect that gender had on the results. Analysis of the difference in total mean scores of communication apprehension shows that the greatest increase on the levels of communication apprehension was in the accounting students' female population.

8.6.1 Table of contingency for levels of communication apprehension by gender:

		Communication Apprehension (CA)		Total
		CA increasing	CA decreasing	
Gender: Male	Count	28	36	64
	% Gender	43.8%	56.3%	100.0%
female	Count	22	8	30
	% Gender	73.3%	26.7%	100.0%
Total:	Count	50	44	94
	% Total	53.2%	46.8%	100.0%

8.6.1.1 Chi-square test for communication apprehension by gender:

	Value	df	Asymp. Sig (2-sided)	Exact Sig (2-sided)	Exact Sig (1-sided)
Pearson Chi-square	7.180(b)	1	.007		
Continuity correction(a)	6.041	1	.014		
Likelihood Ratio	7.413	1	.006		
Fisher's exact test				.008	.006
Linear by linear association	7.103	1	.008		
N of valid cases	94				

a Calculation only for a table of 2x2.

b 0 square (.0%) have a frequency below 5. The minimum expected frequency is 14.04.

The results for Pearson Chi square (0.007 for a two-sided test) and Fisher exact (0.008) suggests that for males, the level of communication apprehension is positive (56.3% improving their apprehension levels compared to 43.8% worsening), but for females there is a high percentage that have their Communication Apprehension levels increasing (73.3%). There are previous confusing studies with regards to gender in written communication apprehension, with some reports actually such as Stanga and Ladd (1990) who suggested that there was not any gender effect on levels of communication apprehension in the individual. The analysis of gender in this study agrees with other studies that report the opposite, that gender does have an effect on communication apprehension (Cayton 1990, Simons et al. 1995, Faris et al. 1995, Gardner et al. 2005, Arquero et al. 2007).

The analysis suggests that the communication self-efficacy techniques embedded in the The Professional Accountant are working for male accounting students. However this study confirms the view that females have a high level of communication apprehension. Trying to treat female students with techniques embedded in The Professional Accountant only seems to make matters worse for some female students. This result of higher levels of communication apprehension for female students than male students is again reflecting the findings of many researchers (Simons et al. 1995, Hassall et al. 2000, Gardner et al. 2005, Arquero et al. 2007). Simons et al. (1995) for example, found that accounting studies students had the highest levels of communication apprehension than any other business major with females reporting significantly higher verbal communication apprehension than any other group.

When it comes to analysing self-efficacy and gender, previous studies have indicated that gender may affect self-efficacy on certain tasks (Lent et al. 1994). In particular, it is argued that females may have a weaker sense of self-efficacy that they can master the requirements of some traditionally male pursuits such as mathematics (Bussey and Bandura 1999) and entrepreneurship (Wilson et al. 2007). It seems that The Professional Accountant module with its attempts to raise students' communication self-efficacy may have reduced female communication self-efficacy by using resources such as case studies (provided by CIMA) that are written so that students may enhance their business acumen, which will require students to develop a certain level of entrepreneurial skills, so this may be having an effect on the female students on the module. The Professional Accountant was written and defined by a male (this researcher). The major theoretical and practical teaching input into The Professional Accountant was by a male dominated team. Accounting has been a traditionally male-dominated profession

with limited number of female role models at partner levels in accounting firms, or senior levels in organisations. All of this may impact females' confidence levels in terms of communication and identity with the profession and may work to undermine the self-efficacy of female accounting students compared to their male equivalents. It seems that more female input is required to ensure that a female perspective is given on affecting the principal sources of communication self-efficacy to improve communication skills in female students. Thought should also be given to the recruitment of females to study accounting at university. Accounting may still potentially be thought of by careers tutors, parents and the students themselves as a boring, staid male-dominated profession (Barsky and Catanach 2001).

8.7 The communication self-efficacy (CSE) results of the second investigation

Thoughts and analysis will now focus on examining communication self-efficacy (CSE) levels. The same four categories as before are used in a verbal formal and informal setting and written formal and informal setting. The levels of communication self-efficacy is potentially not what was desired for this second investigation (the levels of communication self-efficacy lower), yet the relationship with communication apprehension remains (the levels of communication apprehension rise). As noted in the first set of accounting students tested there is still a causal relationship between communication apprehension and communication self-efficacy. In this study results are showing that the students entering accounting at Sheffield Hallam university that are indicating a high level of communication apprehension are also indicating that they have a low levels of communication self-efficacy.

8.7.1 Group Statistics for communication apprehension (CA) and communication self-efficacy

(CSE):

Communication self-efficacy (CSE)	Accounting Students	N	Mean	Deviation typ.	Error typ. Average	t-test sig
Formal Verbal CSE	1 st Intake	179	50.06	9.370	.700	.306
	2 nd Intake	174	53.25	9.369	.700	
Informal Verbal CSE	1 st Intake	179	50.32	11.616	.868	.231
	2 nd Intake	174	53.65	11.615	.868	
Formal Written CSE	1 st Intake	179	57.50	7.901	.584	.576
	2 nd Intake	174	56.34	7.901	.584	
Informal Written CSE	1 st Intake	179	59.28	9.229	.682	.033
	2 nd Intake	174	54.18	9.229	.682	

The initial comparison between the two different cohorts of students shows that the second intake is slightly more confident in their verbal abilities than the first intake. However there is a significant shift in students in their writing abilities, in particular informal communication. This is particularly strange result as this is all about writing between friends. This is again strange as to more and more communication as the initial impression on this researcher is that communication between students seems to be via the medium of social media (Facebook, Snapchat etc.). It could well be that the new intake of students are expressing their anxiety in using IT to communicate rather than focusing on the communication between friends. This lower self-efficacy in the use of IT has been mentioned by the likes of (Sam et al. 2005). It seems that future runnings may need to focus not just on presentations, but on communicating via the medium of IT. Increasing usage of the Internet does seem to decrease the levels of computer anxiety among the undergraduates (Sam et al. 2005).

When looking at the results for of the final questionnaire in the second investigation (after the students' being exposed to antecedents in communication self-efficacy in The Professional Accountant module) again the results were disappointing. This was because that after the course the levels of communication self-efficacy have decreased:

8.7.2 Paired samples statistics listing the results for communication self-efficacy (CSE) recorded at the start (2014) and the end of the second investigation (2015):

Communication Self-Efficacy (SE) mean scores		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	2014 Formal Verbal CSE	53.25	131	10.633	.929
	2015 Formal Verbal CSE	52.90	131	11.437	.999
Pair 2	2014 Informal Verbal CSE	53.65	131	10.957	.957
	2015 Informal Verbal CSE	52.84	131	9.876	.863
Pair 3	2014 Formal Written CSE	56.34	131	8.140	.711
	2015 Formal Written CSE	56.44	131	7.931	.693
Pair 4	2014 Informal Written CSE	52.18	131	8.358	.733
	2015 Informal Written CSE	52.73	131	7.928	.695

Although this is disappointing, the diagram above points to the fact that there is a relationship between communication apprehension and communication self-efficacy. As communication apprehension levels have raised over the course of the year, communication self-efficacy levels have lowered.

8.7.3 Paired samples test highlighting the movement in communication self-efficacy (CSE) in the second investigation:

Communication self-efficacy (CSE) movement over time	Paired Differences					Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of Difference		
				Lower	Upper	
Pair 1 Formal Verbal CSE	-.35	10.749	.939	-2.209	1.507	.709
Pair 2 Informal Verbal CSE	-.81	9.470	.827	-2.446	.828	.330
Pair 3 Formal Written CSE	.09	8.692	.759	-1.411	1.594	.904
Pair 4 Informal Written CSE	.55	6.828	.599	-.638	1.731	.363

The reduction in the accounting students' communication self-efficacy over the course of The Professional Accountant has been in the very areas in particular that the course wished to help improve the students. The Professional Accountant was designed to help improve the students' communication self-efficacy by forming groups in the classroom and given in given slowly step-by-step exposure to giving presentations based on real-world case studies. It is these two areas: the formal verbal communication self-efficacy and the informal verbal communication self-efficacy that have worsened. Therefore more analysis will be undertaken to see what factors (if any) are causing these movements.

8.8 The results for female students in communication self-efficacy analysis

Analysis of all the possible demographics for communication self-efficacy again showed that the only set of demographics that were significantly affecting the overall results were that of gender. With the results showing that communication apprehension levels increase the most amongst female accounting students after studying on The Professional Accountant module, it was thought worthwhile to investigate if there are any differences between males and females in the self-efficacy results. The table below show over the course of the study the effect on male and female self-efficacy:

8.8.1 Group statistics showing the movement in communication self-efficacy categories between the first questionnaire and the second questionnaire in the second investigation:

Communication Self-efficacy (CSE)		N	Mean	Std. Deviation	Std Mean Error	t-test sig
Formal verbal CSE change	Male	91	2.47	8.761	.918	.001
	Female	40	-4.48	13.172	2.084	
Informal verbal CSE change	Male	91	2.16	9.092	.953	.012
	Female	40	-2.30	9.688	1.532	
Formal written CSE change	Male	91	-.15	8.410	.882	n.s.
	Female	40	.050	9.411	1.488	
Informal written CSE change	Male	90	-.88	6.640	.700	n.s.
	Female	40	.20	7.265	1.149	

The male accounting students show positive increases in their communication self-efficacy in situations that required them to speak (in both a formal and informal setting). For female students their communication self-efficacy in written tasks stay pretty much the same, but their self efficacy for verbal tasks reduces dramatically. There is only one writing task in the module and that is a reflective essay at the end of the course. This may help to explain the written communication self-efficacy results, as the essay that the students are asked to write such include reflection on the experiences they had whilst in working in groups and presenting results, in order for them to think about what they would do differently next time they are in future situations. It could well be that the female population are more at ease with expressing their feelings than males.

In terms of the verbal communication self-efficacy, for the male population this is good news, but for the female population this is not so. It can be claimed that the communication self-efficacy tasks embedded in The Professional Accountant are helping the males, but are not helping the female students. This again backs the findings of researchers who found that overall, females are more apprehensive than males in public speaking and conversation (McCroskey et al. 1982, Andriate and Allen 1984, Jaasma 1997, Lang et al. 1998, and Donanvan and MacIntyre 2004), but have less apprehension in writing tasks (Riffe and Stacks 1992, Pajares and Valiante 1997).

8.9 Comparison of the results for gender

The overall results have indicated that the communication self-efficacy techniques embedded in The Professional Accountant module have benefitted the male students but negatively affected the female students. To establish that it is has been university experiences that have affected the accounting students' levels of communication apprehension and communication self-efficacy, further analysis was undertaken. The first analysis (over the page) examined the difference in recorded levels by gender of both communication apprehension and communication self-efficacy in the first questionnaire of the longitudinal study (at the start of The Professional Accountant module):

8.9.1 Communication apprehension (CA) results from the first questionnaire in the second investigation by category:

Communication Apprehension (CA)		N	Mean	Std Deviation	Std Mean Error	t-test sig
Written CA	Male	91	15.27	3.166	.332	n.s.
	Female	40	16.18	3.249	.514	
Group CA	Male	91	13.90	3.721	.390	n.s.
	Female	40	14.28	3.948	.624	
Interview CA	Male	91	16.53	3.793	.398	.000.
	Female	40	19.28	3.343	.529	
Conversation CA	Male	91	13.13	2.531	.265	n.s.
	Female	40	13.83	3.727	.589	
Presentation CA	Male	91	18.13	4.269	.448	n.s.
	Female	40	19.18	4.181	.661	

8.9.2 Communication self-efficacy (CSE) results from the first questionnaire of the second

investigation:

Communication Self-Efficacy (CSE)	N	Mean	Std Deviation	Mean Error	t-test sig
Formal verbal CSE male	91	52.95	8.914	.934	n.s.
female	40	52.80	15.896	2.513	
Informal verbal CSE male	91	53.09	9.060	.950	n.s.
female	40	52.28	11.629	1.839	
Formal written CSE male	91	56.35	7.816	.819	n.s.
female	40	56.63	8.282	1.310	
Informal written CSE male	90	53.14	7.499	.790	n.s.
female	40	51.80	8.847	1.399	

The only difference in category by gender in the initial questionnaire that was of significance was in the communication apprehension section relating to interview skills. Female students are significantly more apprehensive in an interview situation. However, once the students had been exposed to the self-efficacy techniques in The Professional Accountant module, in the second survey of communication apprehension three (out of five) of the components show significant differences.

8.9.3 The second questionnaire results for communication apprehension (CA):

Communication Apprehension (CA)		N	Mean	Std. Deviation	Std Mean Error	t-test sig
Written CA	Male	91	15.60	3.276	.343	n.s.
	Female	40	16.70	3.884	.614	
Group CA	Male	91	13.71	3.740	.392	.016
	Female	40	15.80	4.719	.746	
Interview CA	Male	91	17.12	3.633	.381	.000
	Female	40	20.15	3.880	.613	
Conversation CA	Male	91	13.68	3.409	.357	n.s.
	Female	40	14.10	4.106	.649	
Presentation CA	Male	91	17.37	4.436	.465	.000
	Female	40	21.93	5.186	.819	

8.9.4 The second set of results for communication self-efficacy (CSE):

Communication Self-efficacy (CSE)		N	Media	Std Dev.	Mean Error	t-test sig
Formal verbal CSE	Male	91	55.42	9.572	1.003	.001
	Female	40	48.33	11.382	1.800	
Informal verbal CSE	Male	91	55.26	9.309	.976	.027
	Female	40	49.98	13.425	2.123	
Formal writing CSE	Male	91	56.20	7.791	.817	n.s.
	Female	40	56.68	8.980	1.420	
Informal writing CSE	Male	91	52.31	7.337	.769	n.s.
	Female	40	52.00	10.353	1.637	

Initially the only difference in gender results was that the female population were more apprehensive in facing a formal interview. After being on The Professional Accountant course the main difference in gender is focused in oral communication. The inverse causal relationship also remains whereby the male students' communication apprehension levels are decreasing and their respective communication self-efficacy levels are increasing (indicating an overall improvement in their communication ability). However for females it is the reverse and it appears to be in all the areas The Professional Accountant had deliberate curriculum interventions, presentation and group work communication apprehension (formal and informal communication self-efficacy). It seems that the results for the initial questionnaire could have helped to indicate the higher levels of communication apprehension of female students in a formal setting (interviews). It also appears that the requirements of The Professional Accountant to give formal presentations have only exacerbated female fear of formal situations:

8.9.5 Group statistics showing the movement in communication apprehension categories between the first questionnaire and the second questionnaire in the second investigation:

Communication Apprehension (CA) change in score	N	Mean Change	Std Dev	Mean Error	t-test sig	
Written CA change	Male	91	.33	2.793	.293	n.s.
	Female	40	.53	2.926	.463	
Group CA change	Male	91	-.19	2.957	.310	.009
	Female	40	1.53	3.523	.557	
Interview CA change	Male	91	.59	3.827	.401	n.s.
	Female	40	.88	3.107	.491	
Conversation CA change	Male	91	.55	3.038	.318	n.s.
	Female	40	.28	3.382	.535	
Presentation CA change	Male	91	-.76	4.311	.452	.000
	Female	40	2.75	4.407	.697	
Total formal CA change	Male	91	-.16	6.644	.696	.002
	Female	40	3.63	5.913	.935	

The results demonstrate that the causal relationship between communication apprehension and communication self-efficacy are so strong that both sets of data can be used to pinpoint what

actual factors and tasks are causing the communication levels in the students to actually improve or worsen. The previous table analyses the sub-tasks for communication apprehension in the final questionnaire and demonstrates that it is indeed presentations and group work that is creating female communication apprehension.

The concern for female students is that lowering communication self-efficacy levels can effect their communication ability. More worryingly, there are other academics who found that lowering any form of self-efficacy levels can impact negatively on a student's overall academic performance. This can lead to a reduction in a student's motivation, willingness to learn, and desire to acquire other skills (Bandura 1997, Schunk 1989, Stajkovic and Luthans 1998). Students with low levels of self-efficacy are likely to doubt their abilities and persistence in a task (Multon, Brown and Lent 1991), therefore work must be undertaken to remove their negative self-image and increase belief in their abilities (Bandura 1988).

These findings now suggest that The Professional Accountant module written by a male now needs more of a female perspective to get the same positive effect for the female accounting students. Investigation now needs to be undertaken to explore if any of the results give an indication as to what would help the female accounting population in this study improve their communication self-efficacy, reduce their communication apprehension and ultimately improve their communication ability.

8.10 The results of original self-efficacy on the new levels of communication apprehension

One final analysis of note included an examination on the pre-existing levels of communication self-efficacy on the final level of results for communication apprehension at the end of The Professional Accountant module. This is because an individual with high levels of self-efficacy should be more likely to do well because of their pre-existing belief in their abilities and their ability to recover quickly from setbacks and disappointments in the tasks set (Bandura 1997). Students with low levels will be less confident in their abilities, potentially give up and even take drastic action such as not turn up to class to avoid challenging tasks (Schunk 1995).

Of the 131 students whose questionnaires comparable in the second investigation, it was found that the results could be split into three intervals: Students whose communication apprehension levels decreased, increased or stayed the same. Thirty-seven students' communication apprehension stayed the same. This left ninety-four students whom had either had their communication apprehension levels increase or decrease. Analysis of these ninety-four students in relation to their pre-existing

levels of communication self-efficacy in relation to their communication apprehension as they entered Sheffield Hallam University is found in the table below:

8.10.1 Contingency table communication self-efficacy (CSE) classification by communication apprehension (CA) difference:

Levels of Communication Self-Efficacy (CSE)			Communication Apprehension (CA)		Total
			CA decreasing	CA increasing	
CSE_class	Low CSE	Count	15	18	33
		% in_CSE_class	45.5%	54.5%	100.0%
	Average CSE	Count	14	16	30
		% in_CSE_class	46.7%	53.3%	100.0%
	High CSE	Count	22	9	31
		% in_CSE_class	70.0%	30.0%	100.0%
Total	Count		50	43	94
	% Total		53.8%	46.2%	100.0%

8.10.1.1 Chi-square test for communication apprehension and communication self-efficacy:

	Value	df	Asymp.Sig (2-sided)
Pearson Chi-Square	4.706(a)	2	.095
Likelihood Ratio	4.816	2	.090
Linear by linear association	3.667	1	.056
N of valid cases	93		

a 0 cells (.0%) have an expected count less than 5. The minimum expected count is 13.87.

This analysis of the extremes of communication self-efficacy once again starts to mirror the findings Colby, Hopf and Ayres (1993), Dwyer and Fus (2002) and Hassall et al. (2013). There is a link between levels of communication apprehension and communication self-efficacy. Students entering university with pre-existing levels with low and average communication self-efficacy

have a greater percentage of them with communication apprehension levels increasing in the final questionnaire (54.5% and 53.5% respectively). Those with high levels of communication self-efficacy see their communication apprehension levels decreasing. There are a small minority of students with high levels of communication self-efficacy who actually see their apprehension levels increase, but this is a very small amount overall (Pearson Chi-Square result of 0.95).

This analysis of the extremes mirror other studies such as those conducted by Bouffard Bouchard et al. (1991) and Zimmerman et al. (1992) who suggest that students with higher self-efficacy can make better use of cognitive strategies and display better conceptual problem-solving abilities. Bandura (1977) found that an individual who has low levels of self-efficacy can easily be put off increasing their belief in achieving a task by poor performance or a negative experience. Those people with a strong belief in their abilities will persevere in their efforts despite innumerable obstacles and difficulties; they are not put off by adversity.

The higher the level of self-efficacy in an individual at the start of the module, the more likely this individual will succeed in the module. It seems that The Professional Accountant module needs to do even more to ensure that the students continue to increase their communication self-efficacy levels. If the students can increase their communication self-efficacy levels then they can indeed potentially lower their communication apprehension levels. The students have only been exposed to communication self-efficacy techniques for six months. It seems that there needs to be more exposure to self-efficacy techniques that include: personal mastery, vicarious experience, a personal support network created (by tutors and fellow students alike) to reduce emotional state and to increase a first year accounting student's intellectual arousal in communication tasks (Bandura 1977a).

8.11 Conclusion

The initial results investigating the communication apprehension levels of the first year accounting students after they have been exposed to self-efficacy techniques in The Professional Accountant module were unexpected. The trend is that the students are still displaying the same levels of communication apprehension as the previous set of students who enrolled on the accounting programme. There is little expectation of change given the timescale of only two years between between the two intakes of students. There was also little hope that there might have been a change in message to prospective students as to the nature of accounting (in line with the instruction of Albrecht and Sack 2000) and therefore different students could be attracted to the accounting undergraduate programme. These results suggests that the students are being attracted to the profession for all the wrong reasons (that is a maths-based, safe and secure job) and do not understand the true requirements of a modern day accountant. It may have come as quite a shock to the accounting students as they were exposed to the communication requirements of today's accountants.

Analysis also saw communication apprehension levels rise after exposure to The Professional Accountant module. It was initially surprising and first thoughts were that the module design was not working or the students did not like the innovation designed in the course as they were potentially surface learners, not expecting ambiguity or to use communication skills (Boyce et al 2001).

This exposure will have actually forced many of the students to reappraise their original perceptions they had of their own communication ability when they first joined the accounting programme. In terms of demographics, the major note is the very positive effect the course had on males and the very negative effect the course had on females. This means that future accounting course design and undergraduate accounting recruitment must take into account more of the female perspective.

These results then lead on to the analysis of the subtasks (antecedents) in communication self-efficacy in the next chapter. This should be able to pin-point what is required to improve the communication self-efficacy of the students. This then will inform the future running of The Professional Accountant as to the approach to maintain for males, but to change for females to improve the their overall communication abilities.

The next chapter will explore the communication self-efficacy questionnaire (based on Stone and Bailey 2007) completed by the accounting undergraduate students on the second running of The Professional Accountant. The analysis will attempt to find which (if any) antecedent had an effect on their communication self-efficacy levels, outcome expectancies and future intentions to use communication skills. Special attention will also be paid as to which antecedents have the most effect on female students so that the curriculum can potentially be improved for them in particular.

Chapter Nine: THE SECOND INVESTIGATION: PART TWO (SELF-EFFICACY RESULTS)

9.1 Introduction

This chapter examines the results of the communication self-efficacy questionnaire completed by first year accounting students after their exposure to communication self-efficacy techniques in the second running of The Professional Accountant module. The initial communication self-efficacy questionnaire was completed by students who had taken part in the first running of The Professional Accounting module. As the results of this questionnaire indicated statistically significant possible antecedents of communication self-efficacy, it was thought that this model and questionnaire should be run again as part of the second investigation to examine the effects of The Professional Accountant module on the students' possible antecedents of communication self-efficacy. If the students' communication self-efficacy was raised or lowered, it will be interesting to understand which communication self-efficacy antecedents have had the most effect on the students.

This will inform accounting education as to which antecedents should be focused on the most in future course design to help improve the student's overall communication abilities. This analysis will now follow on from the results of chapter eight showing that the communication apprehension and communication self-efficacy levels for males are positive, but for the females are negative. This analysis in chapter nine will help to indicate which self-efficacy techniques will help female (and male) accounting students improve their communication self-efficacy. Therefore this is turn should allow for communication apprehension levels to be lowered and communication abilities increased.

The results of this second questionnaire allowed for demonstration that the model of communication self-efficacy was still robust and returned differing antecedents to the initial pilot study. This reflected the changes made to curriculum of the module in response to feedback from the tutors after the running of the first The Professional Accountant module. This researcher would ideally have liked to have kept the teaching the same so as to potentially gain the same results, but that would have been at the expense of the new students' educational experience. Therefore minor changes were made to the teaching pattern, but this had an effect on the students' antecedents of communication self-efficacy. One positive to note was that the communication self-efficacy model and questionnaire were able to capture these changes in the communication self-efficacy antecedents.

Analysis in chapter seven suggested that a few questions (items) should be removed from the questionnaire to improve its reliability on indicating the strength of antecedents of communication self-efficacy. Therefore, this chapter removes those questions with poor results. From this strengthened model further analysis of population factors (age, education background and gender) was undertaken. It was found that gender again had a significant impact on results. It was found that the communication self-efficacy model very strongly represented both male and female students' thoughts on self-efficacy, but it reflected the communication self-efficacy of the female population of this study the most. This analysis highlighted that educators potentially must build a curriculum that would encourage very different antecedents of communication self-efficacy for female students than for male students.

9.2 Course design in response to the initial test findings

The main change to The Professional Accountant module came about by suggestions raised at a meeting of all the tutors involved in the first delivery of the Professional Accountant module at the end of the year, after the module had been delivered for the first time. As a result of discussing the performance and engagement of the students there were a few seminars that were changed. This change came from the observation from a member of the team, that there was not enough time to give students proper feedback on their respective presentations. It was thought best to allow the students to take their time and breakdown the subject matter. Therefore two seminars in the new curriculum for The Professional Accountant were adjusted to allow tutors to give students more opportunities to present and subsequently receive more feedback on these extra presentations.

In the original version of The Professional Accountant module, the last seminar in the first semester was a drop-in session to help students with their assessed coursework (a reflective essay). In the new version of The Professional Accountant module this seminar was replaced with another opportunity to give an extra presentation (this change to the curriculum can be found in appendix fourteen). In each of the three weeks there would be increased time available for tutors to give more feedback to the individual groups.

The second seminar that was changed was in the second semester of the new version of The Professional Accountant. Before the students undertake their final assessed presentation, they were allowed a practice presentation to allow them to be familiar with what is required in the assessed presentation. The students undertook the practice presentation, received feedback

from the tutor in the seminar and then presented the assessed case study in the following seminar two weeks later. This year, the students would still be given the same practice presentation again with feedback from the tutor in the seminar, but this time, an extra seminar will be placed in between the practice and assessed seminar. This extra seminar should allow tutors to give more individual and collective feedback to the students.

One other minor change to the course was influenced by the disappointing results for vicarious communication experience from the original pilot study conducted on the first cohort of students to experience The Professional Accountant module. Stone and Bailey (2007) had recorded that vicarious experience was statistically significant in helping their students increase their team-conflict self-efficacy. They thought allowing students to observe and listen to other teams overcome their conflicts had helped their students develop better team skills. Stone and Bailey suggested that to increase this variable's effect even further, it might be good for students to talk with previous students who had been on the course and discuss how to overcome team-conflict. In this thesis' pilot communication self-efficacy survey, results for vicarious experience were the weakest of all the antecedents of communication self-efficacy. It could well be a result of the questions set, but with path coefficient analysis indicating that the communication self-efficacy questions were fine, it was decided to adjust the teaching pattern to help the students improve their vicarious experience.

Although the students had the opportunity to watch each other as a member of a team, there was not enough exposure to other teams' performances. Therefore it was decided by this researcher as module leader, that as well as increasing the number of presentation tasks, the students should present in front of other students in all of the non-assessed tasks. This should allow vicarious experience to increase, but also allow the students to share information from their research for the presentation tasks (e.g. the different types of accounting jobs that exist and the skills required for them).

9.2.1 Table demonstrating how the curriculum changed to cater for more presentation opportunities:

opportunities:

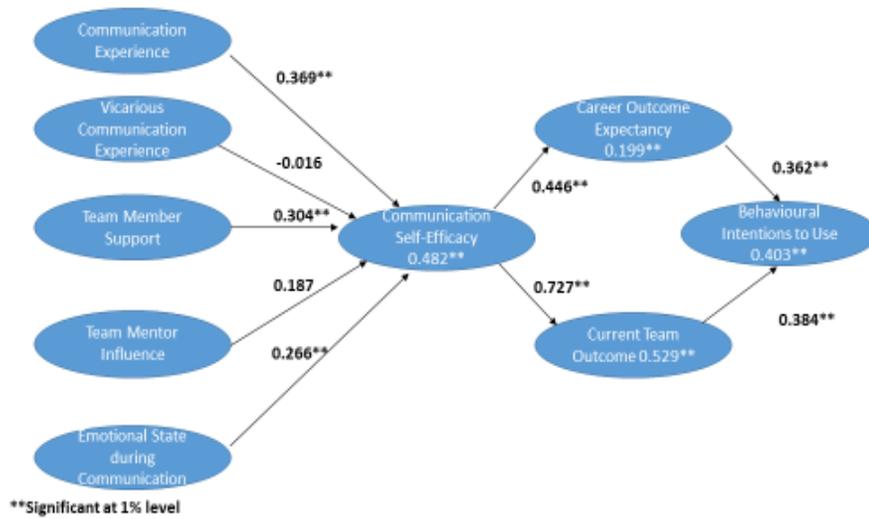
The Seminar Timetable (2012/3) [2 hours per week] <i>First Semester</i>			Seminar Timetable (2014/5) [2 hours per week] <i>First Semester</i>	
Week beginning			Week beginning	
18 th Nov	Topic 4 - Leadership Subjects covered: Leadership, Management and Supervision Consequences of ineffectiveness at work		19 th Nov	Topic 4 - The CIMA Global Challenge Presentation in front of your peers regarding the issues facing the organisation
2 nd Dec	Topic 5 - CIMA Presentations Subjects covered: Personal effectiveness techniques		1 nd Dec	Topic 5 - The CIMA Global Challenge Part Two Presentation in front of your peers to share ideas on presentation and suggestions on the solution for the business.
16 th Dec	Topic 6 - Audit Practice Subjects covered: Personal development and reflection Review and individual performance		15 th Dec	Topic 6 – The CIMA Global Challenge Part Three Put both Seminar 4 and 5 together and present as one complete presentation.
<i>Second Semester</i>			<i>Second Semester</i>	
10 th Feb	Topic 8 - Leadership Subjects covered: Team formation, development and management		9 th Feb	Topic 8 - Practice Presentation Your group will present analysis and solutions for Diamond Fusion Jewellers in your respective seminars (times allocated by your tutor).
24 th Feb	Topic 9 - Practice Presentations Subjects covered: Stakeholders and factors affecting business. Personal effectiveness Teamwork		23 th Feb	Topic 9 – Practice Presentation - Additional Feedback Greater feedback on your collective Diamond Fusion Jewellers will be given here. There will also be assistance on how this experience can be

9.3 The results of the model adapted for communication self-efficacy

The communication self-efficacy questionnaire was completed by the first year students who had been exposed to the second running of The Professional Accountant module, again via a paper-and-pen exercise. The communication self-efficacy questionnaire was again handed out in the last lecture of The Professional Accountant and was completed before the results of the summative group work presentation task were revealed. Of the students that completed the two questionnaires on communication apprehension, it was found that 131 students' responses could be used to test the model of communication self-efficacy and outcome expectancy. These results were processed through the software SMARTPLS (Version 2). The results of this initial study will be presented in the usual graphical format. What can be found over the page is a graphical summary of the findings. The results of the 2014 (the pilot study) are again displayed on the same page to allow for comparison. The full result of this second questionnaire is displayed on the following page.

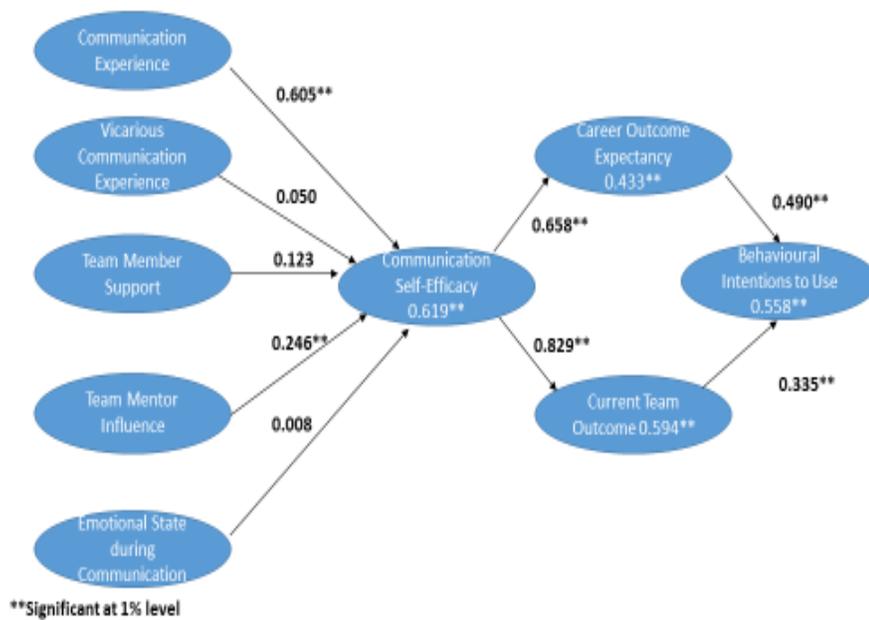
9.3.1 2014 Communication self-efficacy pilot study results

• Revised Model 2014 RESULTS:



9.3.2 2015 Communication self-efficacy results of the second investigation

• Revised Model 2015 RESULTS:



9.4 Findings

The results of the second questionnaire show that communication self-efficacy predictor levels have risen from 0.482 (2014) to 0.619 (2015) meaning that the predictive strength of the model has increased in the relationship between the observed variables in the rectangles and with the latent variables in the ovals from the first test at Sheffield Hallam. The results for 2014 and 2015 data sets did show a similar pattern to the findings of Stone and Bailey (2007) in that antecedents had an impact on the students' self-efficacy. The effect on self-efficacy itself had impact on both team and career outcome expectancy, expectancy then had an impact on behavioural intentions. The strength of this model as a predictor of future behavioural intentions has also risen from 0.403 in 2014 to 0.558 in 2015.

In terms of antecedents, Stone and Bailey in 2007 noted that vicarious experience and team member support were important in influencing team-conflict self-efficacy. In the 2014 result at Sheffield Hallam, the key influences that were statistically significant were communication experience (personal mastery) 0.369, team member support 0.304 and emotional state 0.266. The new results for 2015 show that now only two antecedents of self-efficacy remain statistically significant: communication experience 0.605 and team mentor influence 0.246.

The results of 2015 indicate that the antecedent of communication experience has increased. This variable and its associated questionnaire items were designed to test Bandura's personal mastery antecedent (1977). Stone and Bailey noted that their questions did not mention experience enough. Therefore the questions were changed in the pilot for Sheffield Hallam to focus more on a person's experience. That change in the questions has created stronger personal communication mastery results. What seems to be even more of significance is that the model and the students' responses are capturing the change in The Professional Accountant's curriculum design. It was decided amongst the tutors that the teams would have extra sessions of practising their presentation skills, therefore having as much opportunity to master their skills as possible. These results match the findings of Bandura (1982) that personal mastery is the strongest variable in increasing an individual's self-efficacy.

One of the changes between results of the 2014 and 2015 study conducted at Sheffield Hallam is that of emotional state. The questions have not changed in the questionnaire, but the results are now similar to the findings of Stone and Bailey who also found that emotional state was not significant. The results of 2014 seems to back up the thoughts of the tutors delivering The

Professional Accountant module that the students did not have enough exposure to the communication tasks and therefore were very nervous and anxious, displaying all the classic symptoms of communication apprehension as described by McCroskey (1978). It seems that the extra practice sessions have helped increase communication self-efficacy and potentially reduced emotional state in the students when giving their presentations, and therefore reducing and removing the statistical significance of emotional state in the 2015 results.

There is a contradiction here though, which will need further investigation beyond this thesis. Communication apprehension is linked with displaying signs of nervousness, anxiety etc (McCroskey 1970). If the students are reporting a drop in stress and anxiety and an increase in comfort when presenting, this would suggest that at least their communication apprehension levels are dropping. However, the results from the final PRCA completed in the final lecture suggest that communication apprehension levels are increasing in the same set of students.

Team mentor influence has increased to become a significant antecedent in communication self-efficacy from that reported on the first running of The Professional Accountant (from 0.187 to 0.246). The teaching team has not changed, but this is the second running of The Professional Accountant module, the tutors are now used to how the course is run and are more comfortable with the teaching pattern and style of delivery. It seems that all the focus on putting the best teachers on the first year as advocated by Hermanson et al. (1996) has had a positive effect on the students and their communication self-efficacy levels. As Gist and Mitchell (1992) point out, self-efficacy can be developed in an individual through learning, experience and feedback.

Team member support dropped from being statistically significant as found in the 2014 test, 0.304, to not being large enough to be meaningful in 2015, 0.123. This is interesting because there was still the instruction to the tutors to maintain a nurturing environment for the students and encouraging intra-team interaction. It could well be that changing the delivery of The Professional Accountant has affected levels of team interaction. Two seminars have been changed to allow for extra presentations and greater tutor interaction. It could well be that this increased tutor interaction has allowed for less team interaction.

There could be a timing effect on the team member influence result, in that the final marks for the assessed team work had not been handed out. It could well be that the students felt that they had not done very well and therefore the team member support results could have been effected. Chowdhury et al. (2002) argued that in a team environment, self-efficacy is a growing

process, which can be improved through positive feedback. As this potential positive written feedback had not been received, it could have hampered the individual's cognitive processes on their teams' performance.

Both tests conducted at Sheffield Hallam are different to Stone and Bailey's results in that vicarious experience is not in general statistically significant and therefore deemed not important to effect communication. It still seems that observing other students in communication tasks does not raise self-efficacy as opposed to Stone and Bailey that found that students observing other teams helped the students resolve their team conflict self-efficacy. There was a deliberate change to the Professional Accountant curriculum due to the results of the first questionnaire to allow for greater vicarious experience in the presentation tasks undertaken. Tutors were instructed at the start of the year, that all presentation tasks other than the practice and fully assessed presentations were observed by the other students in the classroom. The results are shown to be moving from a negative to a more positive result (-0.016 to 0.050) so the changes have had some effect. Again, there is the possibility that any changes to the curriculum effecting communication self-efficacy can be adequately mapped and recorded by this model.

The common theme that runs through the Stone and Bailey model and the Hallam model is that, once self-efficacy levels are effected, self-efficacy goes on to impact positively on outcome expectancy and behavioural intentions. All four variables are statistically important and large enough to be meaningful. In terms of outcome expectancy, the higher levels of communication self-efficacy in 2015, 0.619 than 2014, 0.482 meant that there were relative increases in both career outcome expectancy 2014, 0.446 and 2015, 0.658 and current team outcome expectancy, 2014, 0.727 and 2015, 0.829. It is perhaps obvious that the most effected variable is team outcome expectancy as this set of items focuses on the potential "next time" that the students could apply their new found communication techniques. As the students have been made aware that the following year will consist of more group work and opportunities to present, it is easier for the students to visualise the next time they will be called upon to use their new found skills in communication.

Career outcome expectancy is still strong and statistically meaningful, again it should be no surprise that this has a lower significance than current team outcome. These questions ask the students about their feelings to use their new found presentation skills in future teams in their future careers. As this will seem a long way off to students who have just completed their first

year, it is pleasing to see that the students recognise the importance of their skills in their future life, meaning that this course has gone some way to changing perceptions of the profession as advocated by Barsky and Catanach (2001). It is also noted that not only do they intend to use their increased communication skills in future teams and careers, but with their behavioural intentions (2014, 0.403 and 2015, 0.558), students are answering questions that state that not only will they use these new found skills in the future, they will continue to improve upon their skills and even help others improve their communication self-efficacy in the future.

The results for outcome expectancy and behavioural intentions are consistently strong, from the Stone and Bailey model, the first sample at Sheffield Hallam and now the second investigation at Sheffield Hallam are all showing results with significant impact to view these results as important. Stone and Bailey attributed the success of their results to the fact that they had guest lectures that stressed the importance of group work in the workplace. Likewise, the students undertaking The Professional Accountant module, had six guest lectures and were even asked to research key skills required to be an accountant. This therefore should have stressed the importance of the key skill of communication and informing the accounting students of the future requirements of the accountant in the workplace.

9.5 Amendments to the latest (2015) communication self-efficacy model

After assessing the individual question reliability with the first communication self-efficacy model used on the first cohort of Sheffield Hallam University’s accounting students (who had studied on The Professional Accountant model), it was decided to keep all the items (questions) in the questionnaire the same. The intention behind that decision was to firstly examine if another set of students would generate similar results as those in the original survey at Sheffield Hallam and secondly to correctly identify the weaker questions on the basis of their contribution to content validity as described by Hair et al. (2010). Other researchers have indicated that rigid rules of reliability should be applied in the early stages of item and scale development and questions should be removed immediately (Chin 1998). This is because including low scoring questionnaire items in a Covariance Based SEM like Stone and Bailey (2007) would have led to a poor model with poor results. However the communication self-efficacy model is an explanatory model and in this case leaving weak questions in a Partial Least Squares method will help to extract what useful information is available to create a better result overall (Roldan and Sanchez-Franco 2012).

Although there are not measures of overall fit here as in CBSEM, other tests can be carried out to review the strength of the overall powers of prediction of the model, the reliability of the model (consistency), the validity (the accuracy) which allows for the variables and their paths to be tested to examine if they are consistent with what they intend to measure (Straub, Boudreau and Gefen 2004) .The results for the consistency and accuracy of the communication self-efficacy model are summarised in the table below:

9.5.1 Confirmatory factor analysis table from SMARTPLS:

Overview of Reliability:							
Antecedent	AVE	Composite Reliability	R Square	Cronbachs Alpha	Commuality	Redundancy	AVE Square Root
Behavioural Intentions	0.565	0.886	0.558	0.846	0.565	0.241	0.751
Communication Self-Efficacy	0.675	0.926	0.619	0.903	0.675	0.062	0.822
Team Support	0.409	0.802	0.000	0.696	0.409	0.000	0.640
Career Outcome	0.859	0.960	0.433	0.945	0.859	0.371	0.927
Emotional State	0.515	0.700	0.000	0.547	0.515	0.000	0.718
Personal Mastery	0.424	0.778	0.000	0.719	0.424	0.000	0.651
Mentor Support	0.680	0.914	0.000	0.882	0.680	0.000	0.825
Team Support	0.616	0.880	0.684	0.820	0.616	0.418	0.785
Vicarious Experience	0.511	0.902	0.000	0.878	0.511	0.000	0.715

This table shows all the key results of the latent variables and gives as many reliability and validity results as possible. The R² results match the results of the ovals in the previous diagrams showing that the model has an overall ability to predict 61.92% of a students’

communication Self-efficacy and 55.75% of the students' behavioural intentions. The redundancy measure is lower in all cases than the R^2 measure, indicating the relationships between the other variables and these higher level latent variables. The low number for communication self-efficacy means that it is affected the most by other antecedents. To measure the construct validity, the convergent validity the AVE (Average Variance Extracted) and discriminatory validity measure the AVE square root is given. These measure the amount of similarity (AVE) and the amount of difference (AVE square root) each variable has with each other. The values for AVE should be greater than 0.5 (Fornell and Larcker 1981) and there are two areas of concern in Team Support 0.41 and Personal Mastery 0.42. These findings are replicated in the AVE square root measure (Team Support 0.64 and personal mastery 0.65).

Another assessment of the robustness of this model can be obtained from the communalities. The desired result is for the values to be close to 1 indicating that the model explains most of the variation for those variables. In this case, the model does better for some variables than it does for others. The model explains career outcome expectancy the best, and is good for other variables such as overall communication self-efficacy, career outcome expectancy and mentor support. However, for other variables such as personal mastery, vicarious experience and emotional state the model does not do a good job, explaining only about half of the variation.

The test for internal consistency (or reliability) is given in the form of both composite reliability as developed by Werts, Linn and Joreskog (1974) and the most popular test of overall fit Cronbach's Alpha (Bryman and Cramer 2001). Internal reliability is a measure of how well different items are measuring the same thing and Cronbach's Alpha is a reliability coefficient that measures the average inter-correlation between the questionnaire items measuring the variable, taking into account the number of questions and the average correlations in a construct (Nunnally and Bernstein 1994). The Composite reliability is said to be the better suited for PLS (Chin 1998b) with both measures sharing a similar interpretation of indexes (Nunnally and Bernstein 1994). However with 0.70 as a benchmark for modest reliability in early research and 0.80 and 0.90 for advanced stages of research this would suggest that the proposed model is reliable.

However Cronbach's alpha indicates that the model has some slight issues in its powers of reliability in the team support antecedent of communication self-efficacy 0.70 and the

emotional state section 0.55. Therefore the questionnaire items needed examination to decide what items (if any should be removed from the results) to potentially improve the strength of the model. Strict application of the rules of reliability state that the item correlation calculations are to be accepted when they have a loading 0.70 or more and items should present a higher loading in their own scale than in any other when cross-loaded and with items of less than 0.40 eliminated altogether (Carmines and Zeller 1979). It was decided that as there were only a few items with coefficients lower than 0.70 (ten instances in the chart below) all items with a loading of 0.70 or lower were removed and the PLS-SEM algorithm was re-run to increase the reliability of results as suggested by Urbach and Ahlemann (2010). For example in the chart over the page, questions entitled "Member support six" presents a very low loading in its supposed scale (0.007) and presents a higher value when linked to the vicarious experience, meaning that item would be better suited to being in that construct. Given that the question's result is still too low for any scale, the decision was for that and others like it to be removed and the model is calculated without the items with the lowest loadings.

9.5.2 Table of outer model and cross loadings:

This table below highlights the questions that that need to be removed from the questionnaire data analysis to increase reliability and accuracy of the communication self-efficacy model:

	BIC	CSE	TeamSupp	career_out	em_state	mastery	mentor_supp	team COE	vicarious
Behaveintent1	0.722	0.481	0.226	0.692	0.463	0.513	0.203	0.584	0.223
Behaveintent2	0.657	0.431	0.177	0.446	0.681	0.439	0.350	0.424	0.247
Behaveintent3	0.715	0.457	0.204	0.426	0.579	0.337	0.378	0.401	0.275
Behaveintent4	0.831	0.425	0.230	0.588	0.442	0.403	0.256	0.473	0.181
Behaveintent5	0.789	0.471	0.310	0.444	0.428	0.363	0.341	0.478	0.322
Behaveintent6	0.781	0.440	0.251	0.474	0.374	0.419	0.364	0.491	0.304
Careerout1	0.620	0.588	0.280	0.896	0.475	0.549	0.321	0.604	0.173
Careerout2	0.648	0.612	0.330	0.964	0.475	0.515	0.335	0.585	0.223
Careerout3	0.688	0.665	0.389	0.947	0.536	0.530	0.371	0.596	0.320
Careerout4	0.639	0.570	0.312	0.899	0.463	0.471	0.370	0.566	0.256
EmState1	-0.219	-0.170	0.000	-0.126	-0.566	-0.205	-0.194	-0.161	0.028
EmState2	-0.212	-0.114	0.124	-0.119	-0.575	-0.150	-0.198	-0.101	0.125
EmState3	-0.256	-0.231	-0.009	-0.242	-0.428	-0.304	-0.117	-0.217	0.109
EmState4	0.515	0.358	0.249	0.386	0.828	0.410	0.425	0.307	0.235
EmState5	0.509	0.414	0.239	0.340	0.866	0.509	0.402	0.382	0.202
EmState6	0.554	0.463	0.168	0.411	0.854	0.458	0.412	0.378	0.276
EmState7	0.508	0.311	0.296	0.440	0.685	0.297	0.395	0.289	0.145
EmState8	0.513	0.476	0.338	0.524	0.771	0.436	0.455	0.487	0.318
EmState9	0.606	0.465	0.226	0.504	0.757	0.526	0.418	0.503	0.293
Experience1	0.462	0.637	0.288	0.451	0.437	0.859	0.166	0.572	0.306
Experience2	0.352	0.568	0.243	0.363	0.369	0.847	0.112	0.577	0.257
Experience3	0.572	0.651	0.286	0.589	0.590	0.869	0.248	0.667	0.309
Experience4	0.202	0.114	0.019	0.169	0.110	0.223	-0.029	0.103	0.270
Experience5	0.097	0.104	-0.047	0.081	-0.016	0.176	-0.086	0.067	0.126
Experience6	0.318	0.371	0.271	0.301	0.329	0.503	0.135	0.378	0.329
Membersupp1	0.253	0.436	0.898	0.345	0.244	0.356	0.245	0.374	0.565
Membersupp2	0.289	0.237	0.535	0.262	0.176	0.267	0.089	0.256	0.462
Membersupp3	0.223	0.286	0.727	0.204	0.221	0.169	0.305	0.309	0.240
Membersupp4	0.179	0.233	0.715	0.154	0.247	0.192	0.208	0.234	0.212
Membersupp5	0.180	0.114	0.564	0.052	0.197	0.120	0.275	0.205	0.285
Membersupp6	0.108	0.114	0.007	0.143	-0.017	0.048	0.014	0.083	0.295
Membersupp7	0.132	0.285	0.642	0.271	0.076	0.168	0.162	0.192	0.382
Mentorsupp1	0.333	0.347	0.142	0.346	0.434	0.210	0.810	0.258	0.203
Mentorsupp2	0.332	0.406	0.300	0.335	0.454	0.208	0.867	0.339	0.252
Mentorsupp3	0.333	0.318	0.303	0.289	0.378	0.092	0.804	0.274	0.233
Mentorsupp4	0.343	0.351	0.223	0.304	0.386	0.129	0.855	0.269	0.259
Mentorsupp5	0.341	0.311	0.272	0.277	0.412	0.184	0.786	0.298	0.209
SelfEff1	0.490	0.870	0.358	0.574	0.466	0.710	0.379	0.636	0.409
SelfEff2	0.540	0.887	0.365	0.633	0.430	0.699	0.347	0.726	0.340
SelfEff3	0.447	0.835	0.468	0.487	0.415	0.649	0.324	0.746	0.384
SelfEff4	0.561	0.786	0.207	0.660	0.419	0.501	0.332	0.686	0.230
SelfEff5	0.402	0.784	0.400	0.378	0.304	0.421	0.348	0.686	0.340
SelfEff6	0.520	0.761	0.321	0.484	0.487	0.532	0.364	0.596	0.408
Teamoutcome1	0.562	0.750	0.365	0.567	0.423	0.678	0.297	0.859	0.342
Teamoutcome2	0.153	0.190	0.175	0.290	0.055	0.194	0.143	0.288	0.142
Teamoutcome3	0.490	0.743	0.485	0.478	0.384	0.609	0.297	0.895	0.391
Teamoutcome4	0.616	0.741	0.265	0.580	0.447	0.592	0.330	0.847	0.333
Teamoutcome5	0.562	0.633	0.248	0.535	0.444	0.554	0.271	0.860	0.280
Vicarious1	0.156	0.264	0.593	0.090	0.003	0.263	0.131	0.230	0.609
Vicarious2	0.200	0.398	0.581	0.210	0.136	0.307	0.223	0.357	0.755
Vicarious3	0.275	0.355	0.541	0.184	0.189	0.360	0.274	0.355	0.796
Vicarious4	0.247	0.338	0.011	0.237	0.255	0.371	0.091	0.290	0.491
Vicarious5	0.232	0.238	0.395	0.136	0.189	0.246	0.120	0.272	0.744
Vicarious6	0.296	0.302	0.296	0.248	0.264	0.231	0.244	0.297	0.695
Vicarious7	0.285	0.268	0.361	0.206	0.205	0.237	0.201	0.234	0.796
Vicarious8	0.226	0.213	0.408	0.236	0.155	0.148	0.194	0.180	0.713
Vicarious9	0.225	0.226	0.417	0.089	0.257	0.199	0.299	0.169	0.775

9.5.3 Questionnaire items review

The actual questions that were removed to improve the reliability and validity (highlighted in the detailed analysis on the previous page) of the model were as follows:

<u>Questionnaire Items</u>	<u>Standard Coefficient:</u>
<u>Section A Part 1: Personal Mastery</u>	
I worked in a team that had team members who could not communicate in presentations.	0.223
Members of the team I was in exhibited communication problems.	0.176
<u>Section A Part 2: Vicarious Experience</u>	
I learnt how not to communicate by observing those who were poor at communicating.	0.491
<u>Section A Part 3: Member Support</u>	
Friends not in my team encouraged me to speak out in a presentation.	0.535
Team members treated poor communication as a mutual problem to solve.	0.564
Team members avoided trying to solve any verbal communication issues we had.	0.007
<u>Section A Part 5: Emotional State</u>	
When I had to present I felt anxious	-0.566
When I had to present I felt stressed	-0.575
When I had to present I felt frustrated	-0.428
<u>Section A Part 5: Current Team Outcome</u>	
I feel I can improve my presentation performance in the future	0.288

The results are very similar to the pilot questionnaire in that these are the same questions, giving the same poor statistical results with the addition of one extra question from the vicarious experience section, one from the current team outcome section and one extra from the member support section.

The Personal Mastery questions above definitely need to be revised as they are not explicit enough on how the repeated nature of exposure to the task could have led to

improvement in communication self-efficacy. These questions have a low coefficient score (less than 0.4) so follow the rules regarding removal from the data (Hair et al. 2010).

I worked in a team that had team members who could not communicate in presentations.	0.223
Members of the team I was in exhibited communication problems.	0.176

The questions on vicarious experience and team member support are above the 0.4 threshold, but have been removed because they are below the 0.7 as suggested by Nunnally (1978). These seem like rational questions to ask, but there again needs to be reflection on the manner of the question asked as the two team questions seem contradictory, which could have led the students to not fully understand the meaning (poor communication as a problem to solve, versus, avoided try to solve any issues).

I learnt how not to communicate by observing those who were poor at communicating.	0.491
Friends not in my team encouraged me to speak out in a presentation.	0.535
Team members treated poor communication as a mutual problem to solve.	0.564
Team members avoided trying to solve any verbal communication issues we had.	0.507

The questions on emotional state are proving difficult to measure with both sets of data capturing negative correlations, meaning that the students are feeling more comfortable and less anxious than before. Again this may be due to the fact that extra practice sessions have been created and the students are feeling more comfortable. The main concern here is losing a set of questions that try to capture the feelings of anxiousness, stress and frustration. It seems that it will be a mistake to lose these questions as there should be a measure of all three as these are seen as symptoms of communication apprehension (McCroskey 1970).

The team outcome question result is very surprising because that had not featured in the previous data and follows the rules of using the word “can” as a statement of intent rather than “will” (Bandura 2006). If a set of questions were potentially to be misleading, it was the

behavioural intentions as their wording features the word “will” in contrast to the advice of Bandura. It may again need a slight wording change, but if it has to be removed, then the question above it in the questionnaire is perfectly adequate:

“I feel I am now able to contribute more in future presentations.”

When the analysis of the model was re-run (without the data from the ten questions above), the predictive strength of the model improved. Despite the loss of the emotional state questions, there is not too much concern on either reproducing the study with the questions removed or re-written. If alternative questions can be found it will mean testing any new data through PLS-SEM again as it will contain exploratory data questions as opposed to using an established model that can be tested for structural precision using CBSEM confirmatory testing. However this may not be too much of an issue as the current goodness-to-fit testing of the communication self-efficacy models suggests that the current set of questions are a good predictor of communication self-efficacy, outcome expectancy and future behavioural intentions for the students to use their new found communication skills.

9.5.4 The amended questionnaire’s overall results

There were no statistically significant changes to the results with the questionnaire with the ten removed questions. The revised questionnaire still has the same outcomes as the previous questionnaire, in that it can identify the antecedents that can affect communication self-efficacy, that in turn impact outcome expectancy that in turn affects behavioural intentions. The results for the amended model showed improved reliability scores, with the AVEs, Composite Reliability and Commuality results increasing suggesting a better measurement model:

9.5.4.1 Revised Confirmatory Factor Analysis table from SMARTPLS:

Overview of Reliability:							
Antecedent	AVE	Composite Reliability	R Square	Cronbachs Alpha	Commuality	Redundancy	AVE Square Root
Behavioural Intentions	0.565	0.886	0.561	0.846	0.565	0.241	0.751
Communication Self-Efficacy	0.675	0.926	0.612	0.903	0.675	0.050	0.822
Team Support	0.485	0.845	0.000	0.782	0.485	0.000	0.697
Career Outcome	0.859	0.960	0.433	0.945	0.859	0.371	0.927
Emotional State	0.648	0.917	0.000	0.891	0.648	0.000	0.805
Personal Mastery	0.625	0.863	0.000	0.779	0.625	0.000	0.790
Mentor Support	0.680	0.914	0.000	0.882	0.680	0.000	0.825
Team Support	0.753	0.924	0.687	0.891	0.753	0.514	0.868
Vicarious Experience	0.560	0.910	0.000	0.889	0.560	0.000	0.748

The two concerning measures with Cronbach’s Alpha were the team support antecedent of communication self-efficacy 0.70 and the emotional state section 0.55. As questions in these two sections have been removed, it can be seen that the sections overall results have

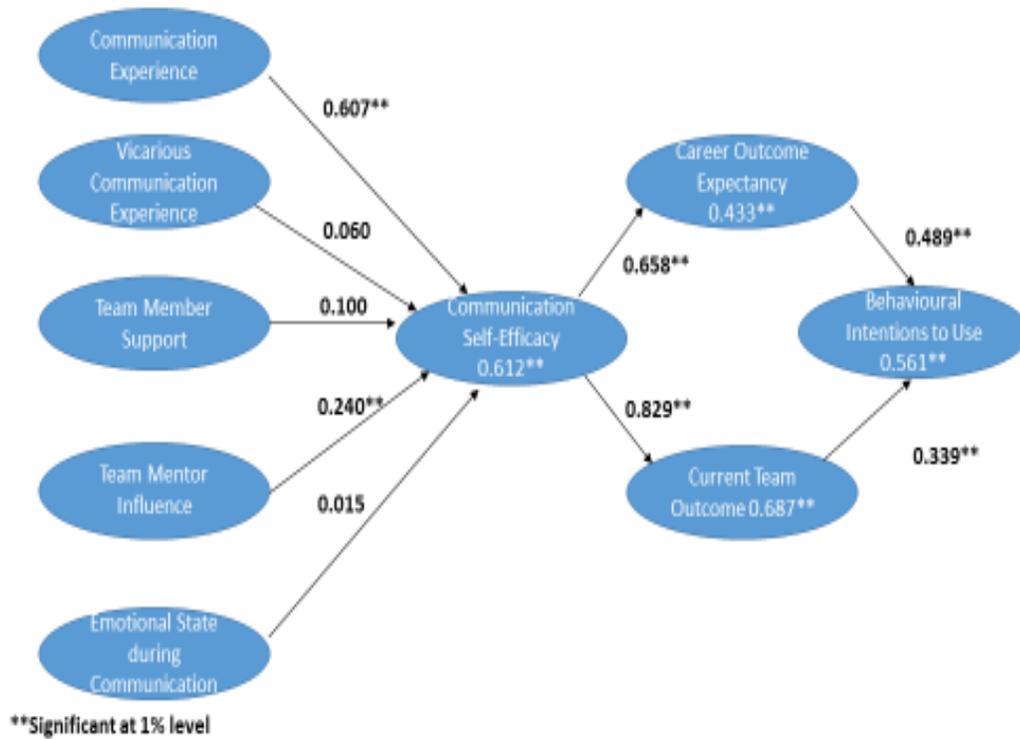
moved upwards to 0.78 for team support and 0.89 for emotional state. This removal of questions has removed the other issues in overall reliability measures such as AVE (Average Variance Extracted) that should be greater than 0.50 (Fornell and Larcker 1981). For AVE in this study, there were two areas of concern in Team Support 0.41 and Personal Mastery 0.42. Both are now either above the benchmark of 0.50 in (Personal Mastery, 0.62) or close to it (Team support, 0.49). This means that next time, the questionnaire could contain less questions and yet potentially yield the same results, avoiding fatigue in the respondents.

9.5.5 The amended communication self-efficacy diagram

Although the above shows that the model's reliability and validity increases, the movement in the R^2 results are minimal, with the predictive indicators giving approximately the same results (albeit giving greater confidence in the data). Therefore the results were re-mapped and the diagrams are shown below. The latent variables show that this model is moderately powerful to indicate a student's communication self-efficacy 0.607, behavioural intentions to use self-efficacy 0.561 and outcome expectations (to use in Future Career 0.433 and team outcome 0.687). The antecedents for self-efficacy are still mentor support 0.240 and personal mastery 0.607 as recorded in the original 2015 model before the ten questions were removed.

9.5.5.1 Amended overall 2015 results in graphical form:

• **Amended Model 2015 RESULTS:**



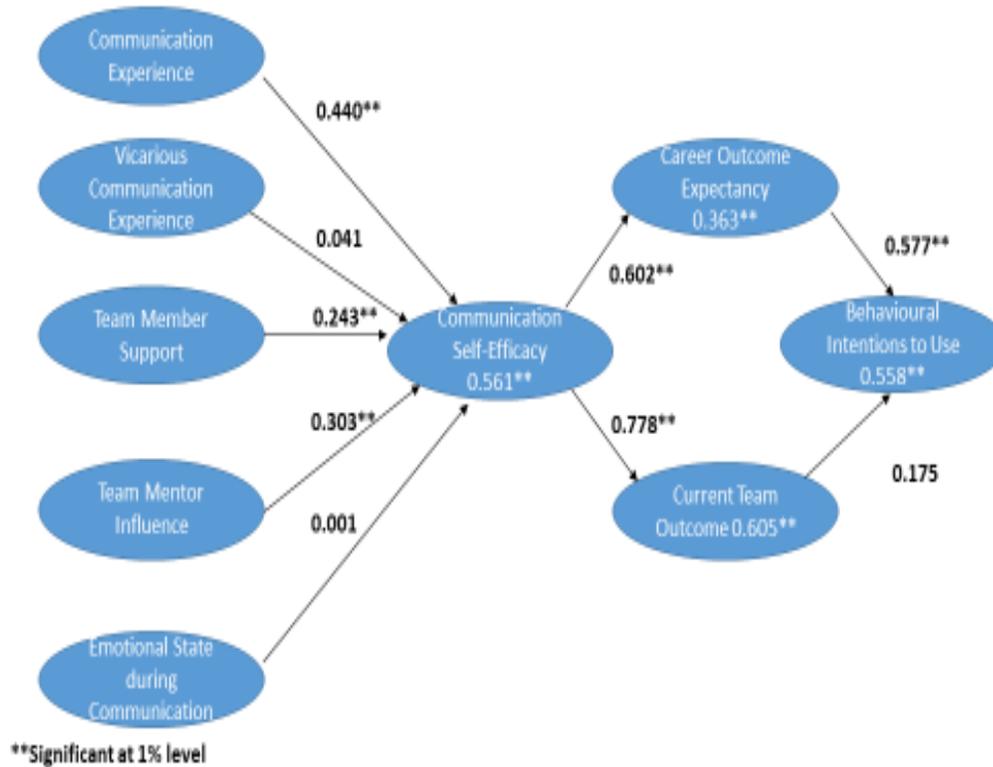
9.6 Male versus female results

After the model was amended and the ten questions removed it was deemed that further investigation into the effects of gender should be investigated in communication self-efficacy. This was due to the results in levels of communication apprehension (with gender being the only real measurable variable of the sample) that indicated that it was females whose communication apprehension levels had fared the worst over the course of The Professional Accountant. Therefore the next set of diagrams show the communication self-efficacy results, firstly for the males students and secondly for the female students.

9.6.1 Male results

9.6.1.1 Amended overall 2015 male results in graphical form:

• Revised Model 2015 RESULTS - MALE:



The male results show that the amended is a reasonable predictor for communication self-efficacy of 0.561. The antecedents for self-efficacy show that for males, personal mastery (Communication Experience) at 0.440, team mentor influence 0.303 and team member support 0.243 are statistically significant in the development of communication self-efficacy.

Again it seems that practice does indeed make perfect as the personal mastery reflects the findings of Bandura (1977a) that this is the strongest influence of all in males' communication self-efficacy. Allowing extra practice sessions has allowed the students to turn their behavioural conceptions into appropriate actions, making corrective refinements towards the perfection of their communication skills.

It is perhaps that these results are not surprising given that as the majority of the tutors teaching the subject are male, with considerable teaching and accounting experience (as advocated by Hermanson et al. 1996), that the results for male students show a team mentor as being statistically significant. Due to this breadth of knowledge, students have looked up to them, perhaps influencing their self-efficacy by having a role model to imitate (Bandura 1986) or perhaps the tutors even helped to reduce communication apprehension by reinforcement of good communication behaviour (encouraged to speak) in presentations (McCroskey 1977). Care must be taken here as communication efficacy behaviour induced by verbal persuasion is weaker than personal mastery of the task of communicating and can be readily undone by experiencing poor performance in the task (Bandura 1977). Any future negative experience in communication experience (such as a poor presentation in the future) can discredit the person giving the advice and undermine the student's self-efficacy.

Also in the realm of verbal persuasion the result for team member support antecedent has become statistically significant. Investigating further, there are three key questions that have an increased impact on the male students' team member support results. The three questions are:

"Friends in my team encouraged me to speak out in a presentation."

"Friends not in my team encouraged me to speak out in a presentation."

"Working in a team forced me to improve my communication skills in order to gain acceptance from my team members."

It seems that it is the male student who is influenced by their peers, who feels the need to be encouraged, not just by the group he is in, but also by friends or colleagues outside of the group. An individual potentially low in confidence or belief in their ability would need encouragement from their peers to reflect on their performance and modify their behaviour as suggested by Kuhn (1972). This internalisation can lead the individual to create a feeling of positive self acceptance (Adams 1977). Bandura (1977a) states that individuals who are socially persuaded can believe that they can manage their fears and use greater effort to overcome the task. As noted in research by Dweck and Goetz (1978), peer influence has a potential to produce strong results with a surveyed population that is very similar in background and ethnicity to one another. This network and discussion between friends will influence their decision making, with choices made on whether to undertake certain tasks or not.

There is one result that is surprising different. In this model of male only respondents, the link of team outcome expectancy to behavioural intention to use is not significant. This suggests that the male students in this survey cannot link the significance of performance in teams in university with their future roles in the workplace. This is a worrying development as all the work in the design of the Professional Accountant model has been to help inform the students that they will not only have to communicate but work in teams in their future workplaces (AECC 1992). This result maybe in line with the findings of Daroca and Nourayi (1994) who noted that changing the curriculum to include, group work etc does not change the student's perceptions of the role of accountants. It could well be that some male students are not motivated to take part and their attitude only worsens because they cannot see the point of these exercises (Nelson 1995). That attitude must be improved and more stress placed on the need for these generic skills in the workplace, when re-designing the Professional Accountant module in the future.

9.6.2 Female results

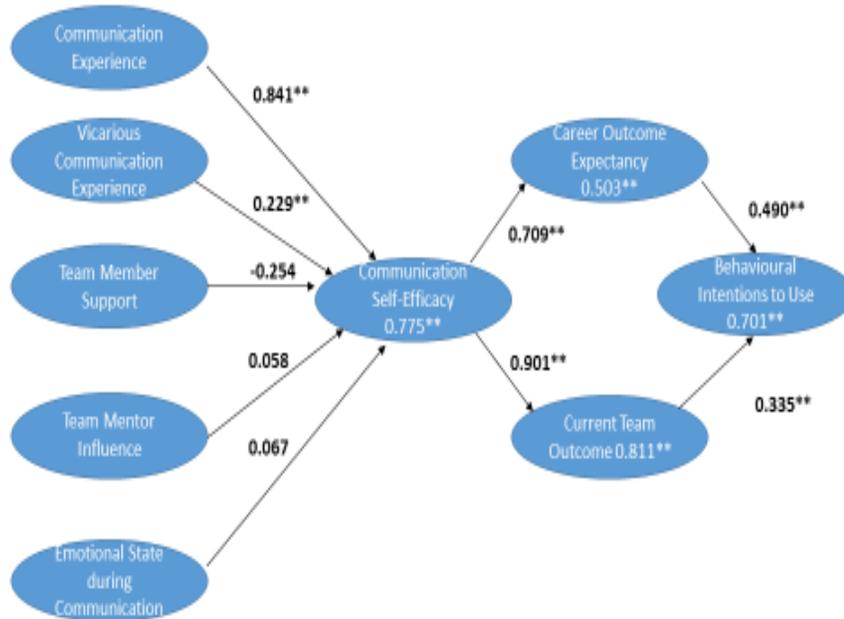
The results of the initial study and then the second investigation in this thesis indicate that female students in the first year accounting undergraduate program here at Sheffield Hallam University report higher levels of communication apprehension and lower communication self-efficacy than male accounting students. Therefore it is important to understand what antecedents of communication self-efficacy do have a positive affect on the female students so that The Professional Accountant (and any other future course) can be improved to enhance female accounting students' communication abilities.

The importance of investigating self-efficacy in female students, is not just linked to communication apprehension, but also linked to their potential career in accounting. Betz and Hackett (1981) were the first to realise the power of self-efficacy in helping female students. They noted that females had significantly lower levels of self-efficacy in their abilities when considering careers that were viewed as traditionally male-dominated occupations than males. Females had high levels of self-efficacy when considering female dominated professions, but viewed themselves less capable to perform in perceived male-dominated vocations (Betz and Hackett 1981). Females considered themselves less able in areas related to maths, finance, decision-making and problem solving (Marlino and Wilson 2003), all of which are key to a successful career in finance (Albrecht and Sack 2000). Betz and Schifano (2000) recognised that

women's self-efficacy can be significantly increased by using the four antecedents of Bandura. Therefore any interventions that can help females can be viewed as important.

9.6.2.1 2015 revised female results diagram:

• Revised Model 2015 RESULTS - FEMALE:



**Significant at 1% level

The overall results of this model show that this is a very high predictor of female students behaviour with overall predictability for self-efficacy of 0.775 and behavioural intentions to use of 0.701. These results are far stronger as a predictor for females than the overall results for males (0.561 communication self-efficacy and 0.619 for behavioural intentions). The results of this model for female behaviours is very strong in its ability to predict behaviours in relation to the rules of PLS-SEM as laid out Nunnally (1978) and Chin (1998).

The antecedents for female communication self-efficacy that are statistically significant are communication experience (personal mastery) of 0.841 and vicarious experience (the observation of others) 0.229. What perhaps came as a surprise was that females do not see team support as an antecedent of self-efficacy. In fact none of the verbal persuasion techniques are seen as significant. It seems that for females the key to improve self-efficacy is to practice and to observe others as these are the most statistically significant results. It suggests that female students to increase their communication self-efficacy need to have a feeling of personal mastery the most. This means is that female students need as many opportunities as possible to practise giving presentations to raise their communication self-efficacy levels.

It seems that the increased number of communication tasks has played its part, with theory in this area indicating that education targeted towards personal mastery can play an important role in developing self-efficacy. These mastery experiences, or learning by doing, appear to be the fundamental reason for improving students' belief in their ability to successfully perform tasks that are perceived to be similar in the future (Cox, Mueller and Moss 2002). The concern is that females with lower self-efficacy may choose avoidance techniques, such as not turning up to a presentation, but if females are able to take part, they will increase their self-efficacy no matter whether they succeed or fail at the task (Lindley 2006).

The results for vicarious experience (the observation of others) is very interesting and links with the behaviourist theory of observational learning and participation modelling introduced in the works of Holt and Brown (1931) and expanded upon by Bandura in his Bobo doll experiments with children (Bandura Ross and Ross 1961 and 1963). This work with children led to many works in observational behaviour and also for Bandura to create his Social Learning Theory (1977b). Bandura states that personal mastery is not the sole source of success; many expectations of an individual's performance are derived from vicarious experience (Bandura's Social Cognitive Theory of 1986). This theory is

based on the idea that people learn by observing others and each behaviour witnessed can change a person's way of thinking (cognition). The environment that person is brought up in, can also have a positive or negative effect. A person of authority, in this case a teacher, can reinforce good examples of communication behaviour and this mind-set of praising the individual in front of others should encourage the individual and the other students in the class. Observational learning leads to changes in an individual's behaviour, by allowing that individual to think about what they have just seen and react in future in a different way; this learning can lead to permanent change in that individual (Bandura 1971).

It seems that females in this study have potentially gained a positive impact from the observation of their peers. Accounting female students will potentially increase their communication self-efficacy by observational learning. Therefore following instruction from Bandura (1977a), there needs to be more help in observational learning, getting the female students to believe in their personal ability to correctly perform in any presentations given, to allow female students more opportunities to be successful at communicating and give every possible support and material possible to allow an environment conducive for improved communication self-efficacy.

The students when in non-assessed presentations are allowed to observe each other. In doing so, another of the potential positive outcomes of this is that the students go through a process called identification. This idea of identification creates an environment whereby the students can feel a one-to-one similarity with the other students presenting, and can lead to a higher chance of the observer following through with the correct modelled action as they are more likely to follow and identify with behaviour of those they can identify with. The more the students have in common with each other (gender, ethnic background etc) the more likely the student will learn and repeat the desired behaviour of communication (Bandura 1986). It has been claimed that not only can observational learning can change behaviour in an individual permanently, it can also spread through an entire population through a process called a diffusion chain. This happens when an individual learns the behaviour by observing and that individual serves as a model who other individuals then copy (Schacter et al. 2011).

To enhance learning through observational learning, course design should follow the instruction of Bandura and ensure that the four stages of observational instruction are present in the classroom:

1. Attention: Observers cannot learn unless they pay attention to what's happening around them. Presentations and the subject matter within them must be of interest to the students, if not, they will not gain emotional arousal and quickly lose interest. Likewise the students need to have similar characteristics or else they will not identify with the person speaking and not take much from the process.
2. Retention/Memory: Observers must not only recognise the observed behaviour as good communication skills but also remember what it was that made it good behaviour so that they can replicate it at a later date. This requires positive reinforcement by the tutor and for students to either remember it mentally or to be able to practise physically the observed good communication behaviour at some later time.
3. Initiation/Motor: Observers must be physically and intellectually capable of reproducing the act of others' good behaviour. In many cases the observer possesses the necessary responses but sometimes, reproducing the actions may involve skills the observer has not yet acquired.
4. Motivation: Tutors must also give pep talks, recognising the importance of motivational processes to learning good communication skills. Bandura (1986)

Bandura clearly distinguishes between learning and performance and unless an individual is motivated, that individual will not reproduce the observed learned behaviour. This motivation needs to come from external reinforcement provided by the tutor. The message must come from the tutor that students will need these skills in future group tasks at university or in the workplace environment, with the reward of better marks or thought of better by their future employer, leading to promotion, pay-rises etc.

Despite the remit to create a nurturing environment in line with the advice of Bandura (2002) to raise the confidence of the class and the groups as a whole, there is little statistical evidence that females increased their communication self-efficacy from verbal persuasion. Feedback should be viewed as a persuasive source of self-efficacy which should inform the students of their goal progress, strengthening self-efficacy and sustaining motivation (Schunk 1995). It could be that girls are more modest than boys in receiving feedback (Wigfield et al. 1996) and therefore do not deem feedback as important as the male students.

There is the obvious need to take into consideration more of the female perspective when designing the Professional Accountant. More female tutors could be assigned to this module, however that may not be necessary as Douvan (1976) found that females have used males as successful role-models where there were few or no established females with established professional identities. Things have moved on since and therefore, this researcher will either include more female tutors or ensure that more guest speakers are female.

9.7 Conclusion

The results in the previous chapter comparing communication apprehension and communication self-efficacy were initially disappointing, with a decrease in communication self-efficacy levels and even an increase in communication apprehension levels. However when analysed further it was found that the factor that was affecting these results was the factor of gender with female students' communication apprehension levels very high when compared to males.

On investigation of the Stone and Bailey adapted model of communication self-efficacy, identification was made on the antecedents of communication self-efficacy and how these in turn have impacted on outcome expectancy and behavioural intentions of students to use their communication skills in the future. The common antecedent over two tests on two different sample populations at Sheffield Hallam is communication experience (or personal mastery). This is in line with the findings of Bandura (1977a and 1982), that the first and strongest variable affecting self-efficacy is an individual's personal mastery or accomplishment of a task.

If the Professional Accountant module is run again, it must be designed in a gender specific way. The results indicate that males student benefit from the course, but female students do not. This means that as well as keeping its appeal to male students, it must keep the same level of personal mastery experience and allow for greater inclusion of female teachers and role models to allow for model similarity (Schunk 1987).

The next chapter will present the results of the entire thesis on its investigation into communication apprehension and communication self-efficacy in summary form with regards its limitations and will suggest answers and suggestion for future research.

Chapter Ten: CONCLUSION

10.1 Introduction

This thesis contributes to accounting education literature by capturing, investigating (and attempting to improve) the levels of communication apprehension and communication self-efficacy of current first year students entering the undergraduate degree programme at Sheffield Hallam University. Its motivation is to increase the communication ability of accounting students. Communication is thought to be the most desirable employability skill that is lacking in accountants (AECC 1992). This chapter outlines the conclusions and recommendations for future research, taking into account the limitations of this study.

This thesis has shown that there is an inverse causal link between communication apprehension and communication self-efficacy in first year undergraduate accounting students. It also contains details of how this researcher introduced general communication self-efficacy techniques to the curriculum of an employability module in the first year accounting degree entitled The Professional Accountant. The final major part of this thesis demonstrates success in the development of a model that maps the antecedents, outcome expectancies and behavioural intentions of an individual's communication self-efficacy. This model is a particularly strong indicator of the antecedents of female communication self-efficacy. Further analysis of the refined model of communication self-efficacy (with ten of the original questions removed from the analysis) showed that for male students the key antecedents for communication self-efficacy include personal mastery, team member influence and mentor support. For female students the key antecedents were just two: personal mastery and vicarious experience.

10.2 Summary of the study

A major priority in the future role of accountants is that they must be able to offer a range of skills that go beyond the basic need of transaction processor to be more of a business advisor or “partner” (CIMA 2009 p.18). To attain this status the accountant and the finance department as a whole must develop the necessary cognitive and vocational skills. The most pressing demand according to all research from 1986 (the AAA’s Bedford Committee Report) onwards is that the principal vocational requirement for accountants should be competent communication skills. One of the main reasons for this lack of communication skills in the accountant in the workplace (or the accounting student at university) has been due to an individual potentially possessing high levels of communication apprehension (as identified by McCroskey 1970).

Accounting is changing (due to globalisation and advances in technology) and the profession requires individuals who are dynamic, entrepreneurial in spirit and can demonstrate leadership in the work place (Albrecht and Sack 2000). Yet the old stereotypes of accounting remain as a staid, boring, even safe profession (Howieson 2003). Students drawn to the profession seem to be those with high levels of communication apprehension, viewing accounting as a profession in which communication requirements are low (Daly and McCroskey 1975). Unfortunately those with communication apprehension are seen, according to Richmond (1997), as being less competent than their fellow employees, not good at networking and forming relationships. They may not even get the job as they will suffer at interview (Gardner et al. 2005). Students suffering from high levels of communication apprehension will not ask questions in class, not attend classes, achieve less and receive poor marks (O’Mara et al. 1996, Bowers 1986).

This study has shown that there is a very statistically significant link between communication apprehension and communication self-efficacy for accounting students. Students are entering the undergraduate accounting degree with high levels of communication apprehension and low levels of communication self-efficacy. This goes against the desire of accounting educating academics who realise that the role of the accountant is changing and therefore demands a change in the skill set of students entering the profession (Clark 1990, Deppe et al. 1991, Magnum 1996, Nelson et al. 1996, Daggett and Lui 1996, Seigel and Sorenson 1999, Leveson 2000, Borzi and Mills 2001, Jones and Sin 2003, Hassall et al. 2005, Delange et al. 2006, Kavanagh and Drennan 2008). It could also be that despite the plea for the profession and educators to inform prospective students that the skills and

the nature of accounting are changing, the opposite is happening. Prospective students are still viewing accounting as being dull, mechanical and linear answers to a prescribed problem (AICPA 1991).

Many accounting degree courses across the globe have changed their syllabi yet there seems to have little effect on the levels of communication apprehension in accounting students (Aly and Islam 2003). Allen and Bourhis (1996) and Spitzberg and Cupach (1984) state that techniques aimed at the development of communication skills will not resolve communication apprehension and that if an individual has a high level of communication apprehension the techniques will not result in improved communication performance. However, this researcher was still prepared to develop communication self-efficacy techniques as an innovative way to improve the communication levels of undergraduate accountants.

This researcher used an employability module (The Professional Accountant) within the accounting degree first year programme at Sheffield Hallam University to introduce communication self-efficacy techniques to improve the communication ability of the students. As the first study of this thesis suggested that there is an inverse causal link between communication apprehension and communication self-efficacy in accounting students. Therefore the main communication interventions used in The Professional Accounting curriculum were based on self-efficacy techniques as advocated by Bandura (1977a). There are four main techniques that are antecedents of self-efficacy: personal mastery, vicarious experience, mentor support and emotional state. All of these techniques were specifically designed in the pedagogy to enhance the student experience (e.g. Guest lectures, case studies prepared by the professional bodies reflecting reality, group work and enthusiastic, experienced tutors).

The second investigation's findings from the communication apprehension and communication self-efficacy questionnaires demonstrated that the attempt to use communication self-efficacy methods to address communication apprehension to mainly overcome time and cost pressures in a mass education market has had mixed results. At first the overall results showed that the students' overall communication apprehension levels rose and communication self-efficacy levels decreased. These results were however skewed by the effect of gender. On examination of the results it was found that the communication self-efficacy techniques in The Professional Accountant had helped to lower communication apprehension levels in male students but significantly increased communication

apprehension levels in female students. More detailed analysis demonstrated the power in the relationship between communication apprehension and communication self-efficacy. The results showed that for example, students with high levels of communication apprehension when giving a presentation also had low levels of communication self-efficacy in their formal communication self-efficacy results.

A new communication self-efficacy model was created that allowed this researcher to test for the variables (antecedents) of communication self-efficacy and their impact not only on student's communication self-efficacy, but also on outcome expectancy and behavioural intentions of students to use their improved communication skills in the future. This self-efficacy model had been originally used to analyse team-conflict self-efficacy (Stone and Bailey 2009), not communication self-efficacy. This theoretical redesign of this model to examine and explore communication self-efficacy provides justification for this accounting research. There has not been any previous study into the factors affecting communication self-efficacy in the current accounting education literature.

This model exploring communication self-efficacy (tested on two different groups of first year accounting students) showed that on both occasions, the self-efficacy techniques have a statistically positive affect on a students' future behaviour intentions to use their new found communication skills. Therefore there is a possibility for educators to address the issue of communication apprehension in students by using communication self-efficacy techniques in their pedagogy. The results of this thesis show that changes to accounting education need not be expensive to impact on an individual's communication self-efficacy. The greatest effect is generated by practice (personal mastery). Allowances should be made to let the students learn from their mistakes when practicing increasingly graded presentations. Vicarious experiences must be created whereby students can watch each other present. There needs to be a belief in the innovative teaching methods and its positive impact on the student by the tutors. There must be willingness from both the educator and the students to take part in these formative and summative presentations. The more the student partakes in the communication exercises (with support from group members and their tutor), the greater their levels of communication self-efficacy and behavioural intentions to use these communication skills in the future.

10.3 Contribution to literature

This thesis attempted to investigate communication apprehension, communication self-efficacy and its antecedents in first year accounting students at Sheffield Hallam University. The first contribution to literature is that it again identifies students with high levels of communication apprehension entering an undergraduate degree programme. This thesis has identified this phenomenon, not once but twice. The first instance was compared to that of business study students indicating that accounting students had higher levels of communication apprehension than the business studies students. The second instance witnessed another, different set of accounting students record very similar results for communication apprehension as the first intake of accounting students. This reinforced the findings of other studies both in the UK and abroad that accounting students possess high levels of communication apprehension (Simons et al. 1995, Hassell et al. 2005, Arquero et al. 2007, Byrne et al. 2009).

The two questionnaires in this thesis on communication apprehension also allowed for the recording of the academic background of the students before they came to study accounting at Sheffield Hallam University. On both occasions it was noted that the students came for a predominantly scientific/maths background. This points to trait theory (as created by Holland in 1963), that students are choosing accounting because it is viewed as a safe, staid role, with a limited requirement to communicate. This thesis adds to this literature and adds to the concern that the image of accounting to the outside world is attracting the wrong type of student to the profession (IMA 2000).

This research gives clear indications that female students are entering accounting courses here at university with much higher levels of communication apprehension than males. It is here in the literature that there is some conflicting results when it comes to the effect of gender on communication apprehension. Stanga and Ladd (1990) state that there is no effect whereas this research adds weight that females facing formal public speaking tasks are the ones to suffer from communication apprehension the most (McCroskey et al. 1982, Andriate and Allen 1998 and Jaasma 1997, Lang et al. 1998, Donovan and MacIntyre 2004).

Research in this thesis also adds to the literature by providing three measured occasions establishing the causal link between communication apprehension and communication self-efficacy. This thesis has found that students with high levels of communication apprehension will have low levels of communication self-efficacy.

The connection between communication apprehension and communication self-efficacy is so strong, that analysis in this thesis allowed this researcher to pinpoint which communication tasks affected females more than males. In the table below, the data indicates that there is significant differing communication apprehension between males and females in presentations, interviews and group tasks. This then links to data that shows that the weakest levels of communication self-efficacy for female students are in formal verbal tasks.

This thesis has followed the instruction to make communication skills perceived as relevant and valuable to both male and female students (Hackett and Betz 1995). Hackett and Betz pointed out that females can underestimate their communication ability, yet possess the correct communication competence or skill. Females could actually decide not to enter the profession or the higher management levels in accounting due to a reduced willingness to take risks and a try not to be noticed (Heilman and Kram 1983). Low self-efficacy levels in an individual could lead an individual to avoid activities that could actually enhance their career (Bandura 1997). Previous studies have indicated that indeed gender may have an effect on self-efficacy in certain tasks (Lent et al. 1994). It has been noted that females may have a weaker sense of self-efficacy in some traditionally viewed male pursuits such as mathematics (Bussey and Bandura 1999) and entrepreneurship (Wilson et al. 2007). Accounting being a traditionally male-dominated profession may impact females' confidence levels.

There is now a greater need for gender-sensitive programming when designing future delivery of communication-based modules taking into consideration female motivation as well as building on their communication self-efficacy. There should not be identical pedagogical methods when attempting to raise communication self-efficacy for students across gender. Therefore, future course design needs to do more to increase female socialisation experiences, bringing in more guest speakers as female role models at partner levels in accounting firms and holders of high level positions in major organisations. Hopefully, this will work to increase the self-efficacy of female accounting students compared to their male counterparts.

This thesis adds to the literature in that there have been few published studies that have attempted to tackle the problem of verbal communication apprehension in accountants (Rebele et al. 2002). This study will contribute by demonstrating that communication interventions can be buildt into the curriculum that can influence the future verbal communication self-efficacy and behavioural

intentions of students when it comes to communication tasks. Metrejean et al. (2002) stated that due to time and fiscal constraints it has been difficult for academics to create truly innovative accounting courses. However, it has been stated that that:

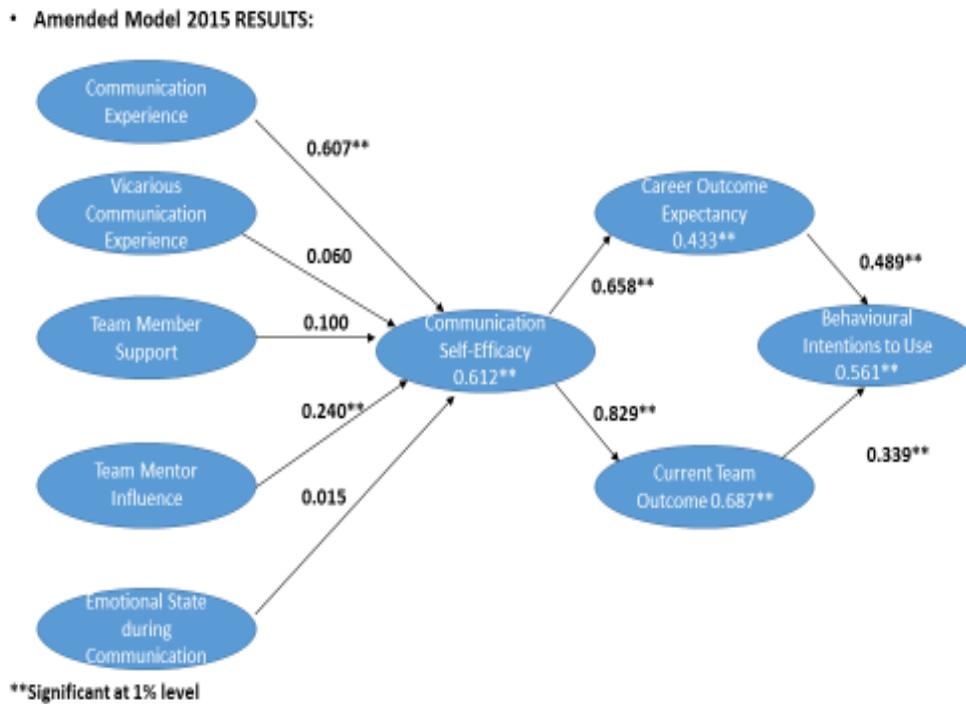
“Universities should guarantee that their students will all have the opportunity to learn and develop generic skills and abilities during their undergraduate study.” (Crebert et al. 2004, p. 148).

The findings in this investigation have demonstrated that simpler and less expensive techniques can be employed in creating innovative communication accounting courses. This thesis presents suggests the key antecedents for improving communication self-efficacy. The pedagogy here presents a new accounting course that tries to meet the demands of academics such as Albrecht and Sack to teach vocational skills (2000). The Professional Accountant module attempts to change student attitudes from viewing accounting as a mechanical, bookkeeping process (Bougen 1994) and works with practitioners to give students a view as to what is involved in accounting.

The course follows the recommendations of the AECC (1992) and has guest lectures, case studies based on real life scenarios and tutors with practical accounting experience. It suggests that for tutors to be successful, they must be engaging and have experience from the current profession (Gammie, Gammie and Gargill 2002). A nurturing, helpful community must be created an environment whereby students are guided through their mistakes rather than punished for them. This encouragement must come from not just from tutors but also from members of their own team (Boyce 2004). Chowdhury et al. (2002) argue that self-efficacy is a growing process, which can be improved through positive feedback. There must be a collective buy-in to the purpose of the module or else lessons can be created that the students will not engage with as they do not see the point (Nelson 1992). Guest lectures by practitioners will help to maintain relevance, informing the students as to the potential jobs within accounting and enhancing key points regarding the need for key skills such as communication (Fedoryshyn and Tyson 2003). The Professional Accountant module is not a perfect design, but has demonstrated that communication self-efficacy techniques can be introduced to mass-market education.

There is also now a new model for measuring the effects of variables (antecedents) on communication self-efficacy. In the current academic literature this is the only model that tests for communication self-efficacy. Each of the new communication scales, measures and items have a

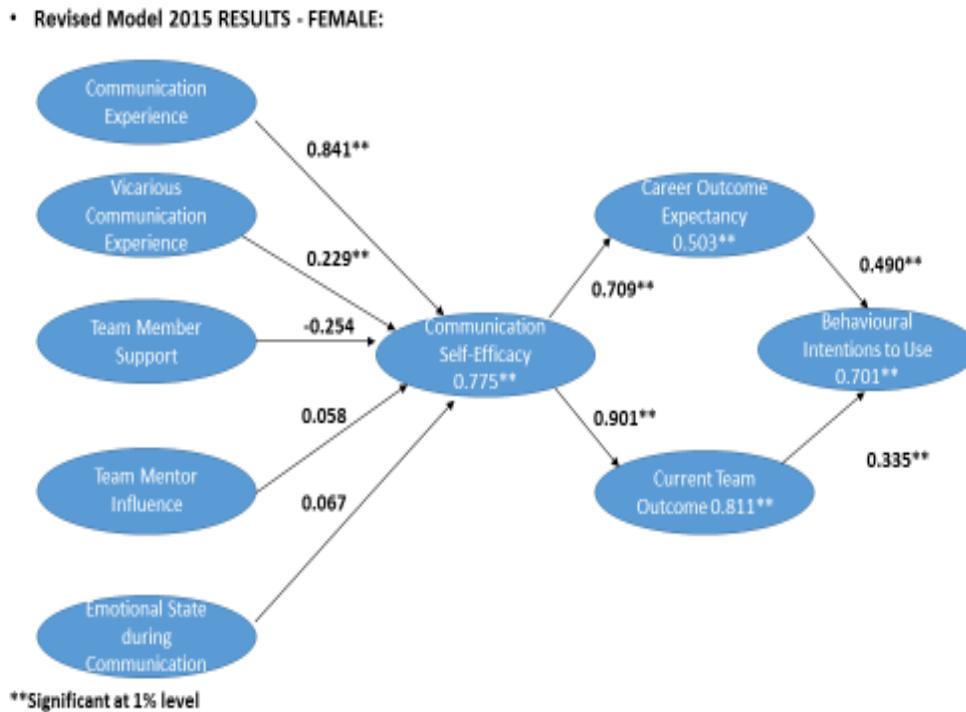
strong theoretical basis and showed results of high reliability and validity in accordance to instruction from Hair et al. (2010). It has been tested empirically and the model's results reflect the effects changes to the curriculum had on the students. It has shown over its two tests, that personal mastery and team member influence are overall statistically important factors in increasing an individual's communication self-efficacy.



This final model of communication self-efficacy has shown that it can reflect changes to the curriculum design and the effect it can have on the antecedents of communication self-efficacy. By increasing the number of presentations the students had to do, this improved the results of personal mastery antecedent and reduced the reported emotional state of the students. This change in the curriculum allowing students more opportunities to present reflects the works of Bandura (1982) who stated that personal mastery was the single most important variable to increasing an individual's self-efficacy. This increase in personal mastery led to the highest impact on self-efficacy in the testing so far also leading to the greatest impact on outcome expectancy and behavioural intentions to use communication skills in the future. This means that The Professional Accountant module (and future design of any undergraduate communication module) in order to increase an individual's

communication self-efficacy, must allow individuals to attempt to gain as much personal experience or mastery of a communication task as possible. However, care must be taken here in relation to the level of failure associated with personal experience of each task, as repeated failure will lower self-efficacy (Gist and Mitchell 1992).

The communication self-efficacy model is particularly strong in recording female students' communication self-efficacy. This model's analysis of female results provides insight for accounting educators as to which antecedents should be focused on to help improve female student's communication self-efficacy:



Female students must be given as many chances as possible to practice formal communication tasks. This is by far the strongest antecedent of communication self-efficacy for female students. The only other antecedent that is of statistical significance in relation to communication self-efficacy is vicarious experience. Female students' communication self-efficacy behaviour is positively affected by observing other students. This allows female students to socially compare and position

themselves in relation to other students. This should lead to them empathising with others and learn from either other students' mistakes or successes.

10.4 Practical implications

One of the implications for recruiters is that students are still attracted to accounting from a predominately science/maths background. This has implication in that students are still being informed that accountants need maths to succeed in accounting. There is still the obvious need for the accountant to be numerate, but to be a business partner (CIMA 2009) requires an accountant to display many vocational skills, such as being a good communicator.

The inverse causal link between communication apprehension and communication self-efficacy has implications on the possible teaching interventions to help students improve their communication abilities. McCroskey himself admitted that his method of for reducing communication apprehension was expensive and time-consuming to deliver. The method McCroskey suggested was systematic desensitization (1972). This method is almost impossible to deliver to a large number of students as this method requires students to lie down in a room, listening to calming techniques while gradually being exposed to their fears. Self-efficacy meanwhile has claimed success in the reduction of many phobias and ailments including stopping people from smoking. The methods used in increasing self-efficacy levels are far easier to implement and use in a mass-market context such as communication self-efficacy in a large cohort of undergraduate accounting students rather than using the systematic desensitization methods of McCroskey.

The Professional Accountant module demonstrates that communication self-efficacy techniques can be embedded cheaply and easily into an undergraduate module. The statistics generated in this study does suggest caution when creating such a module. The techniques used here follow the Bandura guidelines on personal mastery, vicarious experience and mentor influence, but the results were only positive for the majority of male students in this study. Female students did not fare so well. Therefore more care must be taken when designing a future course using communication self-efficacy techniques to help improve the communication ability of students. The results of this study show that female students find personal mastery and vicarious experience the most influential antecedents of communication self-efficacy.

There was plenty of opportunity for both personal mastery and vicarious experience built into The Professional Accountant module, but care must be taken here in that there are subtle differences that can make the female students' communication self-efficacy worse. Other studies have found that female students feel that they have less ability than males when it comes to undertaking studies deemed predominately male-dominated such as maths and entrepreneurship (Wilson et al. 2007). The coursework put the students into groups to answer case studies designed by CIMA based on real-life scenarios. These case studies were created for undergraduates but required the students to use their business acumen and entrepreneurial skills. This may have put many females at a disadvantage to males. There is also the obvious notion that is they suffer the most from communication apprehension, that when they were put into groups, their views would be dominated by male members of the group. Therefore, when designing a course on communication self-efficacy for females, care must be taken to help female students with high levels of communication apprehension to use techniques that will help them get their point of view across in group meetings.

The final antecedent for female students' communication self-efficacy is vicarious experience. Female students will improve their communication self-efficacy by watching other female students succeed at communication tasks. Therefore room must be built in to allow the groups to present in front of one another. This was done in The Professional Accountant module by allowing groups to present in front of one another in non-assessed case study presentations. With vicarious experience, students must observe people with the same low levels of self-efficacy as themselves overcoming obstacles similar to the ones the student observer will face. If they observe people with high levels of self-efficacy achieve a task with ease they will not readily associate their position with their own and therefore decide that they cannot replicate the correct desired behaviour to accomplish the task (Kazdin 1974b).

Care must be taken not to confuse communication apprehension with communication self-efficacy. Self-efficacy is positioned very closely to communication apprehension. Communication apprehension is about a feeling overall, a fear, self-efficacy is more around belief in overcoming a task. Communication apprehension can be defined as an inhibition and self-efficacy provides the belief to overcome such an inhibition. Students with low levels of self-efficacy have very similar behaviour to that of someone displaying high levels of communication apprehension with individuals shying away from interaction and engagement with their peers and the course. Students with low

levels of self-efficacy can adopt severe avoidance techniques such as choosing not to come to class (Lent and Hackett 1987).

For academics to redesign their course to incorporate communication self-efficacy there are a number of factors to consider. In order to use communication self-efficacy in a task the levels of belief in the students must just be right. The optimum level of self-efficacy is where a person's belief in their ability is slightly above their actual ability to perform that task (Csikszentmihalyi 1997). The best method to raise self-efficacy levels to their optimum is to create a programme of personal experience over time accompanied with self-evaluative techniques (Bandura 1977a). By making self-rewarding reactions in attaining a certain level of behaviour, people create self-inducements until their performances matches self-prescribed standards. Performance accomplishment raises self-efficacy but it must be seen as a real accomplishment not forced or contrived. Tasks that attempt to raise students' self-efficacy must be graduated with variation in the threat itself (Bandura, Jeffery and Wright 1974). Real encounters with real threats produce results decidedly superior to imagined exposure with lesser threats (Emmelkamp and Wessels 1975). Prolonged encounters are more likely to produce improved behaviours as opposed to short encounters (Rabavilas, Boulougouris and Stefanis 1976).

The impact of verbal persuasion will vary substantially depending on the creditability of the persuader, their prestige, trustworthiness and expertise. The more believable the person doing the persuading, the more receptive to change the individual with low self-efficacy should be. Physical arousal comes from the appraisal of the situation, such as a job interview. This appraisal may swing either way as something to be motivated by or to avoided (Mandler 1975). People who see this as fear stemming from personal inadequacies are likely to perform worse (Sarason 1976) focusing on these inadequacies rather than the situation. The task itself must not be seen as easy but easy to master with a little bit of effort and there must be room to allow failure and for individuals to learn from their mistakes.

People who experience failure in a task, yet can then go on to repeat the same task and accomplish the task will have greater increases in their self-efficacy (Bandura 1974). The students rapidly lose their fears so that ultimately they can cope unassisted. Self-directed mastery experiences are then arranged to reinforce this newly gained personal efficacy. In tackling communication apprehension there are many things to consider and research if this approach is to be adopted as another or

alternative solution for high levels of communication apprehension. If this antecedent of communication self-efficacy is administered correctly, it allows those incapacitated to rapidly lose their fears and even to reduce fears and inhibitions in other aspects of their lives (Bandura 1977a). Consideration must also be given to continuous professional development beyond The Professional Accountant course. This is due to the fact that individuals can quickly return to their previous levels of self-efficacy if they experience only a few unfavourable experiences (Bandura 1977a). Success in a classroom will quickly be eroded if this success cannot be repeated in the future.

10.5 Limitations

This study is limited to only accounting students (with business studies students initially being used for comparison purposes) on their first year at Sheffield Hallam University. On reflection, it is perhaps only the enthusiasm and bias of this researcher that after only six months of study and application of self-efficacy techniques that we should expect the students to dramatically improve their communication self-efficacy levels. Other studies have shown that innovative courses can sometimes not improve the vocational skills of accounting students (Allen and Bourhis 1996, Hassall et al. 2000, Aly and Islam 2003, Gardner et al. 2005, Arquero et al. 2007).

In terms of the questionnaires, the timing of the questionnaire might have been better. Some of the questionnaires were distributed at the very first lecture on the very first day at university (or the first lecture in the first week) to the students. This may have had very different reactions from the students. The first reaction could be that the students are trying to settle into the hectic nature of their first day and are not concentrating too hard or understanding the consequences of completion of the questionnaire. There may have had an influence in terms of social desirability in that the students may have put up a front so as not to be identified as weak or be as honest as they could if they thought this would lead to future repercussions. There were a lot of distractions and pressures on the students in their first few days at university and students may have a biased opinion of their abilities and skills based on prejudices created by their initial perceptions of their fellow students. However it is argued in this thesis that it is better to capture the students as soon as possible so that they are not able to create possibly poorly informed thoughts and impressions of their fellow students and abilities.

Some of the questionnaires were completed in final lecture at the end of the students' study of The Professional Accountant module. The students were drawn to this lecture because their marks for

their group presentation were about to be handed out in this lecture (worth twenty per cent of their final mark). It was thought to give the students the questionnaires at the beginning of the lecture and hand out the marks after the questionnaires were completed. If the students fill the questionnaires out after the results of their group work had been announced, then perhaps this maybe the final reassurance that they are good at completing the task and some negative thoughts around the completion of the task is removed (Bandura 1997). It could of course go the other way in that the marks are poor and then the questionnaires are completed in an emotional and angry manner that will not create the optimal results. To obtain optimal results it would be better to gain completed questionnaires from those that volunteer rather than those who will just fill them in because they have been coerced. This may create a smaller sample but potentially should prevent satisficing (Krosnick 1991, 1999). One of the potential downfalls in this model is that students were asked about their ability to use their communication skills in the future, either in future teams or future careers. This can lead to results that show increased intentions to use, but could be that it is easy for the students to imagine themselves to be highly trained in communication skills in a hypothetical setting (Bandura 1997).

Perhaps with hindsight it might have been better to hand out the marks first. This is because the students may have been able to reinforce their performance with a mark for their efforts. However, this is a time consuming process handing marks out to the various groups and would have potentially left very little time for the student to complete the questionnaire. Although the student may have had final reassurance that their performance was not that bad and therefore filled the responses in a more positive manner (or indeed negative depending on their mark), there was also the threat their mark was all they were interested in. If this was the case, once the student received their marks, then the students may not then have had the desire to fill in the questionnaires.

The modelling undertaken by Stone and Bailey involves Covariance-Based Structural Equation Modelling (CBSEM) that is complicated, but allows for claims that the statistics produced are precise and reliable. This thesis's adapted communication self-efficacy model was tested by analysis of variance using Partial Least Squares Structural Equation Modelling (PLS-SEM). PLS-SEM has been correctly applied in this thesis because PLS-SEM should be used on an exploratory questionnaire design such as this communication self-efficacy model (Lee 2011). This allows flexibility for individual analysis of questions (items) and the possibility to remove statistically poor question and then re-test the overall results. Some of the questions (items) results are coming out as too low for their current

scale and should either be deleted or revised. The current results were re-run with the removal of these questions and the results do not alter, but more thought needs to be applied to the appropriateness of the removed questions to be used in the future.

The two SEM methods do not compete against one another as Partial Least Squares method still uses linear regression, factor analysis and has a rigorous rationale (Wold 1985). Both methods can be used for theory confirmation (Chin 2010). Partial Least Squares has been useful because its soft modelling allows for causal predictive analysis in situations of high complexity and low theoretical information (Roldan and Sanchez-Franco 2012), but this model has shown to be compatible with the theory of self-efficacy it needs now to be tested in CBSEM for confirmatory research (Gefen et al. 2000). Stone and Bailey can only use this type of modelling on their final version of the questionnaire. In order to get to this position they should have used PLS-SEM to test question reliability and to remove those that did not give strong statistical results.

PLS-SEM can claim a certain overall reliability, but now that the communication self-efficacy questionnaire has had its weaker questions removed it is now a potentially a strong indicator of communication self-efficacy. When the revised questionnaire is used again it can now be analysed through CBSEM to claim precision of its structure and questions. This testing was not conducted as this would mean re-testing a new set of students outside the scope of the current investigation.

Another potential limitation is that the effect of guest speakers was not tested. The introduction of guest speakers has at least addressed the criticisms of academics such as Howieson (2003) of academic and practitioner communities not working together, but the effect these speakers had on the student population was not tested. Metrejean et al. (2002) reported the guest speakers that they had introduced to their course received positive feedback, but were not tested empirically. Fedoryshyn and Tyson (2003) issued pre- and post-course questionnaires that revealed positive behavioural changes in students who had attended guest lectures.

This thesis has been conducted in a positivistic paradigm. There may be the call for this research to include qualitative techniques as academics such as Plumb and Spyridakis (1992) claim that “the wise researcher uses a combination of research methods to obtain converging evidence.” (p.626). There have also been qualitative studies that have shown that there is a need for accountants to improve on the vocational skills of communication (Kelly and Gaedeke 1990, Deppe et al. 1991, Maes et al. 1997). These studies highlighted the fact that an accountant work in “cross-functional teams,

interprets financial information for people in other parts of the organisation and is looked to for input on strategic decisions” Siegel (2000 p.75).

There may be accusations of this researcher taking the obvious methodological approach, being from a positivist neoclassical economic background of accounting where numbers and statistics dominate research. There are suggestions from a qualitative paradigm that questionnaires cannot truly capture feelings and Burrell and Morgan (1997) state that questionnaires should provide the basis for further research. Previous research has found that there can be differences in what they say in a questionnaire in comparison to an interview and often collections of statistics and number crunching are not the answer to understanding meanings, beliefs and experience (Flick 2006). This approach would mean using a mixed methods approach which helps to triangulate, backing up one set of findings from a quantitative method of data collection (the questionnaire) with another very different qualitative method (interviews). There are many flaws to both quantitative and qualitative methods from: collating data, the correct sample size, socially desirable answers, return rates of questionnaires and even to interviewing in the correct manner. After the conflicting results of the communication apprehension questionnaire and the self-efficacy questionnaire sent out to accounting students, a series of follow up interviews could be used to obtain richer data. This mixed methodology approach is proposed as questionnaires can only give a very superficial view (Cooper et al 1983) and should be used as a starting point when investigating behavioural science in the role of the accountant (Ryan et al. 1992).

There are however potential pitfalls in adopting the mixed methods approach that may affect the results into the study of communication apprehension and communication self-efficacy. The very nature of this mixed methods approach has been called into question by the likes of Howe (1988 p.10) who doubts whether it is “epistemologically coherent.” There must be enough attention to rigour to allow for the key matters of reliability, validity and believability as defined by Shipman (1988). There is another more obvious problem in that this thesis is researching communication apprehension levels in accounting students. As this research has indicated that a lot of accounting students are suffering from communication apprehension, there will be great difficulty in trying to get the students to express their fears of communicating in a pressurised semi-structured interview. This researcher’s other concern is that Delamont (2004) states that writing well is particularly important in qualitative research and this researcher’s own positivistic background creates concern

that this researcher might not be able to express eloquently questions towards the students to capture their thoughts and feelings as well as other non-accounting researchers could have done (such as the likes of Burke, 1993). This researcher must consider what is visible and not visible with sufficient self-understanding to create empathy with the role and values of the interviewee (Vidich and Lyman 2000). It will take potentially years of practice to get to that level and learn social science research as advocated by Stoller (1989), but it is one journey that this researcher prepared to undertake.

10.6 Future research

This power and usefulness of this thesis can be expanded upon here as the students included in the second investigation are still only in their second year of study. This means that they will be exposed to more techniques in the accounting curriculum that potentially allows them to improve their general (and communication) self-efficacy, lower their communication apprehension, improving other skills and attitudes useful to the accounting profession. Therefore these accounting students can be tested again before they leave university to see what the overall effect the accounting curriculum has had on them on their time at Sheffield Hallam University. This future research would meet the criteria of a longitudinal study as defined by DeVaus (2001) in that a sample has been surveyed and surveyed again. This means that a large number of respondents can be tested over a large number of variables, potentially allowing it to give safer conclusions (Spector 1981). Churchill (1999) claims that longitudinal studies can be the most powerful and useful research design in a social sciences context.

Rubin et al. (1990) found that in students who studied communication (even those who were enrolled on communication courses) that their communication competence decreased significantly during their first year at university, but then increased significantly in their next two years. With these results it would be useful to consider if this was the same for students studying accounting at Sheffield Hallam. Rubin et al. found that experience and maturity may play its part in increasing levels of confidence in a student's ability to communicate. If students continue to participate in classroom activities intended to boost their communication skills then it may be that future results will mirror that of Glaser, Biglan and Dow (1983) in that students' can show a significant decrease in levels of communication apprehension if they continue to participate in these communication skills activities.

Further research can be conducted to see if the findings of this thesis would be reflected across the accounting undergraduate community. There have been plenty of studies that have identified high levels of communication apprehension in cohorts of undergraduate accounting students here in the UK and abroad. It would therefore be good to expand this study into the causal link between communication apprehension and communication self-efficacy to see if this link can be replicated. Hassall et al. (2013) conducted a smaller scale study that again identified the link between communication apprehension and communication self-efficacy in Malaysian students who attended a summer school here at Sheffield Hallam University. The study in this research was conducted on a far larger scale of 131 UK students and was able to identify precisely by gender where the students had problems in their communication abilities. It would be good to see if the inverse causal link can be applied to other large scale cohorts of undergraduate students here in the UK and overseas. It should also then be possible to investigate the new data generated if indeed it is the more formal communication tasks or interventions that create the student biggest fears in communicating.

There is also the potential to extend the study to members of the accounting profession and for comparative purposes to students and members of other professions who have experienced similar communication apprehension problems such as engineers (P'Rayan and Shetty 2008) or lawyers (Wigley 1995).

If the link between communication apprehension and communication self-efficacy can be established elsewhere, then this should allow for others to use this thesis's instructions on how to implement communication self-efficacy techniques into the curriculum. This will allow hopefully for communication self-efficacy levels rise and communication apprehension levels lower in the students and improve their overall communication abilities.

Even if the desired communication self-efficacy and communication apprehension levels are not reached immediately, there is a questionnaire and model that can indicate the antecedents of communication self-efficacy. Tutors can use these results as an indicator of what antecedents did have an influence on the students and the tutors can either strengthen the course built on these antecedents or remove them. All of this should help the accounting profession by creating accounting students with the correct levels of communication abilities to become the desired business partners as demanded by many organisations (CIMA 2009).

10.7 Impact

The major impact is that since Stanga and Ladd (1990) first identified communication apprehension in accounting students there has not been a major intervention in the accounting undergraduate curriculum that is seen to help the accounting students (Nash et al. 2015). This thesis demonstrates and even gives the year long timetable (appendix three and four) on how to structure a course that enables students to improve their vocational and communication skills. This course reflects the work of Ireland (2016) in that it has looked to self-efficacy to improve communication skills. This thesis has all the key attributes Ireland identifies as necessary to deliver a successful communication self-efficacy course by contributing to student pedagogy (Hamer et al. 2011), having problem based learning (Savin-Baden, 2000) and experiential learning (Dennick 2014). There is work still to be done with particular emphasis on improving female pedagogy, but a sound basis is there.

The research undertaken here clearly shows that students attracted and recruited to the accounting courses at Sheffield Hallam are predominately male who have a strong mathematical and science-based background. Whilst there is nothing wrong with this collective profile, it is clear that employers and the professional accounting bodies recognise that just being good at the numbers is not enough for accountants in today's modern business environment. The recruitment statistics for Sheffield Hallam University also show that for 2016 and 2017 we have had steady recruitment numbers of 33% of our intake as being female and 66% being male.

This perception must change. The only way to change this is via education. This education is prevalent with two of the professional bodies (ACCA and CIMA) who have changed their syllabus to include case studies. Whilst it does not immediately solve the verbal communication problem, it does at least demonstrate that today's accountant operates in a complex environment where there are not linear answers to certain problems faced by various organisations.

Informing students that accountancy is changing as a profession must come earlier in a student's life. Students are influenced by their secondary school teachers and careers advisors. Of the investigations I have undertaken in my role as recruitment lead for the accounting courses here at Sheffield Hallam, it is still viewed by teachers and careers advisors that you need to be good at maths. The perception of the accountant is still the old-fashioned stereotype of a staid boring old male professional (Friedman and Lyne, 2001).

This has to change. Secondary school teachers and careers advisors must be informed that the old stereotype is out-of-date. The profession over the last twenty to thirty years has changed. The profession now has far more diverse requirements. Therefore educators must be told that today's accountant is drawn from a more diverse background and possess more skills than just being good at maths. This education must be either in the form of accountants attending secondary school conferences and giving speeches or the distribution of literature that gives better examples of accountants in today's workplace. There needs to be stronger links with accountants who are female. More female accountants at the top of the profession need also to be invited back to schools, colleges and universities to talk about their job, their lifestyle and how they got to the top to inspire the next generation of female professional accountants.

As this will take a while for the message of diversity to filter through the schools, there will still be the current problem that undergraduate accounting courses will still have students that are potentially unsuited and unprepared for the communication requirements of accounting. Accounting students on entering an undergraduate accounting programme should be screened for communication apprehension. This would allow tutors to ascertain the level of the problem and create solutions in their accounting pedagogy. Therefore the communication self-efficacy requirements of both male and female students would be addressed.

New accounting tutors can be trained in mentoring (a key part of Bandura's self-efficacy interventions) at university in the Post Graduate Certificate of Learning and Teaching for Higher Education (PGCLTHE) here in the UK. More established educators can be informed via published journal articles or conference papers. It maybe more difficult for established tutors to adapt to these new methods of encouragement. This is because they are more likely to be from the more traditional, maths-based accounting background. There is even the possibility that they have high communication apprehension. Therefore instruction must be given as to how to teach and encourage students to become better at verbal communication.

10.8 Final Thoughts

The final thoughts of the researcher is that it has been a long and very insightful journey into why students are attracted to and choose accounting. This researcher is pleased to have undertaken this study as it shows that there is at the moment a mismatch between the requirements of the profession (wanting communication skills) versus the perception of the profession (being seen as not needing communication skills). I intend now to publish my findings in future editions in journals such as "Accounting Education" so that I can inform fellow accounting tutors some of the potential solutions that this problem presents.

I also need to share these findings with my fellow accounting tutors both here at Sheffield Hallam and elsewhere. We need to recognise that we have a problem and that we need to influence the curriculum to help the students develop their vocational and communication skills. It will take more convincing of others who will not want to recognise the problem or will take some convincing that the methods described in this thesis as advocated by McCroskey and in particular Bandura can work in the right context. For example many tutors believe that unless a task in a module is summatively assessed (as opposed to formatively assessed) then the students will not understand its worth and engage. However I have witnessed that if a tutor can convince the students as to the long-term benefit to them of the task (or maintain their intellectual curiosity) then the students are more than willing to engage with the subject matter.

Once I have addressed my fellow tutors I must also turn to the rest of the business school and inform them of my findings. I used a first year of business studies students for comparison of findings with accounting students as in keeping with the research of Stang and Ladd (1990) and Simons et al. (1995). Whilst the business study students showed less communication apprehension, there are still some business students who suffered with this problem. The business studies students also had the strong causal link between communication self-efficacy and communication apprehension. Therefore it is only proper that I also inform business studies tutors of my findings so that hopefully they can also integrate communication self-efficacy techniques into their curriculum. I am hoping that with the publication of this thesis it will give me more credibility and influence on another undergraduate programme.

I also hope to use my findings and contacts as a Chartered Management Accountant to bring female accounting professionals to give guest lectures. They are needed to not only inspire our current female undergraduate accounting but to inform the accounting curriculum as to how we can encourage female

students to choose accounting and how we can cater for their different pedagogical needs compared to male accounting students.

The world of accounting education is changing here at Sheffield Hallam and in other institutions as we embrace the rules and regulations of AACSB and become more exposed to the commercial pressures of league tables. This has meant that recruitment and focus in Sheffield Hallam's accounting department has changed during the time I have spent gaining my PhD. It has moved from recruiting tutors with practical relevant experience in business and accounting, who would be qualified accountants, to recruiting only PhD students with a history of journal publications.

This is not a bad thing as it helps increase the profile of the accounting department (increasing the league table position and help the department meet AACSB criteria) but it means that new universities lose their commercial differentiation appeal to students. The differentiation is that tutors with business experience can bring to life the practical application of theory and describe what behaviours are needed to being a successful accountant.

I would suggest another approach, to recruit qualified accountants as before but with a requirement to complete further studies such as a PhD. This is seen as a very onerous task and having studied hard to obtain the chartered accountant status. Therefore most tutors will be older than most postgraduate students, potentially have a family and will not want to take up this challenge. I am happy to report that obtaining a PhD is difficult (as expected) but not impossible. I would be more than happy to guide and show others how it can be done and is not as mysterious a process as first described.

Appendices

Appendix One: THE COMMUNICATION APPREHENSION QUESTIONNAIRE

Name / student ID:

SECTION A: Some details about you (tick the appropriate box)

1. Age

2. Gender

Male

Female

3. Which best describes your previous educational background:

Mainly numerate/scientific

Mainly literate/arts/humanities

4. How would you rate yourself in terms of overall academic ability compared to your fellow students?

Much better

Better

Average

Worse

Much worse

We gratefully acknowledge your co-operation and help.

SECTION B: Some questions about “Writing”

Below are a series of statements about “writing”. There are no right or wrong answers to these statements. Please indicate the degree to which each statement applies to you.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1. I feel confident in my ability to clearly express my ideas in writing					
2. I enjoy writing					
3. When I have to write an essay I know I’m going to do poorly					
4. It’s easy for me to write good essays					
5. I don’t like my written work to be evaluated					
6. I’m not good at writing					

How sure are you that you could do the following? Rate your confidence level using a scale ranging from 0 (no confidence at all) to 10 (completely confident).

		confidence
		0 - 10
1	Write a letter to a friend or member of your family	<input type="text"/>
2	Fill out a job application form	<input type="text"/>
3	Compose a CV describing your educational history and personal skills	<input type="text"/>
4	Write a one or two sentence answer to a given question	<input type="text"/>
5	Write useful class notes	<input type="text"/>
6	Write a one or two page essay in answer to a given question	<input type="text"/>
7	Write an extended essay of 5 sides or more of A4 in answer to a given question	<input type="text"/>
8	Write a report on a technical accounting problem for a potential employer	<input type="text"/>

How sure are you that you could do the following? Rate your confidence level using a scale ranging from 0 (no confidence at all) to 10 (completely confident).

		Confidence
		0 - 10
1	Correctly spell all words in a one page essay or report	
2	Correctly punctuate a one page essay or report	
3	Write simple sentences with good grammar	
4	Write an introductory sentence that clearly states your idea or argument	
5	Write a paragraph that develops your idea or argument	
6	End paragraphs with proper conclusions	
7	Write a well organised and sequenced essay with good introduction, body and conclusion	
8	Write in a clear manner by staying focused and without getting off the topic	

SECTION C: Some Questions about Oral Communication

For the purpose of this questionnaire “group discussions” means an informal discussion involving several of your colleagues.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1. I dislike participating in group discussions.					
2. Generally, I am comfortable while participating in a group discussion.					
3. I am tense and nervous while participating in group discussions.					
4. I like to get involved in group discussions					
5. Participating in a group discussion with new people makes me tense and nervous.					
6. I am calm and relaxed while participating in group discussions.					

For the purpose of this questionnaire “interview” means a formal conversation between you and a lecturer/employer.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
7. Generally, I am nervous when I have to participate in an interview					
8. Usually I am calm and relaxed while participating in an interviews					
9. I am very calm and relaxed when I am called upon to express an opinion at an interview.					
10. I am afraid to express myself at interviews					
11. Speaking at interviews usually makes me uncomfortable					
12. I am very relaxed when answering questions in an interview.					

For the purpose of this questionnaire “conversation” means an informal discussion involving you and a colleague.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
13. While participating in a conversation with new acquaintance, I feel very nervous					
14. I have no fear of contributing my ideas during conversations					
15. Usually I am very tense and nervous in conversations.					
16. Usually I am very calm and relaxed in conversations.					
17. While conversing with a new acquaintance, I feel relaxed.					
18. I’m afraid to express my opinions during conversations					

For the purpose of this questionnaire “presentation” means a formal verbal communication given to an audience.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
19. I have no fear of giving a presentation.					
20. I feel very tense and nervous while giving a presentation.					
21. I feel relaxed while giving a presentation.					
22. My thoughts become confused and jumble when I am giving a presentation.					
23. I face the prospect of giving a presentation with confidence.					
24. While giving a presentation I get so nervous, I forget facts I really know.					

How sure are you that you could do the following? Rate your confidence level on a scale ranging from 0 (no confidence at all) to 10 (completely confident).

		Confidence
		0 - 10
1	A brief discussion with your friends on a topic you enjoy	
2	An informal discussion with a lecturer on a topic you enjoy	
3	A class discussion	
4	A group presentation in class	
5	A short individual presentation (5-10 minutes) on a given topic	
6	An extended individual presentation (30 minutes) on a given topic	
7	A full individual presentation (45 – 60 minutes) on a given topic	
8	A formal individual interview with an employer	

How sure are you that you could do the following? Rate your confidence level on a scale ranging from 0 (no confidence at all) to 10 (completely confident).

		Confidence
		0 - 10
1	Identify the audiences' requirements	<input type="text"/>
2	Prepare a well organised and sequenced presentation with good introduction, body and conclusion	<input type="text"/>
3	Control your fear	<input type="text"/>
4	Speak clearly and confidently	<input type="text"/>
5	Deliver the presentation staying focused and without getting off the topic	<input type="text"/>
6	Display appropriate body language	<input type="text"/>
7	Make use of visual aids	<input type="text"/>
8	Deal with interruptions and questions from the audience	<input type="text"/>

Appendix Two: THE COMMUNICATION SELF-EFFICACY QUESTIONNAIRE

Name / Student ID:

SECTION A: Some details about you (tick the appropriate box)

1. Age

2. Gender

Male

<input type="checkbox"/>
<input type="checkbox"/>

Female

3. Which best describes your previous educational background:

Mainly numerate/scientific

<input type="checkbox"/>
<input type="checkbox"/>

Mainly literate/arts/humanities

4. How would you rate yourself in terms of overall academic ability compared to your fellow students?

Much better

Better

Average

Worse

Much worse

<input type="checkbox"/>

We gratefully acknowledge your co-operation and help.

SECTION B:

This questionnaire is designed to help us gain a better understanding of your verbal (oral/spoken) communication skills whilst giving presentations*. Please rate how certain you are that you can do the things discussed below by writing the appropriate number. Your answers will be kept strictly confidential and will not be identified by name:

Rate your degree of certainty by recording a number from **0** to **100** using the scale given below:

0	50	100
Not certain at all	Moderately certain	Highly certain

**For the purpose of this questionnaire “presentation” means a formal verbal communication given to an audience.*

Section B Part 1:

Certain

0 - 100

- 1** Through my presentation experiences I was able to develop skills in verbal communication.
- 2** Participation in non-assessed presentations increased my verbal communication skills.
- 3** Participation in assessed presentations increased my verbal communication skills.
- 4** I worked in a team that had team members who could not communicate in presentations.
- 5** Members of the team I was in exhibited communication problems.
- 6** I was able to help my team increase their verbal communication skills.

Section B Part 2:

Certain

0 - 100

- 1** Friends in my team told me how to resolve my verbal communication issues when giving presentations.
- 2** I picked up tips on how to communicate by watching other members of my team who were good at communicating.
- 3** I learned by listening to others as they resolved their verbal communication issues.
- 4** I learnt how not to communicate by observing those who were poor at communicating.
- 5** Friends on other teams told me how they resolved their verbal communication issues.
- 6** I picked up tips on how to communicate by watching other teams.
- 7** I learned by listening to other teams as they resolved their verbal communication issues.
- 8** I learned via the "grapevine" how other teams resolved their verbal communication issues.
- 9** By listening to other teams' experiences, I learned how my team could resolve their verbal communication issues.

Section B Part 3:

Certain

0 - 100

1	Friends in my team encouraged me to speak out in a presentation.	
2	Friends not in my team encouraged me to speak out in a presentation.	
3	Team members supported each other when giving a presentation.	
4	Team members encouraged a "we are in it together" attitude.	
5	Team members treated poor communication as a mutual problem to solve.	
6	Team members avoided trying to solve any verbal communication issues we had.	
7	Working in a team forced me to improve my communication skills in order to gain acceptance from my team members,	

Section B Part 4:

Certain

0 - 100

1	A tutor/mentor helped me improve my presentation skills.	
2	A tutor/mentor helped my team improve their presentation skills.	
3	A tutor/mentor encouraged us to work as a team in improving our presentation skills.	
4	A tutor/mentor got me to acknowledge my weaknesses in presenting.	
5	A tutor/mentor got the team to acknowledge their collective presentation weaknesses.	

Section B Part 5:

Certain

0 - 100

1	When I had to present I felt anxious.	
2	When I had to present I felt stressed.	
3	When I had to present I felt frustrated.	
4	When I had to present I felt calm.	
5	When I had to present I felt confident.	
6	When I had to present I felt comfortable.	
7	I was interested in the intellectual challenge of the presentation tasks.	
8	I was interested in my verbal performance in the non-assessed presentations.	
9	I was interested in my verbal performance in the assessed presentations.	

Section B Part 6:

Certain

0 - 100

1	My verbal communication skills have improved.	
2	I feel I am able to better contribute in presentations now.	
3	By helping the team give a better presentation I also performed better.	
4	I feel I can produce higher quality presentations.	
5	I have learnt how to help my team give better presentations.	
6	I will be able to complete a similar presentation task with less stress.	

Section B Part 7:

Certain

0 - 100

- 1** I feel I am now able to contribute more in future presentations
- 2** I feel I can improve my presentation performance in the future.
- 3** By helping my team give a presentation I feel I am now able to contribute more in future teams.
- 4** I feel I can improve the presentation performance of future teams.
- 5** I feel I can become a contributing member to any team to which I am assigned.

Section B Part 8:

Certain

0 - 100

- 1** I feel by improving my verbal communication skills I have become more attractive to employers.
- 2** By improving me verbal communication skills I feel I am now better qualified for jobs when I graduate.
- 3** I am in a better position now to be more successful in my future career

Section B Part 9:

Certain

0 - 100

- 1** I intend to use my verbal communication skills in future presentations.
- 2** I will not be afraid to give future presentations.
- 3** I intend to be proactive and volunteer to give future presentations.
- 4** I intend to continue improving my presentation skills.
- 5** I will help others to improve their presentation skills.
- 6** I will help my future team find ways to improve their collective presentation skills.

END OF QUESTIONNAIRE- THANK YOU FOR YOUR TIME IN COMPLETING THIS QUESTIONNAIRE

Appendix Three: THE PROFESSIONAL ACCOUNTANT COURSE OUTLINE 2013/14

LECTURE AND SEMINAR PROGRAMME:

Lectures [1 hour per week]			Seminars [2 hours per week]	
Week beginning			Week beginning	
1st Oct	Topic 1 Introduction.	Purpose, types of businesses and the role of the professional accountant, module booklet, course outline, assessment clarification.	7th Oct	Topic 1 - Differing Types of Organisations and Professional Bodies Subjects covered: Stakeholders in business organisations Political and legal factors affecting business Social and Demographic factors The formal and informal business organisation
14th Oct	Topic 2 Guest Lecture - Aviva	The types of roles that exist in the accounting department at Aviva.	20th Oct	Topic 2 - Presentation In groups, present your collective research on the types of accountants that exist in industry.
29th Oct	Topic 3 Guest Lecture - Mr Nik Pratap (Brewster and Pratap)	Insight into the local, UK and overseas markets for Accounting Professionals.	4th Nov	Topic 3 - Learning Styles Subjects covered: Honey and Mumford Motivating individuals and groups Team formation, development and Management
12th Nov	Topic 4 Guest Lecture – Mr James Johnston ACCA.	The role of the professional accountant in the view of a professional body – ACCA.	18th Nov	Topic 4 - Leadership Subjects covered: Leadership, Management and Supervision Consequences of ineffectiveness at work
26th Nov	Topic 5 Guest Lecture – Ms Laura Curtis ICAEW	The role of the professional accountant in the view of a professional body – ICAEW	2nd Dec	Topic 5 - CIMA Presentations Subjects covered: Personal effectiveness techniques
10th Dec	Topic: 6 Guest Lecture - Mr Jonathan Barber	The role of the professional accountant in the view of a professional body – IFA (16th Dec	Topic 6 - Audit Practice Subjects covered: Personal development and reflection

Course Outline for The Professional Accountant 2013/14 (Continued):

Lectures [1 hour per week]			Seminars [2 hours per week]	
Week beginning			Week beginning	
21th Jan	Topic 7 Assessment focus	The importance of communication skills, teamwork and leadership	27th Jan	Topic 7 - RW Sports Ltd Subjects covered: Communicating in business
4th Feb	Topic 8 Presentation Skills	The need to be part of a team, how, to manage a team and how to be a leader.	10th Feb	Topic 8 - Leadership Subjects covered: Team formation, development and management
18th Feb	Topic 9 Ethics	Professional ethics and professional values	24th Feb	Topic 9 - Practice Presentations Subjects covered: Stakeholders and factors affecting business. Personal effectiveness and Teamwork
4th Mar	Topic 10 Presentation skills	How to present, work in groups	10th Mar	Assessed Presentations
17th Mar	Topic 11 Presentations and Portfolio advice	Reflection on how to improve on presentations and advice on assessment.	24th Mar	Feedback on Presentations and Portfolio advice. Subjects covered: Sources of conflict Review and appraisal of individual performance Personal Effectiveness Techniques
31st Mar	Topic 12 Careers, Placement and CV Review	CV advice for the future	7th Apr	CV Workshops: Subjects covered: Recruitment and Selection of Employees.
11th Apr			11th Apr	Hand in date for Reflective Coursework

Appendix Four: THE PROFESSIONAL ACCOUNTANT COURSE OUTLINE 2014/15

LECTURE AND SEMINAR PROGRAMME:

Lectures [1 hour per week]			Seminars [2 hours per week]	
Actual Date:			Week beginning:	
30 th Sep	<u>Topic 1</u> <u>Introduction.</u>	Purpose, types of businesses and the role of the professional accountant, module booklet, course outline.	6 th Oct	Topic 1 - Differing Types of Organisations and Professional Bodies Stakeholders in business organisations Political and legal factors affecting business Social and Demographic factors You will be assigned groups for the following seminar
14 th Oct	<u>Topic 2</u> Guest Lecture –Aviva	The role of the accountant in Industry	20 th Oct	Presentation in groups on the role of the accountant. Present in groups assigned in the first seminar answering the questions of: What accountants are there? What do accountants do? Which one would you like to be?
28 th Oct	<u>Topic 3</u> Guest Lecture – Nik Pratap, Managing Director of Brewster Pratap, Recruitment.	The role of the accountant in Industry	3 th Nov	Topic 3 - The CIMA Global Challenge You will be introduced to analysis tools such as PEST/SWOT 6Ps etc and how to use them correctly in your analysis of the above case You will be assigned groups for the following three seminars
10 th Nov	<u>Topic 4</u> Guest Lecture - Mr James Johnston ACCA.	The role of the professional accountant in the view of a professional body – CIMA.	19 th Nov	Topic 4 - The CIMA Global Challenge Presentation in front of your peers regarding the issues facing the organisation
25 th Nov	<u>Topic 5</u> Guest Lecture – Ms Laura Curtis ICAEW	The role of the professional accountant in the view of a professional body – ICAEW	1 nd Dec	Topic 5 - The CIMA Global Challenge Part Two Presentation in front of your peers to share ideas on presentation and suggestions on the solution for the business.
9 th Dec	<u>Topic: 6</u> Guest Lecture – Mr J Barber IFA	The role of the professional accountant in the SME sector	15 th Dec	Topic 6 – The CIMA Global Challenge Part Three Put both Seminar 4 and 5 together and present as one presentation.

Course Outline for The Professional Accountant 2014/15 (Continued):

Lectures [1 hour per week]			Seminars [2 hours per week]	
Actual Date:			Week beginning:	
20th Jan	Topic 7 Assessment focus	The importance of communication skills in the accounting profession	26 th Jan	Topic 7 - Assessed Group Work. The Practice Presentation Diamond Fusion Jewellers is your book . The assessed presentation which will be the latest CIMA Global challenge will be provided at this point. You will be assigned groups for the following ASSESSED three seminars.
3th Feb	Topic 8 Leadership and managing teams	The need to be part of a team, how, to manage a team and how to be a leader.	9 th Feb	Topic 8 - Practice Presentation Your group will present analysis and solutions for Diamond Fusion Jewellers in your respective seminars (times allocated by your tutor).
17th Feb	Topic 9 DFJ Feedback	Collective feedback on the non-assessed presentation with help on how to improve.	23 th Feb	Topic 9 – Practice Presentation - Additional Feedback Greater feedback on your collective Diamond Fusion Jewellers will be given here. There will also be assistance on how this experience can be added to your Reflective Essay.
3th Mar	Topic 10 Group Work	How to present, work in groups in relation to the latest theory.	9 th Mar	Assessment - CIMA Global Business Game 2015 Presentation in your respective seminar. Time of your presentation will be arranged by your tutor.
17th Mar	Topic 11 Presentation feedback. Reflective Essay help.	Assessed Presentation marks will be handed out in the lecture. Final help with the assessed essay.	23 th Mar	Group Assessment Feedback. Tutors will give additional feedback on your presentation.

Bibliography:

ACCA:http://www.accacareers.com/career_centre/sought-after-skills-in-accounting-and-finance/

Accounting Education Change Commission (AECC) (1990) Objectives of education for accountants: Position statement No. 1, Issues in Accounting Education Vol.5, p.307-312.

Accounting Education Change Commission (AECC) (1992) Position statement No. 2: The first course in accounting, New York, NY American Accounting Association.

Accounting Education Change Commission (AECC) (1993) Improving the early employment experience of accountants, Issue statement No. 4, Issues in Accounting Education, 8(2), p.431-435

Ackerman, P.L., Shapiro, S. and Beier, M.E (2011) Subjective estimates of job performance after job preview: Determinants of anticipated learning curves, Journal of Vocational Behavior 78(1), p. 31-48.

Adams, G.R. (1977) Physical attractiveness, personality, and social reactions to peer pressure. The Journal of psychology 96.2: p.287-296.

Adams, J.S., Pryor, J.L. and Adams, L.S. (1994) Attraction and retention of high-aptitude students in accounting: An exploratory longitudinal study, Issues in Accounting Education, 9 (1), p.45-60.

Adler, R.B. (1977) Confidence in Communication: A Guide to Assertive and Social Skills, New York, Holt, Rinehart and Wilson.

Adler, P.A., Adler, P., Rochford, J., and Burke, E (1986) The politics of participation in field research. Urban Life 14(4), p. 363-376.

Adler, R. W., Milne, M. J. (1997). Improving the quality of accounting students' learning through action-oriented learning tasks. Accounting education, 6(3), 191-215.

Ahadiat, N. and Smith K.J. (1994) A factor-analytic investigation of employee selection factors of significance to recruiters of entry-level accountants, Issues in Accounting Education, 9 (1) p.59-79.

Ajzen, I. (1991) The Theory of Planned Behaviour, Organisational Behaviour and Human Decision Processes, Vol.50, p.179-211.

Ajzen, I., Fishbein, M. (1975) Belief, attitude, intention and behavior: An introduction to theory and research.

Ajzen, I., Fishbein, M. (1977a) Attitude behaviour relations: Theoretical analysis and review of empirical research: *Psychological bulleting* 84: 888-918.

Albrecht, W. S., Clark, D. C., Smith, J. M., Stocks, K. D., and Woodfield, L. W. (1994). An accounting curriculum for the next century. *Issues in Accounting Education*, 9(2), 401.

Albrecht, W.S., Sack, R.J. (2000) Accounting Education: Charting the course through a perilous future, *Accounting education series*, vol.16, Sarasota: American Accounting Association.

Allen, C.E. (1927) The growth of accounting instruction since 1900, *The Accounting Review*, Vol 2, p.17-24.

Allen, M. and Bourhis, J. (1996) The relationship of communication apprehension to communication behaviour: A meta-analysis, *Communication Quarterly*, 44 (2), p214-226.

Allen, M., Hunter, J. E. and Donohue, W.A. (1989) Meta-analysis of self-report data on the effectiveness of public speaking anxiety treatment techniques, *Communication Education*, vol 38 (1), p.54-76.

Alper, S., Tjosvold, D., and Law, K. S. (2000). Conflict management, efficacy, and performance in organizational teams. *Personnel Psychology*, 53(3), 625-642.

Aly, I.M. and Islam, M. (2003) Audit of accounting program on oral communications apprehension: a comparative study among accounting students, *Managerial Auditing Journal*, 18(9), p.751-760.

American Accounting Association Committee on the Future, Content, and Scope of Accounting Education (1986) *The Bedford Report*, Future of accounting education: preparation for the expanding profession, *Issues in Accounting Education*, 1 (1), 169-195.

Ameen, E., Bruns, S.M. and Jackson, C. (2010) Communication skills and accounting, Do perceptions match reality? *The CPA Journal*, July.

American Institute of Certified Public Accountants (1986) *The supply of accounting graduates and the demand for public accounting recruits 1986*, New York, NY: AICPA.

American Institute of Certified Public Accountants (1988) *Education Executive Committee, Education requirements for entry into the accounting profession*, 2Ed., New York, NY: AICPA.

American Institute of Certified Public Accountants (1998a) The supply of accounting graduates and the demand for public accounting recruits 1998, New York, NY: AICPA.

American Institute of Certified Public Accountants (1998b) CPA vision project identifies top five issues for the profession, *The CPPA Journal*, 68 (5), p.1-12.

American Institute of Certified Public Accountants (2000) The supply of accounting graduates and the demand for public accounting recruits 2000, New York, NY: AICPA.

American Institute of Certified Public Accountants (2000b) CPA Vision 2011 and beyond, New York, NY: AICPA.

American Institute of Certified Public Accountants (2010) Operating Policies - June 2010: Auditing, attestation and quality control standard setting activities. New York, NY: AICPA.

Andriate, G., Allen, J. (1984) Communication apprehension in unprepared versus traditional college students, *Communication Research report*, 1(1), pp.68-72.

Aranya, N., Meir, E.I. and Bar-Ilan, A. (1978) An empirical examination of the stereotype accountant based on Holland's theory, *Journal of Occupational Psychology*, Vol.51, p.139-145.

Archer, S. (1993). On the methodology of constructing a conceptual framework for financial accounting. *Philosophical perspectives on accounting: essays in honour of Edward Stamp*, 62-122.

Arnold, J. and Hope. T. (1983) *Accounting for Management Decisions*, Prentice-Hall. International, London.

Arquero, J.L., Donoso, J.A., Hassall, T. and Joyce, J. (2007) Accounting students and accounting apprehension: a study of Spanish and UK students, *European Accounting Review*, 16(2), p299-322.

Arrington, C.E., Francis, J.R. (1989) Letting the Chat out of the Bag: Deconstruction, Priviledge and Accounting Research, *Accounting Organisations and Society*, pp1-28.

Arrington, C.E., Francis, J.R. (1993) Giving economic accounts: accounting as a cultural practice, *Accounting, Organisations and Society*, 18 (2/3), p.107-24.

Ashmore, R.D. and Del Boca, F.K. (1981) *Conceptual approaches to stereotypes and stereotyping*, Hillsdale, NJ: Erlbaum p.37-81.

- Astin, A. W. (1997). The changing American college student: Thirty-year trends, 1966-1996. *The Review of Higher Education*, 21(2), 115-135.
- Athiyaman, A. (2001). Graduates' Perception about Business Education: an exploratory research. *Journal of Further and Higher Education*, 25(1), 5-19.
- Atkinson, J.W. (1957) Motivational determinants of risk-taking behaviour, *Psychological Review*, Vol.64, p.359-372.
- Averill, J.R. (1973) Personal control over aversive stimuli and its relationship to stress. *Psychological bulletin*, vol 80, p286-303.
- Ayres, J., Hopf, T. and Will, A. (2000) Are reductions in CA an experimental artefact? A Solomon four group answer, *Communication Quarterly*, vol 48 (1), p19-26.
- Bacon, F. (1620) *Novum organum*. (J. Devey, Ed.). NewYork: P. F. Collier & Son, 1902.
- Babbie E.R. (1990). *Survey Research Methods*: Belmont CA: Wadsworth 395 pp.
- Bailey, K.D. (1978) *Methods of Social Research*, New York: The Free Press.
- Baker, C. and Bettner, M.S. (1997) Interpretive and critical research in accounting: a commentary on its absence from mainstream accounting research, *Critical Perspectives on Accounting*, Vol 8, p. 293-310.
- Baker, R. E., Simon J.R. and Bazeli, F. (1986) An assessment of the learning style preferences of accounting majors." *Issues in Accounting Education* 1.1, p.1-12.
- Baldwin, B.A. and Ingram, R.W. (1991) Rethinking the objectives and content of elementary accounting, *Journal of Accounting Education*, Vol.9, p1-14.
- Ballantine, J., and McCourt Larres, P. (2007). Final year accounting undergraduates' attitudes to group assessment and the role of learning logs. *Accounting Education: an international journal*, 16(2), 163-183.
- Ballantine, J., and McCourt Larres, P. (2009). Accounting undergraduates' perceptions of cooperative learning as a model for enhancing their interpersonal and communication skills to interface successfully with professional accountancy education and training. *Accounting Education: an international journal*, 18(4-5), 387-402.
- Bandura, A. (1971). *Theories of modeling*. AthertonPress, New York.

- Bandura, A. (1976b) Self-reinforcement: Theoretical and methodological considerations. *Behaviourism*, 4, p135-155.
- Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Bandura, A. (1977b) *Social Learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1982). Self-efficacy mechanisms in human agency. *American Psychologist*, 37, 122–147.
- Bandura, A. (1983) Self-efficacy determinants of anticipated fears and calamities. *Journal of Personality and Social Psychology*, 45, p464-469.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice–Hall.
- Bandura, A. (1988). Self-efficacy conception of anxiety. *Anxiety research*, 1(2), 77-98.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current directions in psychological science*, 9(3), 75-78.
- Bandura, A. (2002). Social cognitive theory in cultural context. *Applied psychology*, 51(2), 269-290.
- Bandura, A. (2006). Guide for constructing self-efficacy scales, in Bandura, A. (ed), *Self-Efficacy Beliefs of Adolescents*, Information Age Publishing, p307–337.
- Bandura, A. and Barab, P.G. (1973) Processes governing disinhibitory effects through symbolic modelling, *Journal of abnormal psychology*, 82, p1-9.
- Bandura, A., Jeffery, R.W., and Gajdos, E. (1975) Generalizing change through participant modelling with self-directed mastery. *Behaviour research and therapy*, 13, p141-152.
- Bandura, A., Jeffery, R.W. and Wright, C.L. (1974) Efficacy of participant modeling as a function of response induction aids. *Journal of abnormal psychology*, 83, p.56-64.
- Bandura, A. Menlove, F.L. (1968) Factors determining vicarious extinction of avoidance behaviour through symbolic modeling. *Journal of personality and social psychology*, 8, p.99-108.

- Bandura, A., Ross, S. A., and Ross, D. (1961). Transmission of Aggression Through Imitation Of Aggressive Models. *Journal of abnormal and social psychology*, 63(3), 575.
- Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *The Journal of Abnormal and Social Psychology*, 66(1), 3.
- Baril, C.P., Cunningham, B.M., Frodham, D.R., Gardner, R. and Wolcott, S. (1998) Critical thinking in the public accounting profession: aptitudes and attitudes, *Journal of Accounting Education*, 16 (3/4), p.381-406.
- Barlow, D. H., Leitenberg, H., Agras, W.S and Wincze, J.P. (1969) The transfer gap in systematic desensitization: An analogue study. *Behaviour research and therapy*, vol 7, p.191-196.
- Barnes, D. (1976). *From curriculum to communication*.
- Barnes, L. B., Christensen, C. R., and Hansen, A. J. (1994). *Teaching and the case method: Text, cases, and readings*. Harvard Business Press.
- Barrick, J. E. (1971). A cautionary note on the use of systematic desensitization.
- Barsky, N.P. and Catanach, A.H. (2001) Perception is reality, *Management Accounting Quarterley*, Fall, p.22-32.
- Bartol, K. M., Durham, C. C. and Poon, J. M. (2001). Influence of performance evaluation rating segmentation on motivation and fairness perceptions. *Journal of Applied Psychology*, 86(6), p.1106.
- Bashore, D. N. (1971). Relationships among speech anxiety, IQ, and high school achievement. Unpublished masters thesis, Illinois State University.
- Basser, I. (1998). What the " new CPA" means for your career. *The CPA Journal*, 68(6), 34.
- Basu, P. and Cohen, J. (1994) Learning to learn in the accounting principles course: Outcome assessment of an integrative business analysis project. *Journal of Accounting Education* 12.4, p.359-374.
- Baum, W. M. (1973) The correlation-based law of effect, *Journal of the experimental analysis of behaviour*, 12, p.701-712.
- Baxter, W. T. (1981). Accounting history as a worthwhile study. *The Accounting Historians Notebook*, 4(1), 5-8.

- Beale, D.A. and Manstead, A.S.R. (1991) Testing the Theory of Planned Behaviour, *Journal of Applied Social Psychology*, Vol 21, p.409-431.
- Beattie IV, V., Collins, B. and McInnes, B. (1997). Deep and surface learning: a simple or simplistic dichotomy?. *Accounting Education*, 6(1), 1-12.
- Beatty, M.J. and Dobos, J.A. (1997) Physiological assessment. In: Daly, J.C., McCroskey, J. Ayres, T., Hopf, T. and Ayres, D.M., (eds) *Avoiding Communication*, p2170229, Beverly Hills, CA: Sage Publications.
- Beatty, M.J., McCroskey, J.C. and Heisel, A.D. (1998) Communication Apprehension as temperamental expression: a communication biological paradigm, *communication monographs*, 65, 197-219.
- Belbin, R. M.(1996) *Team roles and a self-perception inventory*.
- Bendix, R. (1956) *Work and Authority in Industry: Ideologies of Management in the Course of Industrialisation*: Harper and Row
- Bennett, K and Rhodes, S. (1988) Writing apprehension and writing intensity in business and industry, *The journal of Business Communication*, vol 25 (1), p25-39.
- Berg, P.O. (1989) Postmodern management? From Facts to Fiction in theory and practice. *Scand. J. Mgmt*, Vol 5, No.3, pp201-217.
- Berger, B.A., Baldwin, H.J., McCroskey, J.C. and Richmond, V.P. (1982) Implementation of a systematic desensitization program and classroom instruction to reduce communication apprehension in pharmacy students. *American Journal of Pharmaceutical Education*, p227-234.
- Berger, B.A. and McCroskey, J.C. (1982) Reducing communication apprehension in Pharmacy students, *American Journal of Pharmaceutical Education*, Summer, p132-136.
- Berger, B. A., McCroskey, J. C., and Richmond, V. P. (1984). Communication apprehension and shyness. WN Tinally, RS Beardsley y FR Cultiss, *Communication in pharmacy practice: a practical guide for students and practitioners*, 128-158.
- Berger, K . S. (2004). *The developing person through the life span* (2nd ed.). New York: Worth Publishers Ltd
- Berlo, D. K. (1960). *The process of communication: An introduction to theory and practice*.

- Bernstein, R. (1978) *the restructuring of social and Political theory*, Pennsylvania: University of Pennsylvania Press.
- Betz, N. E. and Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of counseling psychology*, 28(5),p.399.
- Betz, N. E. and Schifano, R. S. (2000). Evaluation of an intervention to increase realistic self-efficacy and interests in college women. *Journal of Vocational Behavior*, 56(1), p.35-52.
- Bhamornsiri, D and Guinn, R.E. (1991) The road to partnership in the 'Big Six' firms: implications for accounting education, *Issues in Accounting Education*, 6(1), p9-24.
- Biggers, T. and Masterson, J.T. (1984) Communication Apprehension as a personality trait: An emotional defence of a concept, *Communication Monographs*, 51(4), p381-390.
- Biggs, J. B. (1987). *Study Process Questionnaire Manual. Student Approaches to Learning and Studying*. Australian Council for Educational Research Ltd., Radford House, Frederick St., Hawthorn 3122, Australia..
- Biggs, J. B. (1989). Approaches to the enhancement of tertiary teaching. *Higher education research and development*, 8(1), 7-25.
- Biggs, J. (1994). What are effective schools? Lessons from East and West. *The Australian Educational Researcher*, 21(1), 19-39.
- Birkin, F. (2000). The art of accounting for science: a prerequisite for sustainable development?. *Critical Perspectives on Accounting*, 11(3), 289-309.
- Birley, G. and Moreland, N. (1998) *A Practical Guide to Academic Research*. London, Kogan Page.
- Bisman, J. (2010). Postpositivism and accounting research: A (personal) primer on critical realism. *Australasian Accounting Business & Finance Journal*, 4(4), 3.
- Bitter-Davis, G. and Parker,C.A. (1997) *Writing the doctoral dissertation: A systematic approach*. Barron's Educational Series.
- Blau (1970) A formal theory of differentiation in organizations, *American Sociological review*, 35 (2): pp 201 – 218.
- Blue, A. V., Elam, C., Fosson, S., and Bonaminio, G. (1998). Faculty members' expectations of student behavior in the small-group setting. *Medical Education Online*, 3(1), 4298.

- Bolles, R.C. (1972b) Reinforcement, expectancy and learning. *Psychological review*, 79, p394-409.
- Bolt-Lee, C., & Foster, S. (2003). The core competency framework: A new element in the continuing call for accounting education change in the United States. *Accounting Education*, 12(1), p.33-47.
- Bong, M. (1997). Congruence of measurement specificity on relations between academic self-efficacy, effort, and achievement indexes. Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, IL, March 24–28, 1997).
- Bono, J. E. and Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality*, 17(Suppl1), S5-S18.
- Boorum, M.L., Goolsby, J.R., and Ramsey, R.P. (1998) Relational communication traits and their effect on adaptiveness and sales performance, *Academy of Marketing Science Journal*, 26(1), 16-30.
- Booth, P., Lockett, P. and Mladenovic, R. (1999) The quality of learning in accounting education: the impact of approaches to learning on academic performance. *Accounting Education*, 8(4), p.277-300.
- Booth, P., and Winzar, H. (1993). Personality biases of accounting students: some implications for learning style preferences. *Accounting & Finance*, 33(2), 109-120.
- Borzi, M and Mills, T. (2001) Communication Apprehension in upper level accounting students: An assessment of skill development, *Journal of Education for Business*, vol 76(4), p193-198.
- Boud, D. (1995). Assessment and learning: contradictory or complementary. *Assessment for learning in higher education*, 35-48.
- Bouffard-Bouchard, T., Parent, S., & Larivee, S. (1991). Influence of self-efficacy on self-regulation and performance among junior and senior high-school age students. *International Journal of Behavioral Development*, 14(2), 153-164.
- Bougen, P. (1994) Accounting and labour: Integrations and disintegrations, *Accounting as a Social and Institutional Practice*, Cambridge: Cambridge University Press, p.138-167.
- Bougen, P. D. (1994). Joking apart: The serious side to the accountant stereotype. *Accounting, Organizations and Society*, 19(3), 319-335.

- Bourdieu, P. (1973) Three forms of theoretical knowledge, *Social Science Information*, vol 12. P.53-80.
- Bourhis, J., and Allen, M. (1992). Meta-analysis of the relationship between communication apprehension and cognitive performance. *Communication Education*, 41(1), 68-76.
- Bowden, J., and Masters, G. N. (1993). Implications for higher education of a competency-based approach to education and training.
- Bowden, J., and Marton, F. (1998). *The University of Learning: Beyond quality and competence in university education*.
- Bowman, B., Bowman, G.W. and Resch, R.C. (1984) Humanizing the research interview: a posthumous analysis of LeRoy Bowman's approach to the interview process. *Quality and Quantity*, 18, p157-171.
- Bowers, J.W. (1986) Classroom communication apprehension: a survey, *Communication Education*, vol 35 (1), p372-378.
- Boyce, G. (1994). Innovative approaches to the teaching of accounting. *Compa, k*, 3(August), 20-26.
- Boyce, G. (2004) Critical accounting education: teaching and learning outside the circle. *Critical Perspectives on Accounting*, 15(4/5), pp 595-612.
- Boyce, G., Williams, S., Kelly, A., and Yee, H. (2001). Fostering deep and elaborative learning and generic (soft) skill development: the strategic use of case studies in accounting education. *Accounting education*, 10(1), 37-60.
- Boyd, C. (2004). The structural origins of conflicts of interest in the accounting profession. *Business Ethics Quarterly*, 377-398.
- Boyd, D. T., Boyd, S. C., and Boyd, W. L. (2000). Changes in accounting education: Improving principles content for better understanding. *Journal of Education for Business*, 76(1), 36-42.
- Boyns, T. (2003) In memoriam: Alexander Hamilton Church's system of 'scientific machine rates' at Hans Renold Ltd., c. 1901-c. 1920. *The Accounting Historians Journal* 30.1 p.3.

- Boyns, T. and Edwards, J.R. (1996) Cost and management accounting in early Victorian Britain: a Chandleresque analysis? *Management Accounting Research*, 8(1), p.19-46.
- Boyns, T., and Edwards, J.R. (2006). The development of cost and management accounting in Britain. *Handbooks of Management Accounting Research* 2 p.969-1034.
- Bozeman, D. P. and Perrewé, P. L. (2001). The effect of item content overlap on Organizational Commitment Questionnaire–turnover cognitions relationships. *Journal of Applied Psychology*, 86(1), p.161.
- Bradburn, N. and Sudman, S. (1979) *Improving Interview method and Questionnaire design*, San Francisco: Jossey Bass.
- Braun, N.M. (2004) Critical Thinking in the Business Curriculum, *Journal of Education for Business*, Mar/Apr, 78 (4), 232-236.
- Brenner, M. (1978) Interviewing: the social phenomenology of a research instrument, in: M. Brenner, P. Marsh & M. Brenner (Eds) *The social contexts of method* (London: Croom Helm).
- Brooks, W.D. and Platz, S.M. (1968) The effects of speech training upon self-concept as a communicator, *Speech Teacher*, vol 17 91), p44-49.
- Brown, J.D. (1991) Preprofessional socialization and identity transformation: The case of the professional, in: *Journal of Contemporary Ethnography*, 20(2), pp157-178.
- Brown, H. D., and Burke, R. C. (1987). Accounting education: A learning-styles study of professional-technical and future adaptation issues. *Journal of Accounting Education*, 5(2), 187-206.
- Brown, R. B., and Guilding, C. (1993). A survey of teaching methods employed in university business school accounting courses. *Accounting Education*, 2(3), 211-218.
- Bruskin Associates. (1973). *What Are American's Afraid of?. The Bruskin Report*, 53.
- Bryer, R. A. (2005). A Marxist accounting history of the British industrial revolution: a review of evidence and suggestions for research. *Accounting, Organizations and Society*, 30(1), 25-65.
- Bryman, A. (2001) *Social Research Methods*, Oxford: Oxford University Press.
- Bryman, A. (2008) *Social Research Methods (3rd Edn)*, Oxford: Oxford University Press.

Bryman, A. and Cramer, D. (2001) *Quantitative Data Analysis with SPSS Release 10 for Windows A Guide for Social Scientists*, London: Routledge.

Buckley, J.W. and Buckley, M.H. (1974) *The Accounting Profession*, Melville, Los Angeles.

Buckley, M., E. Peach, and W. Weitzel (1989) Are collegiate business programs adequately preparing students for the business world? *Journal of Education for Business* 65: 101-105.

Bugelski, B. R. (1971). *The Psychology of Learning Applied to Teaching*, New York: Bobbs-Merrill Company.

Bullock, J. J., Ell, V., Inman, B. C., Jiambalvo, J. J., Krull, G. W., Lathan, M. H., and Barefield, R. M. (1995). Accounting faculty/practitioners partnerships to address mutual education concern. *Issues in Accounting Education*, 10(1), 197-206.

Burchell, B. and Marsh, C. (1992) The effect of questionnaire length on survey response. *Quality and Quantity* 26.3, p.233-244.

Burke, J.L (1993) *In the Electric Mist with the Confederate dead*. London: Phoenix.

Burley, K. H. (1958). *Some accounting records of an eighteenth-century clothier*. Cambridge University Press.

Burns, J., Ezzamel, M., and Scapens, R. (1999). Management accounting change in the UK. *Management Accounting-London-*, 77, 28-32.

Burns, T. and Stalker, G.M. (1961) *The management of innovation*, London: Tavistock

Burns, T., and Stalker, G. M. (2009). *The Organization. Knowledge Management and Organisational Design*, 77.

Burns, J., and Yazdifar, H. (2001). Tricks or treats. *Financial Management*, 33, 35.

Burrell, and G. Morgan, G. (1979) *Sociological Paradigms and Organisational analysis: elements of the sociology of corporate life*, London: Heinemann.

Bussey, K., and Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological review*, 106(4), 676.

Byrd, S.D. Byrd, D.B. and Nichols, R.L. (1989) Integrating practitioners into graduate coursework in accounting, *Journal of Education for Business*, 65 (2), p.56-59.

Byrne-Armstrong, H., Higgs, J. and Horsfall, D (2001). *Critical moments in qualitative research*. Butterworth-Heinemann Medical.

Byrne, M., Flood, B., and Shanahan, D. (2009) Communication apprehension among business and accounting students in Ireland, *Irish Accounting Review*, 16(2), p1-19.

Byrne, M. and Willis, P. (2005) Irish secondary student's perceptions of the work of an accountant and the accounting profession, *Accounting Education*, 14(4), p.367-381.

Caldwell, M., Weishar, J. and Glezen, W. (1996) The effect of cooperative learning on student perceptions in the accounting principles courses, *Journal of Accounting Education*, 14 (1), p.17-36.

Campbell, N.K., and Hackett, G.(1986) The effects of mathematics task performance on math self-efficacy and task interest. *Journal of Vocational Behavior* 28.2: p.149-162.

Cannell, C. F., & Kahn, R. L. (1968). Interviewing. *The handbook of social psychology*, 2, 526-595.

Cannell, C.F., Miller P.V. and Oksenberg.L. (1981). Research on Interviewing Techniques. *Sociological Methodology* 12, p.389-437.

Carey, J.L. (1953) Is public accounting attracting enough good men? *Journal of Accountancy*, Vol.95. p.421-424.

Carey, J.L. (1969) *The Rise of the Accounting Profession*, AICPA, New York.

Carland, J. W., Carland, J. C., & Dye, J. C. (1994). Accounting education: a cooperative learning strategy. *Accounting Education*, 3(3), 223-236.

Carlozzi, C. L. (1998). Learning for the future. *Journal of Accountancy*, 186(1), 42.

Carmines, E. G., and Zeller, R. A. (1979). *Reliability and validity assessment* (Vol. 17). Sage publications.

Carnegie, G.D. and Napier, C.J. (1996) Critical and interpretive histories: Insights into accounting's present and future through its past, *Accounting, Auditing and Accountability Journal*, 9(3), p.7-39.

Carnegie, G.D. and Napier, C.J. (2010) Traditional accountants and business professionals: Portraying the accounting profession after Enron. *Accounting, Organizations and Society* 35.3, p.360-376.

Carruthers, B.G. and Espeland, W.N. (1991) Accounting for rationality: double-entry bookkeeping and the rhetoric of economic rationality, *American Journal of Sociology*, Vol.97, p.31-69.

Carr-Saunders, A. M., and Wilson, P. A. (1933). *The professions*. Clarendon.

Carvalko, J. (2005) Introduction to an Ontology of Intellectual Property. *The Scitech Lawyer*, ABA

Cassell, C. and Symon, G. (2004). *The Real Life Guide to Accounting Research: A Behind-the-scenes view of using qualitative research methods*, Elsevier Ltd, 491-508.

Cayton, M. (1990) What happens when things go wrong: Women and writing blocks, *Journal of Advanced Composition*, vol 10, p321-337.

Chandler, A. D. Jnr (1962) *Strategy and Structure: Chapters in history of the American industrial enterprise*, Cambridge, MA: MIT Press.

Chen, G. and Bliese, P. D. (2002). The role of different levels of leadership in predicting self-and collective efficacy: evidence for discontinuity. *Journal of Applied Psychology*, 87(3), p.549.

Chen, G., Donahue, L. M., and Klimoski, R. J. (2004). Training undergraduates to work in organizational teams. *Academy of Management Learning & Education*, 3(1), 27-40.

Cherry, A. A. and Reckers, P. M. J. (1985). A study of the need for change in intermediate accounting courses and textbooks. *Issues in Accounting Education*, p.131-144.

Chesebro, J. W., McCroskey, J. C., Atwater, D. F., Bahrenfuss, R. M., Cawelti, G., Gaudino, J. L., and Hodges, H. (1992). Communication apprehension and self-perceived communication competence of at-risk students. *Communication Education*, 41(4), 345-360.

Choi, F. D. (1993). *Accounting education for the 21st century: Meeting the challenges*. Leonard N. Stern School of Business, New York University.

Christensen, D. S., and Rees, D. (2002). An analysis of the business communication skills needed by entry-level accountants. *Mountain Plains Journal of Business and Economics*, 3(1), 1-13.

Chua, W. F. (1986) Radical developments in accounting thought, *The Accounting review*, p.601-632.

Churchill, G.A. (1999) *Marketing Research: Methodological Foundations*, Dryden Press: Fort Worth.

- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Chin, W. W. (2010). How to write up and report PLS analyses. In *Handbook of partial least squares* (pp. 655-690). Springer Berlin Heidelberg.
- Chowdhury, S., Endres, M., & Lanis, T.W. (2002). Preparing students for success in team work environments: the importance of building confidence. *Journal of Managerial Issues*, 14(3), 346.
- CIMA (2009) Finance transformation: The evolution to value creation. *Excellence in Leadership*, Issue 13. Global Trade Media.
- Clark, D. (2005) *Toward a theory of writing anxiety*, Unpublished PhD thesis, Arizona State University, Tempe, Arizona.
- Clarke, P.J. (1990) *The Present and Future Importance of Curriculum topics Relevant to Accounting Practice: A Study of Irish Perceptions*, University College Dublin.
- Clevenger, T. Jnr (1959) A synthesis of experimental research in stage fright, *The quarterly Journal of Speech*, vol 45 (2), p134-145.
- Coate, C.J., Mitshow, M.C. and Schinski, M.D. (2003) What students think of CPAs: Is the stereotype alive and well? *CPA Journal*, 3 (8), p.52-56.
- Cohen, G. (2000). Hierarchical models in cognition: Do they have psychological reality?. *European Journal of Cognitive Psychology* 12.1, p.1-36.
- Cohen, S.G. and Bailey, D.E. (1997) What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of management* 23.3, p.239-290.
- Cohen, K.J. and Cyert, R.M. (1975) *Theory of the firm: resource allocation in a market economy*, New York: Prentice Hall.
- Cohen, J. and Hanno, D. (1993) An analysis of underlying constructs affecting the choice of accounting as a major, *Issues in Accounting Education*, 8(2), p.219-238.
- Cohen, L. and Manion, L. (1989) *Research methods in education*, (3rd edn), London: Routledge.
- Colby, N., Hopf, T., and Ayres, J. (1993). Nice to meet you? Inter/Intrapersonal perceptions of communication apprehension in initial interactions. *Communication Quarterly*, 41(2), 221-230.

Coll, R. K., Zegwaard, K., and Lay, M. (2001). The influence of cooperative education on student perceptions of their ability in practical science. *Journal of Cooperative Education*, 36(3), 58-72.

Collins, S.H.(1987) Recruitment.*Journal of Accountancy*163.2, p.52.

Collins, J.H. and Milliron, V.C. (1987) A measure of professional accountants' learning style, *Issues in Accounting Education*, 2(2), p.193-206.

Comte, A.; and Bridges, J.H. (1865)(tr.); *A General View of Positivism*; Trubner and Co. (reissued by Cambridge University Press, 2009)

Condit, C.M. (2000) Accountants as custodians of information and knowledge, *Accountancy Ireland*, vol 49(1), p7-24.

Connell, S.H. and Borden, G.A. (1987) Incorporating treatment for communication apprehension into oral communication courses, *Communication Education*, vol 36 (1), p56-61.

Cooper, C.(2002) Critical accounting in Scotland. *Critical Perspectives on Accounting* 13.4, p. 451-462.

Conner, M., and Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of applied social psychology*, 28(15), 1429-1464.

Cooper, D., Scapens, R., Arnold, J. (1983) *Management accounting: research and practice*, London: Chartered Institute of Management Accountants.

Cooper,D., Sherer, M.J. (1984) The value of corporate accounting reports: arguments for a political economy of accounting. *Accounting, Organisation and society*.

Cory, S. N. (1992). Quality and quantity of accounting students and the stereotypical accountant: is there a relationship?. *Journal of Accounting education*, 10(1), 1-24.

Covaleski, M., Dirsmith, M. (1990) Dialectice tension double reflexivity and the everyday accounting researcher: on using qualitative methods, *Accounting Organisation and Society*, Vol 26, No.3, pp.320-339.

Cox, B.(1982) *Management Accounting, what is it?* *Management Accounting* 60 (3).

Cox, L. W., Mueller, S. L., and Moss, S. E. (2002). The impact of entrepreneurship education on entrepreneurial self-efficacy. *International Journal of Entrepreneurship Education*, 1(2), 229-245.

Craig, R. and Amernic, J. (1994) Roleplaying in a conflict resolution setting: description and some implications for accounting. *Issues in Accounting Education* 9.1, p.28.

Cramer, D.H. (1957) What does the employer expect of the college graduate? *The Accounting Review*, January, p.15-20.

Crebert, G., Bates, M., Bell, B. Patrick, C.-J., & Cragolini, V. (2004). Developing generic skills at university, during work placement and in employment: graduates' perceptions. *Higher Education Research and Development*, 23(2), p 147.

Cranmer, S. (2006). Enhancing graduate employability: best intentions and mixed outcomes. *Studies in Higher Education*, 31(2), 169-184.

Crebbin, W. (1997). Defining quality teaching in higher education: An Australian perspective. *Teaching in Higher Education*, 2(1), 21-32.

Cresswell, J. W., and Clark, V. L. P. (2006). *Understanding mixed methods research*. London. Consultado el, 25(11), 2013.

Crotty, M. (1998) *The Foundations of Social Research Meaning and Perspective in the Research Process*, Australia: Sage Publications.

Csikszentmihalyi, M. (1997). *Finding Flow: The Psychology of Engagement with Everyday Life*. Basic Books.

Cunningham, B. M. (1996). How to restructure an accounting course to enhance creative and critical thinking. *Accounting Education: A Journal of Theory, Practice and Research*, 1(1), 49-66.

Daggett, P.D. and Liu W.Y. (1997). Prepared to perform? Employers rate work force readiness of new grads, *Journal of Career Planning & Employment*, LVII (2), 32-35, 52-56.

Daly, J. A., and Leth, S. (1976). Communication apprehension and the personnel selection decision. In *Annual Convention of the International Communication Association*, Portland.

Daly, J.A. and Millar, M.D. (1975) Further studies on writing apprehension: SAT scores, success expectations, willingness to take advanced courses and sex differences, *Research in the teaching of English*, 9, pp 249-253.

Daly, J.A. (1977) the effects of writing apprehension and writing competency in business and industry, *Journal of educational research*, vol 72 (1), p10-14.

Daly, J.A. (1978). Writing apprehension and writing intensity in business and industry. *Journal of Education Research*, 10-14.

Daly, J. A. (1997). *Avoiding communication: Shyness, reticence, and communication apprehension*. Hampton Pr.

Daly, J.A. and McCroskey, J.C. (1975) Occupational desirability and choice as a function of communication apprehension, *Journal of Counselling Psychology*, Vol 22 (4), p309-313.

Daly, J. A., McCroskey, J. C., Ayres, J., Hopf, T. and Ayres, D.M. (1997). *Avoiding communication: Shyness, reticence, and communication apprehension* (2nd ed.). Cresskill, NJ: Hampton Press.

Daly, J.A. and Miller, M (1975a) The empirical development of an instrument to measure writing apprehension, *Research in the teaching of English*, vol 9, p242-249.

Daly, J.A and Shamo, W.G. (1978) Academic decisions as a function of writing apprehension. *Research in the Teaching of English*, vol 17, p327-341.

Daroca, F.P. and Nourayi, M.M. (1994) Some performance and attitude effects on students in managerial accounting: Lecture v self-study courses, *Issues in Accounting Education*, 9(2), p.319-329.

Davidson, R.A. and Etherington, L.D. (1995) Personalities of accounting students and public accountants: Implications for accounting educators and the profession, *Journal of Accounting Education*, 13 (4), p.425-444.

Davis, B.G. (1993) *Tools for Teaching*, San Fransico, CA: Jossey Bass Publishers.

Davis, F.D. (1986) *A technology acceptance model for empirically testing new end-user information systems: Theory and results*. Diss. Massachusetts Institute of Technology.

DeCoster, D.T. (1971) The CPA in the world of psychology, *The Journal of Accountancy*, August, p.40-45.

Deines, D.S and Pallett, W.H (1989) Tomorrow's Professionals' Perceptions of Certified Public Accountants, *Proceedings of the Midwest Regional Group, American Accounting Association*.

Delamont, S. (2004) *Ethnography and participant observation: Qualitative research practice*, 2004 - London: Sage

- De Lange, P., Jackling, B. and Gut, A.M. (2006) Accounting graduates' perceptions of skills emphasis in undergraduate courses: an investigation from two Victorian universities, *Accounting and Finance*, 46, p.365-386.
- DeMaio, T.J. (1984). Social Desirability and Survey Measurement: A Review. In *Surveying Subjective Phenomena*, vol. 2, ed. Charles F. Turner and Elizabeth Martin, pp. 257–82. New York: Russell Sage Foundation.
- Demski, J.S. Feltham, G.A. (1976) *Cost determination: a conceptual approach*, Iowa: Iowa State University Press.
- Denna, E.L., Cherrington, J. O., Andros, D. P., and Hollander, A. S. (1993). *Event-drive business solutions*. Homewood, IL: Business One Irwin.
- Dennick, R. (2014). Theories of learning. In D. Matheson (Ed.). *An Introduction to the study of education* (3rd ed.). (pp.37-69). London: Routledge.
- Denscombe M. (1998) *The good research guide: For small scale social research projects*. Buckingham. Open University Press.
- Denzin, N.K. and Lincoln, Y.S. (1998) *Collecting and Interpreting Qualitative Materials*, Thousand Oaks, CA: Sage Publications.
- Deppe, L.A., Sonderegger, E.O., Stice, J.D., Clark, D.C. and Streuling, G.F. (1991) Emerging competencies for the practice of accountancy, *Journal of Accounting Education*, 9(1), 257-290.
- DeVaus, D. (2001) *Research Design in Social Research*, Thousand Oaks, CA: Sage Publications.s
- Dewey, J. (1916). *Democracy and Education: An Introduction to Philisophy of Education*. Macmillan.
- DeZoort, F.T. and Lord, A.T. (1997) A review and synthesis of pressure effects research in accounting, *Journal of Accounting Literature*, Vol 16, p.28-85.
- Diamond, M. (2005) Accounting education, research and practice: after Enron where do we go? *European Accounting Review*, 14(2), p353-362.
- DiFazio, W. (1998) Poverty, the postmodern and the jobless future. *Critical Perspectives on Accounting* 9.1 p.57-74.
- Diller-Hass, A. (2004) Time to Change Introductory Accounting, *The CPA Journal*, 74(4), p.60-65.

- DiMaggio P. J., Powell W., (1997) Le néo-institutionnalisme dans l'analyse des organisations, *Politix. Revue des sciences sociales du politique*, 10 (40), p. 113-154.
- Dimnik, T. and Felton, S. (2000) Accountant Stereotypes in Movies Distributed in North America in the Twentieth Century, American Accounting Association Annual Meeting, Philadelphia.
- Dittenhofer, M. A. (1992). Teaching internal auditing: the case-study method. *Managerial Auditing Journal*, 7(3).
- Donaldson, L. (1996) *For Postivist Organization theory: Proving the hard core*, London:sage.
- Donavan, I. MacIntyre, P. (2004) Age and sex differences in willingness to communicate, communication apprehension and self-perceived competence, *Communication Research Reports*, 21(4), pp.420-427.
- Dormann, C., Fay, D., Zapf, D., & Frese, M. (2006). A state-trait analysis of job satisfaction: On the effect of core self-evaluations. *Applied Psychology: An International Review*, 55(1), 27-51.
- Docan-Morgan, T., and Schmidt, T. (2012). Reducing public speaking anxiety for native and nonnative english speakers: The value of systematic desensitization, cognitive restructuring, and skills training.
- Douvan, E. (1976). The role of models in women's professional development. *Psychology of Women Quarterly*, 1(1), 5-20.
- Dweck, C. S., and Goetz, T. E. (1978). Attributions and learned helplessness. *New directions in attribution research*, 2, 157-179.
- Dwyer, P. D. (1998). Embezzlement at the University of California: An instructional case in employee fraud. *Issues in Accounting Education*, 13(4), 975.
- Dwyer, K. K., and Fus, D. A. (2002). Perceptions Of Communication Competence, Self-Efficacy, And Trait Communication Apprehension: Is There an Impact on Basic Course Success?. *Communication Research Reports*, 19(1), 29-37.
- Dyer, J. L. (1999). Accounting education on the threshold of a new century. *The Journal of Government Financial Management*, 48(4), 40.
- Earley, P. C. (1999). Playing follow the leader: Status-determining traits in relation to collective efficacy across cultures. *Organizational behavior and human decision processes*, 80(3), 192-212.

- Easterby-Smith, M., Johns, A. and Burgoyne, J. (1997) Evaluating action learning. M. Pedler, *Action Learning in Practice*. London: Gower, p.347-54.
- Easterby-Smith, M., Thorpe, R. and Lowe, A. (1991) *Management Research: An Introduction*, London: Sage.
- Easterby-Smith, M., R. Thorpe, and A. Lowe (2002). *Management research methods*, London: Sage Publications.
- Eccles, J. S. (1983). Expectancies, values, and academic behaviors.
- Edwards, J.R. (1989). Industrial cost accounting developments in Britain to 1830: a review article. *Accounting and Business Research* 19.76 p.305-317.
- Elias, R.Z. (1999) An examination of non-traditional accounting students' communication apprehension and ambiguity tolerance, *Journal of Education for business*, vol 75(1), p38-41.
- Elliott, R.K.(1991) Accounting education and research at the crossroad. *Issues in Accounting Education* 6.1 p.1-8.
- Elliot, K.R. and Jacobsen D.P. (2002) The Evolution of the Knowledge Professional, *Accounting Horizons*, AAA, 16(1), p69-80.
- Ellis, K. (1995). Apprehension, self - perceived competency, and teacher immediacy in the laboratory - supported public speaking course: Trends and relationships. *Communication Education*, 44(1), p.64-78.
- Emmanuel, C. R., and Otley, D. T. (1985). *Budgetary Planning and Control*. *Accounting for Management Control*.
- Emmelkamp, P.M.G and Wessels, H. (1975) Flooding in imagination vs flooding in vivo: A comparison with agoraphobics, *Behaviour research and therapy*, vol 13, p7-15.
- Ericson, P. M., and Gardner, J. W. (1992). Two longitudinal studies of communication apprehension and its effects on college students' success. *Communication Quarterly*, 40(2), 127-137.
- Esposito, D., et al.(1998) The (in) spectre returns! Global capitalism and the future of work. *Critical Perspectives on Accounting* 9.1 p.7-54.
- Estes, W.K. (1972) Reinforcement in human behaviour, *American scientist*, 60, p723-729.

Eysenck, H.J. (1997) The future of psychology in Solso, R.L (ed.) *Mind and Brain Sciences in the 21st Century*, p263-301, Cambridge, Mass: London: MIT Press.

Ezzamel, M., Hoskin, K., and Macve, R. (1990). Managing it all by numbers: a review of Johnson and Kaplan's 'Relevance Lost'. *Accounting and business research*, 20(78), 153-166.

Farag, S. M. (2009). The accounting profession in Egypt: Its origin and development. *The international Journal of accounting*, 44(4), p.403-414.

Faris, K.A. , Golen, S.P. and Lynch, D.H. (1999) Writing apprehension in beginning accounting majors, *Business Communication Quarterly*, vol 62 (2), p9-21.

Fedoryshyn, M.W. and Tyson, T.N. (2003) The impact of practitioner presentations on student attitudes about accounting, *Journal of Education for Business*, 78(5), p.273-284.

Feeney, O. (2013). Accounting information in new product development: a structuration perspective (Doctoral dissertation, Dublin City University).

Felton, S., Buhr, N. and Northey, M. (1994) Factors influencing the business student's choice of a career in chartered accountancy, *Issues in Accounting Education*, Vol 9, p.131-141.

Feltz, D. L. and Lirgg, C. D. (1998). Perceived team and player efficacy in hockey. *Journal of applied psychology*, 83(4), p.557.

Fenton, R. J. and Hopf, T. S. (1976). Some effects of communication inhibition on small groups: Participation, member satisfaction, perceived effectiveness, credibility, and leadership. In *Speech Communication Association convention*, San Francisco.

Festinger, L. and Katz, D. (1965). eds. *Research Methods in the Behavioural Sciences*.

Field, A. (2000) *Discovering Statistics with SPSS for Windows*, London: Sage Publications.

Fishbein, M.(1975) *Attitude, intention and behavior: An introduction to theory and research*.

Fishbein, M. and Ajzen, I. (1975). *Belief, Attitude, Intention, and Behaviour: An Introduction to Theory and Research*.

Fleischman, R.K. and Parker, L.D. (1990) Managerial accounting early in the British Industrial Revolution: The Carron company, a case study, *Accounting and Business Research*, Vol.20, p.218.

- Fleischman, R. K., and Parker, L. D. (1991). British entrepreneurs and pre-industrial revolution evidence of cost management. *Accounting Review*, p.361-375.
- Flick, U. (2006) *An introduction to qualitative research*, Fourth Edition, London: Sage.
- Fogarty, J.T. (1997) The education of accountants in the US: Reason and its limits at the turn of the century, *Critical Perspectives on Accounting*, Vol.8, p.45-68.
- Fordham, D.R., and Gabbin, A.L. (1996) Skills versus apprehension: Empirical evidence on oral communication, *Business Communication Quarterly*, 59(3), 88-98.
- Fornell, C. and Cha, J. (1994). Partial least squares. *Advanced methods of marketing research*, 407, p.52-78.
- Fornell, C. and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, p.39-50.
- Foster, H.L. (1995) *Implementing Innovative Pedagogy in the First Course in Accounting and its Relationship to Student Attitudes toward the Profession*.
- Francalanza, C. A. (1997). Accounting education and change in financial accounting. *Journal of Accounting Education*, 15(1), 109-122.
- Freeman, W. J. (1997). Self, awareness of self, and the illusion of control. *Behavioral and Brain Sciences*, 20(01), p.112-113.
- Freeney, Y., and O'Connell, M. (2012). The predictors of the intention to leave school early among a representative sample of Irish second-level students. *British educational research journal*, 38(4), 557-574.
- Freire, P. (2008). 2.2 Teachers as cultural workers. *Handbook of research on teacher education: Enduring questions in changing contexts*, 208.
- Fremouw, M.J. (1984) *Cognitive-behavioural therapies for modification of communication apprehension*, in Daly, J.A. and McCroskey, J.C. (Eds), *Avoiding Communication*, Beverly Hills, California, Sage Publications.
- French, K. (1981) *Methodological considerations in hospital patient opinion surveys*. *International Journal of Nursing Studies* vol 18: pp 7-32.
- French, G. R., and Coppage, R. E. (2011). A strategic model for accounting education. *Journal of Applied Business Research (JABR)*, 19(2).

- Friedman, D. (2006). Interaction and the architecture of the brain. Retrieved January, 22, 2008.
- Friedman, A. L., and Lyne, S. R. (2001). The beancounter stereotype: towards a general model of stereotype generation. *Critical Perspectives on Accounting*, 12(4), 423-451.
- Friedlan, J.M. (1995) The effects of different teaching approaches on students' perceptions of the skills needed for success in accounting courses and by practising accountants. *Issues in Accounting Education* Vol.19, p.1-6.
- Friedrich, G. W. (1970). An empirical explication of a concept of self-reported speech anxiety.
- Friedrich, G., and Goss, B. (1984). Systematic desensitization. In J. A. Daly & J. C. McCroskey (Eds.), *Avoiding communication: Shyness, reticence and communication apprehension* (pp. 173-188). Beverly Hills, CA: Sage
- Gabric, D., and K. McFadden (2000) Student and employer perceptions of desirable entry-level operations management skills, *Mid-American Journal of Business*, 16, 51-59.
- Gabriel, S. L., and Hirsch, M. L. (1992). Critical thinking and communication skills: Integration and implementation issues. *Journal of Accounting Education*, 10(2), 243-270.
- Gaffikin, M.J.R (1986) *Legacy of the Golden Age: Recent Developments in the Methodology of Accounting*, Abacus.
- Gallagher, S. (2008). Intersubjectivity in perception. *Continental Philosophy Review*, 41(2), 163-178.
- Gammie, B., Gammie, E., and Cargill, E. (2002). Personal skills development in the accounting curriculum. *Accounting Education*, 11(1), 63-78.
- Gardner, C.T., Milne, M.J., Stringer, C.P. and Whiting, R.H. (2005) Oral and written communication apprehension in accounting students: curriculum impacts on academic performance, *Accounting Education: an international journal*, 14(3), p313-336.
- Garner, R.M. and Dombrowski, R.F. (1997) Recruiting the "Best and the Brightest": The Role of University Accounting Programs and State CPA Societies, *Issues in Accounting Education*, 12 (2), p.299-314.
- Gati, I. (1998). Using career-related aspects to elicit preferences and characterize occupations for a better person–environment fit. *Journal of Vocational Behavior*, 52(3), 343-356.

- Geary, W. T., and Rooney, C. J. (1993). Designing accounting education to achieve balanced intellectual development. *Issues in Accounting Education*, 8(1), 60-70.
- Gefen, D., Straub, D. and Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the association for information systems*, 4(1), 7.
- Geertz, C. (1973) Thick description: Toward an interpretative theory of culture. In C. Geertz (Ed.) *The interpretation of cultures* (pp3-30), New York: Basic Books.
- Gettier, E. Jnr. (1963) Is justified belief true knowledge? *Analysis*, 23, 121-123.
- Gibbs, G. (1992). Improving the quality of student learning: Based on the Improving Student Learning Project funded by the Council for National Academic Awards. Bristol,, UK: Technical and Educational Services.
- Gill, J. and Johnson, P. (2002) *Research Methods for Managers*, London: Sage Publications.
- Gilkinson, H. (1942) Social fears as reported by students in college speech classes, *Speech Monographs*, Vol 9 (1), p141-160.
- Gist, M., & Mitchell, T. (1992). Self-efficacy: a theoretical analysis of its determinants and acquisition of computer skills. *Personnel Psychology*, 41, 255-265.
- Glaser, S. R., Biglan, A., and Dow, M. G. (1983). Conversational skills instruction for communication apprehension and avoidance: Evaluation of a treatment program. *Communication Research*, 10(4), 582-613.
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Garden City, NY: Doubleday/Anchor.
- Goode, W.J. and Hatt, P.K. (1952) *Methods in Social Research*, International Student Ed: McGraw-Hill Kogakusha Ltd.
- Gordon, R. and Howell, J. (1959) *Higher Education for Business*, New York: Columbia University Press.
- Goss, E., Thompson, M. and Olds, S. (1978) Behavioral support for systematic desensitization for communication apprehension. *Human Communication Research*, 4(2), p.158-163.
- Gow, L., Kember, D., and Cooper, B. (1994). The teaching context and approaches to study of accountancy students. *Issues in Accounting Education*, 9(1), 118.

Grace, D and Gilsdorf, J. (2004) Classroom strategies for improving students' oral communication skills, *International Journal of Management Education*, vol 8 (2), p67-74.

Granlund, M. and Lukka, K. (1998). It's a small world of management accounting practices. *Journal of Management Accounting Research*, 10, 153.

Graue, M. E. and Walsh, D. J. (1998). *Studying children in context: Theories, methods, and ethics*. Sage Publications.

Graves, O.F., Nelson, I.T. and Davis, J.R. (1992) Accounting students characteristics: A survey of accounting majors at federation schools of accountancy (FSA), *Journal of Accounting Education*, 10(1), p.25-37.

Gray, F. E. (2010). Specific oral communication skills desired in new accountancy graduates. *Business Communication Quarterly*, 73(1), 40-67.

Gray, S. J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus*, 24(1), p.1-15.

Grundy, A. (2000) The strategic investment decision, *Accounting and Business*, March p.41-43.

Grutzeck, L. F. (1970). A search for invariant characteristics of reticent elementary school children.

Guba, E. G. (Ed.). (1990). *The paradigm dialog*. Sage Publications.

Gubrium, J. and Holstein, J. (eds) (2001) *Handbook of Interview Research*, London, Sage.

Gully, S. M., Incalcaterra, K. A., Joshi, A. And Beaubien, J. M. (2002). A meta-analysis of team- efficacy, potency, and performance: interdependence and level of analysis as moderators of observed relationships. *Journal of applied psychology*, 87(5), p.819.

Gummerson, E. (1991) *Qualitative Methods in Management Research*. Newbury Park: Sage.

Gutiérrez-Doña, B., Lippke, S., Renner, B., Kwon, S., & Schwarzer, R. (2009). How self-efficacy and planning predict dietary behaviors in Costa Rican and South Korean women: A moderated mediation analysis. *Applied Psychology: Health & Well-Being*, 1, 91–104.

Habermas, J. (1972) *Knowledge and Human Interests*, London: Heineman.

Guzzo, R.A., et al (1993) Potency in groups: Articulating a construct, *British Journal of social Psychology* 32.1 p.87-106.

- Habermas, J. (1974) *Theory and practice*, London: Heineman.
- Hackett, G., and Betz, N. E. (1995). Self-efficacy and career choice and development. In *Self-efficacy, adaptation, and adjustment* (pp. 249-280). Springer US.
- Hackett, G., Betz, N. E., Casas, J. M. and Rocha-Singh, I. A. (1992). Gender, ethnicity, and social cognitive factors predicting the academic achievement of students in engineering. *Journal of counseling Psychology*, 39(4), p.527.
- Hackett, G. and Lent, R.W. (1992) Theoretical advances and current enquiry in career psychology, In S.D. Brown and R.W. Lent (Eds) *Handbook of Counseling Psychology*, (2nd ed.) p419-451, New York, Wiley.
- Haggbloom, S. J., Warnick, R., Warnick, J. E., Jones, V. K., Yarbrough, G. L., Russell, T. M., ... & Monte, E. (2002). The 100 most eminent psychologists of the 20th century. *Review of General Psychology*, 6(2), 139.
- Hair J Jr, Anderson R.E, Tatham R.L., and Black W.C. (1992) *Multivariate data analysis with readings*. New York MacMillan.
- Hair, J.F. Ringle, C.M. and Sarstedt, M. (2011) PLS-SEM: Indeed a silver bullet, *Journal of Marketing Theory and Practice*, 19(2), p.137-149.
- Hamer, J., Luxton-Reilly, A., Purchase, H. C., and Sheard, J. (2011). Tools for contributing student learning. *ACM Inroads*, 2(2), 78-91.
- Hamilton, P. R. (1972). The effect of risk proneness on small group interaction, communication apprehension, and self-disclosure. Unpublished Master's thesis, Illinois State University, Cited in Powers, WG & Hutchinson, K.(1979), *The measurement of communication apprehension in the marriage relationship*, *Journal of Marriage and the Family*, 41, p.89-95.
- Hancock, A. B., Stone, M. D., Brundage, S. B. and Zeigler, M. T. (2010). Public speaking attitudes: does curriculum make a difference?. *Journal of voice*, 24(3), p.302-307.
- Hanlon, G. (1994). *The commercialisation of accountancy: Flexible accumulation and the transformation of the service class*. St. Martin's Press.
- Hanson, D.J (1980) Relationship between methods and judges in attitude behaviour research. *Psychology*, 17, pp11-13. 126, 191.
- Harper, D. (2000) "communication". *Online Etymology Dictionary*.

- Hartwell, C.L., Lightle, S.S and Maxwell, B. (2005) High school students' perceptions of accounting. *The CPA Journal*, 75 (1), p.62-67.
- Hassall, T. (2006). *Bologna and Beyond: Accounting Education in Europe*. Ponencia presentada en la.
- Hassall, T., Joyce, J., Bramhall, M. D., Robinson, I. M. and Arquero, J. L. (2005). The sound of silence? A comparative study of the barriers to communication skills development in accounting and engineering students. *Industry and Higher Education*, 19(5), p.392-398.
- Hassall, T., Arquero, J.L., Joyce, J., Gonzalez, J.M. (2013) Communication Apprehension and Communication Self-efficacy in Accounting Students. *Asian Review of Accounting* Vol.21, Issue 2, p.160-175.
- Hassall, T., Joyce, J. Ottewill, R., Arquero Montano, J.L. and Donoso Anes, J.A. (2000) Communication apprehension in UK and Spanish business and accounting students, *Education and Training*, 42(2), p93-100.
- Hassard, J. (1990). *Science experiences: Cooperative learning and the teaching of science*. Addison-Wesley.
- Hayes, J. G. (2005). Problematic Student Behaviors in the College Communication Classroom: Reviewing and Re-envisioning Instructional Communication Research. *Basic Communication Course Annual*, 17(1), 7.
- Heefer, A. (2005). The rhetoric of problems in algebra textbooks from Pacioli to Euler. Preprint. <http://logica.ugent.be/albrecht/thesis/AlgebraRhetoric.pdf>.
- Heffes, E. M. (2001). Making accounting relevant & attractive. *Financial Executive*, 17(3), 49-49.
- Heider, Fritz. (1958). *The Psychology of Interpersonal Relations*. New York: John Wiley & Sons
- Heilman, M. E., and Kram, K. E. (1983). Male and female assumptions about colleagues' views of their competence. *Psychology of Women Quarterly*, 7(4), 329-337.
- Hermanson, D. and Hermanson, R. (1995) Are America's top business students steering clear of accounting? *The CPA Journal*, 54(2), p.1-8.
- Hermanson, R.H., Deines, D.S., Eldridge-Hermanson, D.R., Ivancevich, S.H. and Williams D.Z. (1996) Strategies for recruiting the best and brightest students into accounting, *Journal of Accounting Education*, 14(3), p.347-365.

- Henry, J. W., & Stone, R. W. (1999). The impacts of end-user gender, education, performance, and system use on computer self-efficacy and outcome expectancy. *Southern Business Review*, 25(1), 10.
- Herring, H. C. and Williams, J. R. (2000). The role of objectives in curriculum development. *Journal of Accounting Education*, 18(1), 1-14.
- Hessler, R.M. (1992) *Social Research Methods*, New York: West Publishing Company.
- Himmelfarb, S. and Lickteig, C. (1982). Social Desirability and the Randomized Response Technique. *Journal of Personality and Social Psychology* 43, p.710-17.
- Hines, J. (1989) The socio-political paradigm in financial accounting research, *Accounting, Auditing and Accountability Journal*, 2(1), p.52-76.
- Hirsch, M. L., Anderson, R. and Gabriel, S. (1994) *Accounting and communication*. Cincinnati, OH: South-Western Publishing Co.
- Hirsch, M. L., and Collins, J. D. (1988). An integrated approach to communication skills in an accounting curriculum. *Journal of Accounting Education*, 6(1), 15-31.
- Hirst, P. (1997) Globalisation and economic governance, *Organisation*, 1(2), p.409-425.
- Hofstede, G. H. and Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage.
- Holbrook, A. L., Green M.C., and Krosnick J.A (2003) "Telephone versus face-to-face interviewing of national probability samples with long questionnaires: Comparisons of respondent satisficing and social desirability response bias." *Public Opinion Quarterly* 67.1, pp 79-125.
- Holland, J.L. (1959) A theory of vocational choice, *Journal of Counselling Psychology*, Vol.6, p.35-45.
- Holland, J.L. (1963) *The Psychology of Vocational Choice: A Theory of Personality Types and Model Environments*, Waltham, Mass: Blaisdell.
- Holland, J.L. (1973) *Making Vocational Choices: A Theory of Careers*, Englewood Cliffs, N.J.: Prentice Hall.
- Holland, J.L. (1997) *Making Vocational Choices: A Theory of Vocational Personalities and Work Environments*, Odessa FL: Psychological Assessment Resources.

- Holland, R. (1999) Reflexivity: Human relations, vol 52, No.4, p.463-484.
- Holt, E.B. & H.C. Brown (1931). Animal drive and the learning process, an essay toward radical empiricism. New York: H. Holt and Co.
- Holtzman, Y. (2004) The transformation of the accounting profession in the United States: From information processing to strategic business advising. *Journal of Management Development*, 23 (10), p.949-961.
- Hopf, T., and Colby, N. (1992). The relationship between interpersonal communication apprehension and self-efficacy. *Communication Research Reports*, 9(2), 131-135.
- Hopper, T.M. and Powell, A. (1985) Making sense of research into the organisational and social aspects of management accounting: a review of its underlying assumptions, *Journal of Management Studies*, 22(5), p.429-465.
- Hopwood, A. G. (1987). The archeology of accounting systems. *Accounting, organizations and society*, 12(3), p.207-234.
- Horwitz, B. (2002) *Communication Apprehension: origins and management*, Albany NY: Singular-Thomson Learning.
- Hoskin, K.W. and Macve, R.H. (1986) Knowing more as knowing less? Alternative histories of cost and management accounting in the US and the UK, *Accounting Historians Journal*, 27 (91), p.91-149.
- Houghton, K.A. (1992) Accounting: The stereotype and the future, *Australian Economic Review*, 4th Quarter, 100, p.89-92.
- Hongren, C. T. and Harrison Jr, W. T. (1992). *Accounting*.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion; psychological studies of opinion change*.
- Howard, G. (1994) Why do people say nasty things about self-reports? *Journal of Organisation Behaviour*, 15, pp.399-404.
- Howe, K. (1988) against the quantitative-qualitative incompatibility thesis or dogmas die-hard, *Educational researcher*, Vol 17, No.8, pp.10-16.
- Howieson, B (2003) Accounting practice in the new millennium: is accounting education ready to meet the challenge? *The British Accounting Review*, vol.35, p.69-103.

Hunt, G.H, Hogler, R.L. (1990) Agency Theory as an ideology: a comparative analysis based on critical legal theory and radical accounting: *Accounting, Organisation and Society*, Vol 15, No 5, pp 437-454.

Hunt, S.C., Falgani, A.A. and Intriery, R.C. (2004) The nature and origins of students' perceptions of accountants, *Journal of Education for Business*, 79 (3), p.142-149.

Hunton, J. E. (2002). Blending information and communication technology with accounting research. *Accounting Horizons*, 16(1), p.55-67.

Hurt, H. T., Preiss, R. and Davis, B. (1976, April). The effects of communication apprehension of middle school children on sociometric choice, affective, and cognitive learning. In annual convention of the International Communication Association, Portland.

Hussey, R. (1995). *A dictionary of accounting*; Ed.: Hussey R. Oxford paperback reference.

Hulley, S. B., Hulley, S. B., Cummings, S. R., Browner, W. S., Grady, D. G., & Newman, T. B. (2007). Designing questionnaires and interviews. *Designing clinical research*, 241-255. Hussey, J. and Hussey, R. (1997). *Business research. A practical guide for undergraduate and postgraduate students*. Houndsmills: Macmillan.

Hsu, C. (2004) Sources of Differences in Communication Apprehension between Chinese in Taiwan and Americans, *communication Quarterly*, vol 52(4), p370-89.

Ickes, W. K. (1971). A classical conditioning, model for "reticence". *Western Journal of Communication (includes Communication Reports)*, 35(1), 48-55.

Imada, A.S., Fletcher, C. and Dalessio, A. (1980) Individual correlates of an occupational stereotype: Are examination of the stereotype of accountants, *Journal of Applied Psychology*, Vol. 65, p.436-439.

Inman, B.C., Wenzler, A. and Wickert, P.D. (1989) Square pegs in round holes: Are accounting students are well suited to today's accounting profession? *Issues in Accounting Education*, 4(1) p.29-47.

Institute of Chartered Accountants in England and Wales (ICAEW) (1997) *Added-Value Professionals – Chartered Accountants in 2005? Consultation Document* (ICAEW, London).

Institute of Management Accountants (IMA) (1994) *What Corporate America Wants in Entry-Level Accountants? Executive summary (with the Financial Executives Institute)*, Montvale, NJ.

Institute of Management Accountants (IMA) (1996) *The Practice Analysis of Management Accounting: Results of Research*, Montvale, NJ.

Institute of Management Accountants (IMA) (1999) *Counting More, Counting Less: Transformations in the Management Accounting Profession*, Montvale, NJ.

Institute of Management Accountants (IMA) (2000) *Counting More, Counting Less*, Montvale, NJ.

International Federation of Accountants (IFAC) (1998) *The Measurement and Management of Intellectual Capital: An Introduction*, N.Y. IFAC.

International Federation of Accountants (IFAC) (2001) *A Profession Transforming from Accounting to Management*, N.Y. IFAC.

International Federation of Accountants (IFAC)- Financial and Management Accounting Committee (2002) *The Role of the Chief Financial Officer in 2010*, N.Y. IFAC.

International Federation of Accountants (IFAC)- Financial and Management Accounting Committee (2009) *International Education Standard 3 Professional Skills and General Education* N.Y. IFAC.

Ireland, Chris (2016) Student oral presentations: developing the skills and reducing their apprehension. In: *Proceedings of 10th International Technology, Education and Development Conference Valencia, Spain. 7-9 March, 2016*. IATED (2016). IATED, Valencia, Spain, pp. 1474-1483.

Jablin, F. M., and Sussman, L. (1978). An exploration of communication and productivity in real brainstorming groups. *Human Communication Research*, 4(4), 329.

Jaasma, M. (1997) Classroom Communication apprehension: Does being male or female make a difference, *communication reports*, 10(2), summer, pp.220-228.

James, K.L. (2008) Barriers to accounting as a career choice for African American students, *Research in Higher Education Journal*, 1, p58-67.

Jernigan, C.G. (2004) What do students expect to learn? The role of the learner experiences, beliefs and attributions for success and failure in student motivation. *Current Issues in Education*, 7 (4).

- Jerusalem, M. and Mittag, W. (1995). Self-efficacy in stressful life transitions. In A. Bandura (Ed.), *Self-efficacy in changing societies*, p 177-201, New York: Cambridge University Press.
- Jex, S. M., Bliese, P. D., Buzzell, S. and Primeau, J. (2001). The impact of self-efficacy on stressor–strain relations: Coping style as an explanatory mechanism. *Journal of applied psychology*, 86(3), p.401.
- Johnson, P. (1995) Towards an epistemology for radical accounting: beyond objectivism and relativism. *Critical perspectives on accounting*, No 6, pp485-509.
- Johnson, P., Duberley, J. (2000) *Understanding Management Research: An Introduction to Epistemology*, London: Sage
- Johnson, H. T. and Kaplan, R. S. (1987). The rise and fall of management accounting. *IEEE Engineering Management Review*, 3(15), p.36-44.
- Jones, E. (1981). *Accountancy and the British economy 1840-1980: The evolution of Ernst & Whinney*. Batsford.
- Jones, C. S. (1985). An empirical study of the role of management accounting systems following takeover or merger. *Accounting, Organizations and Society*, 10(2), p.177-200.
- Jones, N. V. (1996). Occupational stress, a cross-sectional and logitudinal analysis.
- Jones, A. A. and Sin, S. (2003). *Generic Skills in Accounting: Competencies for students and graduates*. Pearson/Prentice Hall.
- Jordan, A.S. (1999) The impact technology is having on the accounting profession, *Journal of Accounting Education*, No. 17, p.341-348
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83(1), 17-34.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86(1), 80-92.
- Judge, T. A., Jackson, C. L., Shaw, J. C., Scott, B. A. and Rich, B. L. (2007). Self-efficacy and work-related performance: the integral role of individual differences. *Journal of applied psychology*, 92(1), 107.

Kaidonis, M. A. (2004). Teaching and learning critical accounting using media texts as reflexive devices: conditions for transformative action or reinforcing the status quo?. *Critical Perspectives on Accounting*, 15(4), 667-673.

Kavanagh, M.H. and Drennan, L. (2008), What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations, *Accounting and Finance*, 48, p279-300.

Kazdin, A. E. (1974) Comparative effects of some variations of covert modelong. *Journal of behaviour therapy and experimental psychiatry*, 5, p225-232.

Keating, P. J., and Jablonsky, S. F. (1991). Challenge to management education: Avoiding irrelevancy.

Kedslie, M.J. (1990) Mutual self interest – a unifying force; the dominance of social closure over social back-ground in the early professional accounting bodies, *The Accounting Historians Journal*, 17 (2), p.1-19.

Keeva, S. (1998) Keeping in front of the future. *ABA Journal* Vol. 8,4, p.81-82.

Kell, P., Shore, S., and Singh, M. (Eds.). (2004). *Adult education@ 21st century* (Vol. 219). Peter Lang Pub Incorporated.

Kelly, L., Duran, R. L., and Stewart, J. (1990). Rhetoritherapy revisited: A test of its effectiveness as a treatment for communication problems. *Communication Education*, 39(3), 207-226.

Kelly, C., Gaedeke, R. (1990) Student and employer evaluation of hiring criteria for entry level marketing positions, *Journal of Marketing Education*, 12(3), pp. 64-71.

Kelly,L. and Keaten, J.A. (2000) Treating communication anxiety: implications of the communibiological paradigm, *Communication Education*,49(1), pp 45-57.

Kelman, M. (1987) *A Guide to Critical Legal Studies*, Harvard: Harvard University Press.

Kennie, T and Enemark,S. (1996). *CPD. Continuing Professional Development-and its Future Promotion within FIG*. FIG Denmark.

Kerby, D. and Romine, J. (2009) Develop Oral Presentation Skills through Accounting Curriculum Design and Course-Embedded Assessment, *Journal of Education for Business*, 85, p172–179.

Kim, T. S., Ghosh, B. C. and Meng, L. A. (1993). Selection criteria: Perception gap between employers and accounting graduates. *Singapore Accountant*, 9(4), p.32-33.

- Kimmel, P. (1995). A framework for incorporating critical thinking into accounting education. *Journal of Accounting Education*, 13(3), p.299-318.
- King, P. M. (1992). How Do We Know? Why Do We Believe? Learning to Make Reflective Judgments. *Liberal Education*, 78(1), 2-9.
- Kinney, W. R. (1990). Some reflections on a professional education: It should have been more positive. *Issues in Accounting Education*, 5(2), p.295-301.
- Klein, J. T. (2006). A platform for a shared discourse of interdisciplinary education. *JSSE-Journal of Social Science Education*, 5(4).
- Kline, P. (2000) *The Handbook of Psychological Testing*, London: Routledge.
- Knapp, T. J. (1985). Who's who in American introductory psychology textbooks: A citation study. *Teaching of Psychology*, 12(1), 15-17.
- Knechel, W. R. (1992). Using the case method in accounting instruction. *Issues in Accounting Education*, 7(2), 205-217.
- Knutson, P. K., and Lashbrook, W. B. (1976). Communication apprehension as an antecedent to social style. In annual meeting of the Speech Communication Association, San Francisco.
- Kolb, D. A. (1976). Management and the learning process. *California management review*, 18(3), 21-31.
- Koreto, R.J. (1997) When the bottom line is online, *Journal of Accountancy* 183 (3), p.63-65.
- Kozlowski, S. W., Toney, R. J., Mullins, M. E., Weissbein, D. A., Brown, K. G. and Bell, B. S. (2001). Developing adaptability: A theory for the design of integrated-embedded training systems. *Advances in human performance and cognitive engineering research*, 1, p.59-124.
- Kougl, K. (1980) Dealing with quiet students in the basic college speech course, *Communication Education*, vol 29 (3), p234-328.
- Kovar, E.S., Ott, L.R. and Fisher, G.D. (2003) Personality preferences of accounting students: a longitudinal case study, *Journal of Accounting Education*, 21(2), p.75-94.
- Kraus, S.J.(1995) Attitudes and the prediction of behaviour: A Meta-analysis of the empirical literature: *Personality and Social Psychology bulletin* 21: 58-75.

- Krosnick, J.A. (1991) Response strategies for coping with cognitive demands of attitude measures in surveys: *Applied cognitive psychology* Vol 5, pp 213-236.
- Krosnick, J.A. (1999). Survey Research. *Annual Review of Psychology* 50, p.537–67.
- Krosnick, J. A., Narayan, S. and Smith, W.R. (1996). Satisficing in Surveys: Initial Evidence. *New Directions for Evaluation* 70, p.29–44.
- Kuhn, T. (1962). 1970. The structure of scientific revolutions, p.31-65.
- Kuhn, M. H. (1972) Major trends in symbolic interaction theory in the past twenty-five years. In J. G. Manis and B. N. Meltzer (Eds.), *Symbolic Interaction* (2nd ed.). Boston: Ayn and Bacon.
- Kuhn, T. (1970) *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press.
- Kullberg, D.R., Gladstone, W.L., Scanlon, P.R., Cook, J.M., Groves, R.J., Horner, L.D., O'Malley, S.F. and Kangas, E.A. (1989) *Perspectives on Education: Capabilities for Success in the Accounting Profession*, New York, Cleveland, Chicago: Arthur Andersen and Co., Arthur Young Coopers and Lybrand, Deloitte Haskins and Sells, Ernst and Whinney, Peat Marwick Main and Co., Price Waterhouse, Touche Ross.
- Kurfiss, J. G. (1988). *Critical Thinking: Theory, Research, Practice, and Possibilities*. ASHE-ERIC Higher Education Report No. 2, 1988. ASHE-ERIC Higher Education Reports, The George Washington University, One Dupont Circle, Suite 630, Dept. RC, Washington, DC 20036-1183.
- Laing, R.D. (1967) *The politics of Experience and the Bird of Paradise*, London: Penguin Books.
- Lamb, P. (1973). *English for Children of the Global Village*.
- Lang, N., Rowland-Morris, P., Coe, N. (1998) Identification of communication apprehension in medical students starting a surgery rotation. *The American Journal of Surgery*, 176(1), pp.41-45.
- Langenderfer, H. (1987) Accounting education's history – a 100 year search for identity, *Journal of Accountancy*, 163 (5), p.302-331.
- Lauwers, L., & Willekens, M. (1994). Five hundred years of bookkeeping: a portrait of Luca Pacioli. *Tijdschrift voor Economie en Management*, 39(3), 289-304.
- Lee, T. (1995) The professionalization of accountancy, *Accounting, Auditing and Accountability Journal*, 8(4), p.48-69.

- Lee, D. W., and Blaszczynski, C. (1999). Perspectives of "Fortune 500" executives on the competency requirements for accounting graduates. *Journal of Education for Business*, 75(2), 104-107.
- Lee, L., Petter, S., Fayard, D., and Robinson, S. (2011). On the use of partial least squares path modeling in accounting research. *International Journal of Accounting Information Systems*, 12(4), 305-328.
- Lee-Kelley, T. L. (1929). *Scientific method: Its function in research and education*.
- Lent, R.W., Brown, S.D. and Hackett, G. (1994) Towards a unifying theory of career and academic interest, choice and performance, *Journal of Vocational Behaviour*, Vol45, p.79-122.
- Lent, R. W., Brown, S. D., and Larkin, K. C. (1984). Relation of self-efficacy expectations to academic achievement and persistence. *Journal of counseling psychology*, 31(3), 356.
- Lent, R.W. and Hackett, G. (1987) Career self-efficacy: Empirical status and future directions, *Journal of Vocational Behavior*, 30(3), p.347-382.
- Lent, R. W., Lopez, F. G. and Bieschke, K. J. (1993) Predicting mathematics-related choice and success behaviors: Test of an expanded social cognitive model. *Journal of vocational behavior*, 42(2), p.223-236.
- Leveson, L. (2000) Disparities in perceptions of generic skills: Academics and employers. *Industry and Higher Education*, 14(3), p.157-164.
- Lewin, K. (1946) Action Research and Minority Problems. *Journal of Social Issues*, 2. P.34-6.
- Lewis, J. (2005) *Language wars: The role of media and culture in the global terror and political violence*, London: Pluto Press.
- Libby, R. (1991). Experimental research and the distinctive features of accounting settings. In *Auditing* (pp. 1-20). Springer New York.
- Lick, J., and Bootzin, R. (1975) Expectancy factors in the treatment of fear: Methodological and theoretical issues. *Psychology bulletin*, 82, p917-931.
- Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology*, 140, pp 44-53.
- Lindley, L. D. (2006). The paradox of self-efficacy: Research with diverse populations. *Journal of Career Assessment*, 14(1), 143-160.

Lippke, L., and Tanggaard, L. (2014). Leaning in to “Muddy” Interviews. *Qualitative Inquiry*, 20(2), 136-143.

Lippmann, W. (1946). *Public opinion* (Vol. 1). Transaction Publishers.

Littleton, A.C. (1933) *Accounting Evolution to 1900*, New York: Russell and Russell.

Livingston, C. (1992). *Teachers as Leaders: Evolving Roles*, NEA School Restructuring Series. NEA Professional Library, PO Box 509, Westhaven, CT 06516 (Stock No. 1848-6-00, \$15.95).

Lock, L., Spirduso, W.W., Silverman, S.J. (1993) *Proposals that work* (3rd ed.) Newbury Park, CA: Sage

Lodh, S.C. and Gaffikin, M.J.R (1997) Critical studies in accounting research: rationality and Habermas: a methodological reflection, *Critical Perspectives on Accounting*, Vol. 8, p.433-74.

Loft, A. (1995). *The history of management accounting: relevance found*. Prentice Hall.

Lomas, C. W. (1934). A study of stage fright as measured by student reactions to the speech situation.

LoPiccolo, J. (1970) *Effective components of systematic desensitisation*, PhD Yale University.

Lymer, A. (1999) The Internet and corporate reporting in Europe, *European Accounting Review*, 8(2), p.289-301.

Mabrito, M. (2000) Computer conversations and writing apprehension, *Business Communication Quarterly*, vol 65 (1), p39-49.

Machlup, F. (1967). Theories of the firm, maginalist, behavioural and managerial. *American economic Review*, Vol 57, no. 1.

Maddux, J. E., Norton, L. W., and Stoltenberg, C. D. (1986). Self-efficacy expectancy, outcome expectancy, and outcome value: Relative contributions in influencing and predicting behavioral intentions. *Journal of Personality and Social Psychology*, 51, 783-789.

Maes, J., Weldy, T., Icenogle, M. (1997) A managerial perspective: oral communication competency is most important for business students in the workplace, *Journal of Business Communication*, 34(1), pp.67-80

Malinowski, B. (1922). *Ethnology and the Study of Society*. *Economica*, (6), 208-219.

- Malinowski, B. (1935). The method of field work and the invisible facts of native law and economics. *B. Malinowski, Coral Gardens and Their Magic*, 1, 317-40.
- Mandler, G. (1975) *Mind and emotion*. New York: Wiley.
- Mangum, T. (1996). Identity and Economics; or, The Job Placement Procedural. *ADE BULLETIN*, p.19-24.
- Manicas, P. (1993) Accounting as a human science, *Accounting, Organisations and Society*, 18 (4), p.147-161.
- Marcheggiani, J., Davis, K.A. and Sander, J.F. (1999) The effects of teaching methods on examination performance and attitudes in an introductory financial course, *Journal of Education for Business*, 74 (4), p.203-211.
- Marginson, S. (2000). Rethinking academic work in the global era. *Journal of higher education policy and management*, 22(1), 23-35.
- Marlatt, A. A., Baer, J. S., & Quigley, A. A. (1995). Self-efficacy and addictive behavior. In A. Bandura (Ed.), *Self-efficacy in changing societies*, p. 289-316, New York: Cambridge University Press.
- Marlino, D. L. and Wilson, F. (2003). *Teen girls on business: are they being empowered?*. Simmons College School of Management.
- Marshall, L and Varnon, A. (2009) Writing apprehension among accounting seniors, *The accounting educators' journal*, vol xix, p.45-65.
- Marriott, P. and Marriott, N. (2003) Are we turning them on? A longitudinal study of undergraduate accounting students' attitudes towards accounting as a profession, *Accounting Education*, 12 (2), p.113-133.
- Mathews, M.R. (2001) Whither (or wither) accounting education in the new millennium, *Accounting Forum*, 25 (4), p.380-394.
- Matthews, D., Anderson, M., and Edwards, J. R. (1998). *The priesthood of industry: the rise of the professional accountant in British management*. Oxford University Press on Demand.
- Matthews, S. (1998). The changing role of the management accountant and its implications for qualification development. *Management Accounting*, 76(8), 68-69.

- Mauer, R., Neergaard, H., and Linstad, A. K. (2009). Self-efficacy: Conditioning the entrepreneurial mindset. In *Understanding the entrepreneurial mind* (pp. 233-257). Springer New York.
- Mauldin, S. Crain, J.L. and Mounce, P.H. (2000) The accounting principles instructor's influence on students' decision to major in accounting. *Journal of Education for Business*, 75(3), p.142-149.
- May, G. S., and Arevalo, C. (1983). Integrating effective writing skills in the accounting curriculum. *Journal of Accounting Education*, 1(1), 119-126.
- May G.S., Windal, F.W. and Sylvestre, G. (1995) The need for change in accounting education: an educational survey, *Journal of Accounting Education*, 13 (1), p.12-43.
- May, G. S., and May, C. B. (1989). Communication instruction: What is being done to develop the communication skills of accounting students?. *Journal of Accounting Education*, 7(2), 233-244.
- McAdam, E. K. (1986). *Cognitive behavior therapy and its application with adolescents*.
- McAuley, J. (1985) Hermeneutics as a practical research methodology, *Management Education and Development*, 16 (3), p.292-299.
- McBurney D.H., (1994) *Research Methods*. Brooks/Cole, Pacific Grove, California.
- McCloskey, D. (1985) *the Rhetoric of Economics*, Wisconsin: University of Wisconsin Press.
- McCroskey, J. C. (1962). Still more debate over debate. *The Forensic of Pi Kappa Delta*, 48, 7-9.
- McCroskey, J. C. (1967). *Experimental studies of the effects of ethos and evidence in persuasive communication* (Doctoral dissertation, ProQuest Information & Learning).
- McCroskey, J. C. (1969). A summary of experimental research on the effects of evidence in persuasive communication. *Quarterly Journal of Speech*, 55(2), 169-176.
- McCroskey J.C.(1970) Measures of communication-bound anxiety, *Speech Monographs*, 37 (4), 269-277
- McCroskey, J. C. (1972). The implementation of a large-scale program of systematic desensitization for communication apprehension. *Communication Education*, 21(4), 255-264.

- McCroskey, J.C. (1976) The problems of communication apprehension in the classroom, *The Florida Speech Communication Journal*, vol 4 (2), p1-12.
- McCroskey, J. C. (1977a). Oral communication apprehension: A summary of recent theory and research. *Human Communication Research*, 4, 78–96.
- McCroskey J.C.(1978) Classroom consequences of communication apprehension, *Communication Education*, 26 (1), 27-33.
- McCroskey, J. C. (1980). Quiet children in the classroom: On helping not hurting.
- McCroskey, J. C. (1982). Communication competence and performance: A research and pedagogical perspective. *Communication Education*, 31, 1–7.
- McCroskey J.C. (1982) Oral communication apprehension: a summary of recent theory and research, *Human Communication Research*, 4 (1) 78-96.
- McCroskey J.C.(1984) *The communication apprehension perspective*. Beverley Hills, CA: Sage Publications.
- McCroskey, J.C. (1997c) Why we communicate the ways we do: a communibiological perspective, The Carroll C. Arnold Distinguished Lecture, Presented at the annual convention of the National Communication Association Chicago, Illinois, p5-12.
- McCroskey J.C.(2006) *An introduction to Rhetorical Communication: A western rhetorical perspective*, 9th edition, London: Allyn and Bacon Pearson Education
- McCroskey, J.C. and Anderson, J.F. (1976) The relationship between communication apprehension and academic achievement among college students, *Human Communication Research*, 3, p73-81.
- McCroskey, J. C., Booth-Butterfield, S., and Payne, S. K. (1989). The impact of communication apprehension on college student retention and success. *Communication Quarterly*, 37(2), 100-107.
- McCroskey, J. C., Burroughs, N. F., Daun, A., and Richmond, V. P. (1990). Correlates of quietness: Swedish and American perspectives. *Communication Quarterly*, 38, 127–137.
- McCroskey, J. C., and Daly, J. A. (1976). Teachers'Expectations of the Communication Apprehensive Child in the Elementary School. *Human communication research*, 3(1), 67-72.

- McCroskey, J.C., Daly, J.A., Richmond, V.P. and Cox, B. (1976) The effects of communication apprehension on interpersonal attraction, *Human Communication Research*, 2, p51-65.
- McCroskey, J. C., and McCroskey, L. L. (1988). Self-report as an approach to measuring communication competence.
- McCroskey, J. C., Simpson, T. J., and Richmond, V. P. (1982). Biological sex and communication apprehension. *Communication Quarterly*, 30(2), 129-133.
- McCroskey, J.C., and Richmond, V.P. (1976) The effects of communication apprehension on the perceptions of peers, *Western Speech Communication*, 40, p14-21.
- McCroskey, J. C., and Richmond, V. P. (1987). Willingness to communicate. IN JC McCroskey & JA Daily (Eds). *Personality and interpersonal communication* (PP. 139-156).
- McCroskey, J. C., and Richmond, V. P. (1991). Quiet children and the classroom teacher. ERIC Clearinghouse on Reading and Communication Skills, Indiana University, 2805 E. 10th St., Suite 150, Bloomington, IN 47408-2698.
- McCroskey, J. C., and McVetta, R. W. (1977). The relationship between communication apprehension and classroom seating preferences. Unpublished monograph., West Virginia University.
- McGlynn, F., Smitherman, T., Gothard, K. (2004) Comment on the Status of Systematic Desensitization. *Behavior Modification*, 28: 2, pp. 194–205.
- McGracken, G. (1988) *The long interview*, London: Sage recording interviews(McGracken 1988).
- MacIntyre, P. D. (1994). Variables underlying willingness to communicate: A causal analysis. *Communication Research Reports*, 11(2), 135-142.
- McKendrick, N. (1970). Josiah Wedgwood and cost accounting in the Industrial Revolution. *The Economic History Review*, 23(1), 45-67.
- McLean, T. (1995). Contract accounting and costing in the Sunderland shipbuilding industry, 1818–1917. *Accounting, Business & Financial History*, 5(1), 109-146.
- Menzel, H. (1978) Meaning: who needs it? In M. Brenner, Marsh, P., Brenner, M. (eds) *The social contexts of method*(pp 140-171) New York: St Martin's Press.
- Merton, R.K., Fiske, M. Kendall, P.L. (1956) *The focused interview*, Glencoe Ill: Free Press.
- Messmer, M. (1999) Skills for a new millennium, *Strategic finance*, Aug, pp.10-12.

- Messmer, M. (2001) Interpersonal skills: the new essential in accounting. *National Public Accountant*, 46 (1), p.28-37.
- Metrejean, C.T. and Zarzeski, M.T. (2001) Bring the real world to the classroom, *Journal of Accountancy*, 192 (4), p.73-78.
- Metrejean, C., Pittman, J. and Zarzeski, M.T. (2002) Guest speakers: reflections on the role of accountants in the classroom, *Accounting Education*, 11(4), p.347-364.
- Miles, M.B. and Huberman, A.M. (1994) *Qualitative Data Analysis: An Expanded Sourcebook*, London: Sage Publications.
- Miller, P. and Napier, C. (1993) Genealogies of calculation, *Accounting Organisations and Society*, 18(7-8), p.631-647.
- Milliron, V. C. (2008). Exploring millennial student values and societal trends: Accounting course selection preferences. *Issues in Accounting Education*, 23(3), 405-419.
- Mills, B. J., and Cottell, P. G. A Good Idea. But It Might Not Work.
- Miranti, P.J. (1990) *Accountancy Comes of age: The Development of an American Profession, 1886-1940*, Chapter Hill: Universtiy of North Carolina Press.
- Mladenovic, R. (2000) An investigation into ways of challenging introductory accounting students' negative perceptions of accounting, *Accounting Education*, 9(2), p.135-155.
- Montano, J. L. A., Donoso, J. A., Hassall, T., and Joyce, J. (2001). Vocational skills in the accounting professional profile: the Chartered Institute of Management Accountants (CIMA) employers' opinion. *Accounting Education*, 10(3), 299-313.
- Moore, D. C. (1991) Accounting on trial: the critical legal studies movement and its lessons for accounting. *Accounting, organisations and society*. Vol 16, No. 8, pp 763-791.
- Mora, M. (Ed.). (2012). *Research methodologies, innovations and philosophies in software systems engineering and information systems*. IGI Global.
- Morgan, G. J. (1997). Communication skills required by accounting graduates: practitioner and academic perceptions. *Accounting Education*, 6(2), p.93-107.
- Morgan, G. and Smircich, L. (1980) The case for qualitative research, *The Academy of Management Review*, 5(4), p.491-500.

- Mulac, A., and Sherman, A. R. (1975). Relationships among four parameters of speaker evaluation: Speech skill, source credibility, subjective speech anxiety, and behavioral speech anxiety. *Communications Monographs*, 42(4), 302-310.
- Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation.
- Nachimas, C.F. and Nachimas, D. (2000) *Research Methods in the Social Sciences*, Worth Publishers, New York.
- Napier, C. J. (2001). Accounting history and accounting progress. *Accounting history*, 6(2), p.7-31.
- Napier, C. J. (2006). Accounts of change: 30 years of historical accounting research. *Accounting, Organizations and Society*, 31(4), 445-507.
- Nash, G., Crimmins, G., and Oprescu, F. (2015). If first-year students are afraid of public speaking assessments what can teachers do to alleviate such anxiety?. *Assessment & Evaluation in Higher Education*, (ahead-of-print), 1-15.
- Neer, M and Kircher, W. (1989) Apprehensives' perception of classroom factors influencing their class participation, *Communication Research Reports*, vol 6 (1), p70-77.
- Neimark, M.K. (1990) The king is dead, long live the king. *Critical perspectives on accounting*, Vol 1, No. 1, pp103-114.
- Neimark, M. K. (1996) Caught in the squeeze: an essay on higher education in accounting. *Critical Perspectives on accounting*, 7(1), 1-11.
- Nelson, D. (1992). *Scientific management and the transformation of university business education. A Mental Revolution: Scientific Management since Taylor*, Columbus, OH: Ohio State University Press, 1992, p.77-101.
- Nelson, I. T. (1995). What's new about accounting education change? An historical perspective on the change movement. *Accounting Horizons*, 9(4), p.62.
- Nelson, I. T., and Vendrzyk, V. P. (1997). Trends in accounting student characteristics: A longitudinal study at FSA schools, 1991–1995. *Journal of Accounting Education*, 14(4), p.453-475.

Nelson, S. J., Moncada, S. and Smith, D. C. (1996). Written language skills of entry-level accountants as assessed by experienced CPAs. *Business Communication Quarterly*, 59(4), p.122-128.

Neuman, L. W. (1994) *Social Research Methods*, Allyn and Bacon, U.S.

Newburger, C. A., and Daniel, A. V. (1985). Self-concept, Communication Apprehension and Self-confrontation: A Relational Study.

Notterman, J.M., Schoenfeld, W. N. And Bersch, P. J. (1952) A comparison of three extinction procedures following heart rate conditioning. *Journal of abnormal and social psychology*, 47, p674-677.

Novin, A. M., and Pearson, M. (1989). Non-accounting-knowledge qualifications for entry-level public accountants. *The Ohio CPA Journal*, 48(4), p.12-17.

Novin, A. M., Pearson, M. A., and Senge, S. V. (1990). Improving the curriculum for aspiring management accountants: The practitioner's point of view. *Journal of Accounting Education*, 8(2), p.207-224.

Novin, A. M. and Tucker, J. M. (1993). The composition of 150-hour accounting programs: The public accountants' point of view. *Issues in Accounting Education*, 8(2), p.273-291.

Nunnally, J.C. (1978) *Psychometric Theory*, 2nd Ed, Mc-Graw hill: New York.

Nunnally, J. and Bernstein, I. (1994) *Psychometric Theory*, 3rd ed, New York: McGraw Hill.

Oakes, P.J., Haslam, A. and Turner, J.C. (1994) *Stereotyping and Social Reality*, Oxford: Blackwell.

O'Connell B., G. Carnegie G., Carter A., Helliar C., K.Watty K., P. Hancock P. and DeLange P. (2015) *Shaping the future of accounting in business education in Australia*, Final Report, July, CPA Australia, Melbourne, Victoria : ISBN: 978-1-921742-67-5

Oldroyd, D. (1995). The role of accounting in public expenditure and monetary policy in the first century AD Roman Empire. *The Accounting Historians Journal*, p.117-129.

Oliverio, M. E., and Newman, B. H. (1996). Attention to accounting education: The first decade of the twentieth century. *Issues in Accounting Education*, 11(2), 253.

Olivier, H. (2001) Challenges facing the accountancy profession. *European Accounting Review*, 9 (4), p.603-622.

Oppenheim, A.N. (1992) Questionnaire design, Interviewing and Attitude Measurement, Second Edition, London: Pinter.

O'Mara, J., Allen, J.L., Long, K.M., and Judd, B. (1996) Communication Apprehension, nonverbal immediacy and negative expectations for learning, *Communication Research Reports*, vol 13 (1), p109-128.

Ormrod, J.E. (1999). *Human learning* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall

Pajares, F., Hartley, J., and Valiante, G. (2001). Response format in writing self-efficacy assessment: Greater discrimination increases prediction. *Measurement and evaluation in counseling and development*, 33(4), p.214.

Pajares, F., and Johnson, M. J. (1994). Confidence and competence in writing: The role of self-efficacy, outcome expectancy, and apprehension. *Research in the Teaching of English*, p.313-331.

Pajares, F. And Valiante, G. (1997) Influences of self-efficacy on elementary students writing, *Journal of educational research*, 90, p353-360.

Pajares, F. and Valiante, G. (1999). Predictive and Mediation role of the writing self-efficacy beliefs of upper elementary school students. *Journal of Educational Research*.

Paludi, M.A. (2011). *The Psychology of Teen Violence and Victimization*. USA: ABC-CLIO, LLC.

Paolillo, J. and Estes, R. (1992) An empirical analysis of career choice factors among accountants, attorneys, engineers and physicians, *Accounting Review*, 57 (4), p.785-793.

Parker, L. D. (1979). Participation in budget planning: the prospects surveyed. *Accounting and Business Research*, 9(34), p.123-138.

Parker, L. D. (1986). Polemical themes in social accounting: A scenario for standard setting. *Advances in public interest accounting*, 1(0), 67-93.

Parker, L. D. (1992). Divisional performance measurement: beyond an exclusive profit test (pp. 551-568). Springer US.

Parker, L. D. (1999). Historiography for the new millennium: adventures in accounting and management. *Accounting History*, 4(2), 11-42.

Parker, L. D. (2001). Back to the future: the broadening accounting trajectory. *The British Accounting Review*, 33(4), p.421-453.

Patton, M.Q. (1990) *Qualitative evaluation and research methods* (eds). Newbury Park Ca:Sage.

Patten, R. J., and Williams, D. Z. (1990). There's trouble—right here in our accounting programs: The challenge to accounting educators. *Issues in Accounting Education*, 5(2), p.175-179.

Paulhus, D.L. (1998). *The Paulhus deception scales: BIDR Version 7*, Toronto/Buffalo: Multi-Health Systems.

Pavio, A. (1963). Audience influence, social isolation, and speech. *The Journal of Abnormal and Social Psychology*, 67(3), 247.

Pavlov, I. P., & ANREP, G. V. E. (1927). *Conditioned Reflexes. An Investigation of the Physiological Activity of the Cerebral Cortex...* Translated and Edited by GV Anrep. London.

Perks, R. W. (1993). *Accounting and society* (p. 2). London: Chapman and Hall.

Pervin, L., Cervone, D. and John, O. (2005) *Personality, theory and research*. 9th Eds, Hoboken, NJ: Wiley.

Pfeffer, J., & Fong, C. T. (2002). The end of business schools? Less success than meets the eye. *Academy of Management Learning & Education*, 1(1), 78-95.

Phillips, F. (1998). Accounting students' beliefs about knowledge: Associating performance with underlying belief dimensions. *Issues in Accounting Education* 13 (2): p.113-125.

Phillips, G. M. (1968). Reticence: Pathology of the normal speaker. *Communications Monographs*, 35(1), p.39-49.

Phillips, G. M., and Butt, D. (1966). Reticence revisited. *Pennsylvania Speech Annual*, 23, 40-57.

Phillips, G and Metzger, N. (1973)The reticent syndrome: Some theoretical considerations about etiology and treatment, *Speech Monographs*, vol 40 (3), p220-230.

Pierson, F. C. (1959). The education of American businessmen. *The Journal of Business Education*, 35(3), p.114-117.

Pitt, L. F., Berthon, P. R. and Robson, M. J. (2000). Communication apprehension and perceptions of salesperson performance: a multinational perspective. *Journal of Managerial Psychology*, 15(1), p.68-82.

Pitt, L., Murgolo-Poore, M. and Dix, S. (2001). Changing change management: the intranet as catalyst. *Journal of Change Management*, 2(2), p.106-114.

- Pittenger, K. K., Miller, M. C. and Mott, J. (2004). Using Real-World Standards to Enhance Students' Presentation Skills. *Business Communication Quarterly*, 67(3), p.327-336.
- Plumb, C. Spyridakis, J.H.(1992) Survey Research in Technical Communication: Designing and Administering Questionnaires.
- Pollock, K. S., Papiernik, J. C. and Slaubaugh, M. D. (2002). High school guidance counselors' perceptions of the profession. *The CPA Journal*, 72(5), p.73.
- Popper, K.R (1945) *The open society and its enemies vol 2, The high tide of prophecy: Hegel, Marx and the aftermath*, London: Routledge and Kegan Paul.
- Porta, D. Keating, M. (2008) How many approaches in the social sciences? An epistemological introduction. In Porta, D, Keating, M. (eds) *Approaches and Methodologies in the social sciences: a pluralist perspective*, Cambridge: Cambridge University Press.
- Porter, G. L. (1992). Professional accounting education-back to the future?. *Strategic Finance*, 73(7), 63.
- Powney, J. Watts, m. (1987) *Interviewing in educational research*, London: Routledge.
- Putnam, H. (1990) *Realism with a human face*, Cambridge MA: Harvard University Press.
- P'Rayan, A., and Shetty, R. T. (2008). Developing engineering students' communication skills by reducing their communication apprehension. *English for Specific Purposes World*, 4(20), 1-24.
- Previts, G. J. and Merino, B. D. (1979). *A history of accounting in America: An historical interpretation of the cultural significance of accounting*. John Wiley & Sons Inc.
- Previts, G. J. and Merino, B. D. (1998). *History of Accountancy in the United States: The Cultural Significance of Accounting*. Ohio State University Press.
- Price, R. L. and Murvin, H. J. (1992). Computers Can Help Student Retention in Introductory College Accounting. In *Business Education Forum* (Vol. 47, No. 1, pp. 25-27).
- Pring, R. (2000). The 'false dualism' of educational research. *Journal of Philosophy of Education*, 34(2), 247-260.
- P. W. C. LLB (2003). *United Way of the National Capital Area Forensic Accounting Investigation*.
- Rabavilas, A.D., Boulougouris, J.C. and Stefanis, C. (1976) Duration of flooding sessions in the treatment of obsessive-compulsive patients, *Behaviour research and therapy*, vol 14, p349-355.

Radhakrishna, R. B., and Bruening, T. H. (1994). Pennsylvania study: Employee and student perceptions of skills and experiences needed for careers in agribusiness. *NACTA Journal*, 38(1), 15-18.

Raistrick, A. (1970). *Dynasty of Iron Founders, the Darbys and Coalbrookdale: Railway Extracts*. publisher not identified.

Reay, D. (2008) Class, authenticity and the transition to higher education for mature students, *The Sociological Review*, Vol 50, No.3.

Rebele, J. E. (2002). Accounting education's uncertain environments: descriptions and implications for accounting programmes and accounting education research. *Accounting Education*, 11(1), 3-25.

Reckers, P. M. (1996). Know thy customer. *Journal of Accounting Education*, 14(2), p.179-185.

Rechtien, J. G., and Dizinno, G. (1998). Apprehension about writing: Further results. *Psychological Reports*, 82(1), 221-222.

Redmond, M. R., Mumford, M. D. and Teach, R. (1993). Putting creativity to work: Effects of leader behavior on subordinate creativity. *Organizational behavior and human decision processes*, 55(1), p.120-151.

Research notes, 1969, *Spectra*.

Reiman, J. (1979) A Comparative Analysis of Empirical Research on Technology and Structure. *Journal of management*. vol. 5, no. 2, pp. 167-192

Remenyi, D., Williams, B., Money, A. and Swartz, E. (1998). *Research in Business and management*. London: Sage. Remmen, D.(2003). Performance pays off. *Strategic Finance*, 84(9), p.24-31.

Richmond, V.P. (1997) Quietness in contemporary society: Conclusions and generalisations of the research, in Daly, J.A., McCroskey, J.C., Ayres, J., Hopf, T and Ayres, D. M. (eds) *Avioding Communication; shyness, reticence and communication apprehension*, p423-488, Beverly hills, CA: Sage.

Richmond, V.P., and McCroskey, J.C. (1989) *Communication Apprehension, Avoidance and Effectiveness*, Scottsdale, AZ, Gorusch.

Richmond, V. P., and Robertson, D. (1977). Communication apprehension as a function of being raised in an urban or rural environment. Unpublished monograph, West Virginia Northern Community College.

Riffe, D. and Stacks, D. (1992) Student characteristics and writing apprehension, *Journalism Educator*, vol 47 (2), p39-49.

Rimmer, W. G. (1960). *Leeds Leather Industry in the Nineteenth Century*.

Ritzer, G (1996) *The McDonaldisation of Society: An investigation into the changing character of contemporary social life*, Thousand Oaks, CA: Pine Forge Press.

Robbins, S., Judge, T. A., Millett, B. and Boyle, M. (2013). *Organisational behaviour*. Pearson Higher Education AU.

Robinson, T. (1997) Communication apprehension and the basic public speaking course: A national survey of in class treatment techniques, *Communication Education*, vol 46 (3), p188-197.

Robson, C. (1993) *Real World Research: A resource for social scientists and practitioner-researchers*, Oxford: Blackwell Publishers.

Rodgers, J.R. (2001) A panel-data study of the effect of student attendance on university performance. *Australian Journal of Education* 45.3, p.284-295.

Roe, A. (1957) *The Psychology of Occupations*, Wiley, New York.

Roe, M. J. (2000) Shareholder Wealth Maximization Norm and Industrial Organization, *The*; 149 *U. Pa. L. Rev.* 2063

Roldán, J. L. and Sánchez-Franco, M. J. (2012). Variance-based structural equation modeling: guidelines for using partial least squares. *Res Methodol Innov Philos Softw Syst Eng Inf Syst*, p.193.

Rose, N. and Miller, P. (1992). Political power beyond the state: problematics of government. *British journal of sociology*, p.173-205.

Rosenfeld, L. B., Grant III, C. H. and McCroskey, J. C. (1995). Communication apprehension and self - perceived communication competence of academically gifted students. *Communication Education*, 44(1), p.79-89.

- Rotter, J.B. (1966) Generalized expectancies for internal versus external control of reinforcement, *Psychological Monographs*, vol 80 (1).
- Ruchala, L.V. and Hill, J.W. (1994) Reducing accounting students' oral communication apprehension: empirical evidence, *Journal of Accounting Education*, 12(4), p283-303.
- Russell, Keith A., Siegel, Gary H. and Kulesza, C. S. (1999) *Management Accounting Quarterly*, Autumn, Vol. 1 Issue 1, p1-7.
- Rubin, R. B., Graham, E. E. and Mignerey, J. T. (1990). A longitudinal study of college students' communication competence. *Communication Education*, 39(1), p.1-14.
- Rubin, R. B., Martin, M. M., Bruning, S. S. and Powers, D. E. (1993). Test of a self - efficacy model of interpersonal communication competence. *Communication Quarterly*, 41(2), p.210-220.
- Rubin, H.J., Rubin I.S. (1995) *Qualitative Interviewing: The art of hearing data*, London:Sage.
- Rubin, R. B., Rubin, A. M. and Jordan, F. F. (1997). Effects of instruction on communication apprehension and communication competence. *Communication Education*, 46(2), 104-114.
- Rubin, R. B., Welch, S. A. and Buerkel, R. (1995). Performance - based assessment of high school speech instruction. *Communication Education*, 44(1), p.30-39.
- Rushi, P. J. (2007). Questioning the utility of self-efficacy measurements for Indians. *International Journal of Research & Method in Education*, 30(2), 193-206.
- Ryan, B., Scapens, R.W., Theobald, M. (1992) *Research Method and Methodology in Finance and Accounting*, London: Academic Press.
- Ryan, G., Toohey, S. and Hughes, C. (1996) the purpose, value and structure of the practicum in higher education: a literature review, *Higher Education*, 31(3), pp. 355-377.
- Robertson, I. T., and Sadri, G. (1993). Managerial self-efficacy and managerial performance. *British Journal of Management*, 4(1), 37-45.
- Saks, A. M. (1995). Longitudinal field investigation of the moderating and mediating effects of self-efficacy on the relationship between training and newcomer adjustment. *Journal of applied psychology*, 80(2), p.211.
- Sale, D. (2001). Designing a 'Thinking Curriculum'in the Classroom. *Curriculum and Teaching*, 16(1), p.45-57.

Sam, H. K., Othman, A. E. A., and Nordin, Z. S. (2005). Computer self-efficacy, computer anxiety, and attitudes toward the Internet: A study among undergraduates in Unimas. *Educational Technology & Society*, 8(4), 205-219.

Sangster, A., Leech, S. A., and Grabski, S. (2009). ERP implementations and their impact upon management accountants. *JISTEM-Journal of Information Systems and Technology Management*, 6(2), 125-142.

Sangster, A. (2010). Using accounting history and Luca Pacioli to put relevance back into the teaching of double entry. *Accounting, Business & Financial History*, 20(1), p.23-39.

Sarason, I. G. (1976) Anxiety and self-preoccupation in: Sarason, I.G. and Spielberger, C.D. (eds) *Stress and anxiety* (vol 2). Washington D.C. : Hemisphere.

Saravanamuthu, K., and Tinker, T. (2002). The university in the new corporate world. *Critical Perspectives on Accounting*, 13(5), 545-554.

Saudagaran, S. M. (1996) The first course in accounting: An innovative approach. *Issues in Accounting Education*, 11(1), p.83.

Saunders, M., Lewis, P., Thornhill, A., and Wilson, J. (2009). *Business research methods*. Financial Times, Prentice Hall: London.

Savin-Baden, M. (2000). *Problem-based learning in higher education: Untold stories*. Buckingham: Open University Press.

Schacter, D. L., Gilbert, D. T., & Wegner, D. M. (2011). Semantic and episodic memory. *Psychology*, 240-241.

Schaubroeck, J., Jones, J. R. and Xie, J. L. (2001). Individual differences in utilizing control to cope with job demands: Effects on susceptibility to infectious disease. *Journal of Applied Psychology*, 86(2), p.265.

Schlenker, B. R., and Weingold, M.F. (1989). Goals and the Self-Identification Process: Constructing Desires and Identities. In *Goal Concepts in Personality and Social Psychology*, ed. Lawrence A. Pervin, pp. 243–90. Hillsdale, NJ: Erlbaum.

Schmeck, R. R. (1983) Learning styles of college students. (Eds: Dillon, R. F and Schmeck, RR) *Individual differences in cognition*.

Schmeck, R. R. (1983). Learning styles of college students. *Individual differences in cognition*, 1, 233-279.

- Schoen, L.G. and Winocur, S. (1988) An Investigation of the Self-Efficacy of Male and Female Academics, *Journal of Vocational Behavior* 32, p307-320.
- Schon, D. (1983). *The reflective practitioner*.
- Schon, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. Jossey-Bass.
- Schuman, H. Kalton, G. (1985) Survey methods in G. Lindzey and E Aronson (eds) *Handbook of social psychology*, vol 1, pp635-698.
- Schuman, H. Presser, S. (1981) *Questions and answers in attitude surveys*: New York, Academic Press.
- Schunk, D.H. (1981) Modeling and attributional feedback on children's achievement: A self-efficacy analysis. *Journal*
- Schunk, D.H. (1987) Peer models and children's behavioural change, *Review of Educational Research*, 57, p149-174.
- Schunk, D. H. (1989) Social cognitive theory and self-regulated learning. In *Self-regulated learning and academic achievement* (p. 83-110). Springer New York.
- Schunk, D. H. (1995) Self-efficacy and education and instruction. In *Self-efficacy, adaptation, and adjustment* (p. 281-303). Springer US.
- Schwarzer, R. and Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analyses. *Applied Psychology: An International Review. Special Issue: Health and Well-Being*, 57, 152-171.
- Schwarzer, R. and Knoll, N. (2007). Functional roles of social support within the stress and coping process: A theoretical and empirical overview. *International Journal of Psychology*, 42, 243-252.
- Scott, C.R., McCroskey, J.C., Sheahan, M. E. (1978) Measuring Communication Apprehension, *Journal of Communication*, 28(1), pp. 104-111.
- Scribner, E. (1995). Interpreting the meaning of objectives of an accounting program. *Journal of Accounting Education*, 13(2), 177-183.
- Sekaran, U. (2000) *Research Methods for Business: A Skill-building Approach*. USA: John Willey & Sons.

- Shanahan, D. (2013). High Oral Communication Apprehensives: How Can Students be Helped to Reduce Their Fear of Public Speaking?. *Irish Journal of Academic Practice*, 2(1), 9.
- Shannon, C. E., and Weaver, W. (1949). *The mathematical theory of information*.
- Sharma, D. S. (1998). Addressing the student quality problem: some directions for accounting education research. *Asian Review of Accounting*, 6(1).
- Shell, D. F., Murphy, C. C., & Bruning, R. H. (1989). Self-efficacy and outcome expectancy mechanisms in reading and writing achievement. *Journal of Educational Psychology*, 81(1), 91.
- Sherman, A.R. (1972) Real life exposure as a primary therapeutic factor in the desensitization treatment of fear, *Journal of abnormal psychology*, vol 79, p19-28.
- Shipman, M.D. (1988) *The limitations of Social Research*, 3rd edn, London: Longman
- Shutz, A (1967) *The phenomenology of the social world*, Evanston, IL: Northwestern University Press
- Siegel, G. (2000) Management accounts: The great communicators, *Strategic Finance*, 82 (1), pp. 75-77
- Siegel, G. and Sorenson, J. E. (1999) Counting more, counting less, *The 1999 Practice Analysis of Management Accounting (IMA)*.
- Simister, M., Sheldon, J., & Roest, P. (1998). *CFO of the Future*. Institute of Chartered Accountants in Australia.
- Simons, K., and Higgins, M. (1993). An examination of practitioners' and academicians' views on the content of the accounting curriculum. *Accounting Educators' Journal*, 5(2), 24-34.
- Simons, K; Higgins, M. and Lowe, D. (1995) A profile of communication apprehension in accounting majors: Implications for teaching and curriculum revision, *Journal of Accounting Education*, 13(3), 299-318.
- Smith, D and Nelson, S (1994) Written and oral communication apprehension: Extent and influence on writing variables, *NABTE review*, vol 21,p29-34.
- Solomons, D. (1991) Accounting and social change: a neutralist view. *Accounting, Organizations and Society*, 16(3), 287-295.Solomon.
- Solomons, D. (1991) A rejoinder. *Accounting, Organizations and Society*, 16(3), p.311-312.

- Sorenson, G. and McCroskey, J.C. (1977a) The prediction of interaction behaviour in small groups, *Communication Monographs*, 44, p73-80.
- Spector, P.E. (1981) *Research Design Series: Quantitative Applications in the Social Sciences*, London: Sage Publications.
- Spielberger, C. D. (1966). Theory and research on anxiety. *Anxiety and behavior*, 1, 3-20.
- Spitzberg, B.H., and Cupach, W.R. (1984) *Interpersonal Communication Competence*, Beverly Hills, California, Sage.
- Soffa, S. (2006). Inspiring academic confidence in the classroom: An investigation of features of the classroom experience that contribute to the academic self-efficacy of undergraduate women enrolled in gateway courses. Dissertation completed at the University of Wisconsin-Madison.
- Sosik, J. J., Kahai, S. S. and Piovoso, M. J. (2009). Silver bullet or voodoo statistics? A primer for using the partial least squares data analytic technique in group and organization research. *Group & Organization Management*, 34(1), p.5-36.
- Spradley, J.P. *The ethnographic interview*. New York: Holt Rinehart and Winston.
- Stanga. K.G., and Ladd, R.T. (1990) Oral communication apprehension in beginning accounting majors: an exploratory study, *Issues in Accounting Education*, 5(2), p180-194.
- Stenhouse, L. (1982) The conduct, analysis and reporting of case study in educational research and evaluation. In R. McCormick (ed.) *Calling education to account*. London: Heinemann. 438
- Stern, R. and Marks, I. (1973) Brief and prolonged flooding: A comparison of agoraphobic patients. *Archives of general psychiatry*, 28, p270-276.
- Stevens, E. (1981) The new procedure. *Federal Reserve Bank of Cleveland Economic Review*, Summer.
- Stevens, C. K. and Gist, M. E. (1997). Effects of self-efficacy and goal-orientation training on negotiation skill maintenance: What are the mechanisms?. *Personnel Psychology*, 50(4), p.955.
- Stewart, J. P., and Dougherty, T. W. (1993). Using case studies in teaching accounting: A quasi-experimental study. *Accounting Education*, 2(1), 1-10.
- Stoller, P.(1989) *The Taste of Ethnographic Things: The Senses in Anthropology*. Philadelphia: University of Pennsylvania Press.

- Stone, R.W and Bailey, J.J. (2007) Team Conflict Self-Efficacy and Outcome Expectancy of Business Students, *Journal of Education for Business*, 82:5, p258-266.
- Stout, D.E. and DaCrema, J.J. (2004) A writing intervention for the accounting classroom: dealing with the problem of faulty modifiers. *Journal of Accounting Education*, vol 27, 4, p289-323.
- Strahley, D.F. (1966) Systematic desensitisation and counterphobic treatment of an irrational fear of snakes (PhD, University of Tennessee.
- Stajkovic, A. D. and Lee, D. (2001). Hoping for collective efficacy while nurturing self-efficacy: Culture and team-building at work. In Pan-Pacific Conference.
- Stajkovic, A. D. and Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological bulletin*, 124(2), p.240.
- Straub, D., Boudreau, M. C. and Gefen, D. (2004). Validation guidelines for IS positivist research. *The Communications of the Association for Information Systems*, 13(1), p.63.
- Strauss, A (1987) *Qualitative analysis for social scientists*, Cambridge: Cambridge University Press.
- Strauss, A. Corbin, J. (1990) *Basics of Qualitative research: grounded theory procedures and techniques for developing grounded theory* (2nd ed.) Thousand Oaks, CA: Sage.
- Strauss, A. and Corbin, J. (1998) *Basics of qualitative research: Techniques and procedures for developing grounded theory*. SAGE Publications, Thousand Oaks, USA.
- Stone, R. W., and Henry, J. W. (1998). Computer self-efficacy and outcome expectations and their impacts on behavioral intentions to use computers in non-volitional settings. *Journal of Business and Management*, 6(1), 45-58.
- Stone, R. W., and Henry, J. (2003). The Roles of Computer Self-Efficacy and Outcome Expectancy in Influencing the Computer End-User's Organizational. *Advanced topics in end user computing*, 2, 44.
- Stout, D. E., Wygal, D. E., and Hoff, K. T. (1990). Writing across the disciplines: Applications to the accounting classroom. *The Bulletin of the Association for Business Communication*, 53(4), 10-16.
- Subotnik, D. (1987) What accounting can learn from legal education. *Issues in Accounting Education*, 2(2), p.313-324.

- Sundem, G. L. (1999). The accounting education change commission: its history and impact (No. 15). Accounting Education Change Commission and American Accounting Association.
- Taylor, S. and Bogdan, R. (1998) Introduction to qualitative research methods: a guidebook and resource, New York: Wiley.
- Taylor, D. B., and Dixon, B. R. (1979). Accountants and accounting: a student perspective. *Accounting & Finance*, 19(2), 51-62.
- Taylor, M. S., Locke, E. A., Lee, C., and Gist, M. E. (1984). Type A behavior and faculty research productivity: What are the mechanisms?. *Organizational Behavior and Human Performance*, 34(3), 402-418.
- Telch, M. J., Bandura, A., Vinciguerra, P., Agras, A., & Stout, A. L. (1982). Social demand for consistency and congruence between self-efficacy and performance. *Behavior Therapy*, 13(5), 694-701.
- Terry, D. J. (1993). Self-efficacy expectancies and the theory of reasoned action. The theory of reasoned action: Its application to AIDS-preventive behaviour. *International series in experimental social psychology*, 28, p.135-151.
- Thiéry, M. (2009). Did You Say Debit? *AU-GSB e-JOURNAL*, 2(1).
- Thomas, J. W., and Rohwer Jr, W. D. (1986). Academic studying: The role of learning strategies. *Educational psychologist*, 21(1-2), 19-41.
- Thomas, G, Tynon, W and Thomas, K. (1994) Communication apprehension, interpretative styles, preparation and performance in oral briefing, *The journal of business communication*, vol 31 (4), p311-317.
- Thompson, J.D. (1967) *Organisations in action*, New York: McGraw-Hill.
- Thomson, I., and Bebbington, J. (2004). It doesn't matter what you teach?. *Critical Perspectives on Accounting*, 15(4), 609-628.
- Tinker, T., Ciancanelli, P., Lehman, C. and Neimark, M. (1987, April). Accounting's Regressive Hypothesis: Disciplining Labor Processes With Social Accounting in the US, 1968–1986. In Presented at the American Accounting Association Annual Meeting.
- Tinker, T. and Koutsoumadi, A. (1998). The accounting workplace: a joyless future. In *Accounting Forum* Vol. 21, No. 3, p. 289-316.

- Tourangeau, R. Rasinski, K.A. (1988) Cognitive processes underlying context effects in attitude measurement: *Psychological bulletin*, 103. Pp 299-314.
- Tourangeau, R.L., Rips, J. and Rasinski, K. (2000). *The Psychology of Survey Response*. New York: Cambridge University Press.
- Tourangeau, R. Singer, E, Presser, S. (2003) Context effects in attitude surveys: Effects on remote items and impact in predictive validity: *sociological methods and research* Vol 31, No 4, pp486-513.
- Tourna, E. and Hassall, T. (2006) Constructing and validating an instrument for measuring and validating attitudes towards the accounting profession, *The South European Review of Business Finance and Accounting*, 4(2), pp 5 – 33.
- Trigwell, K., and Prosser, M. (1991). Improving the quality of student learning: the influence of learning context and student approaches to learning on learning outcomes. *Higher education*, 22(3), 251-266.
- Trist, E.L (1976) Engaging with large scale systems. In A.W. Clark (ed.) *Experimenting with organizational life: the action research approach*. London: Plenum .
- Truan, F., and Hughes, H. (2000). Tradition or enlightenment: philosophical choice in accounting academia. *Journal of Accounting Education*, 17(1), 23-34.
- Tucker, M. L., and McCarthy, A. M. (2001). Presentation self-efficacy: Increasing communication skills through service-learning. *Journal of Managerial Issues*, 227-244.
- Tuckman, B. W. (1965) Developmental sequence in small groups. *Psychological bulletin* 63.6 p. 384.
- Turney, B. and Robb, G. (1971) *Research in Education*, Hinsdale, Illinois: The Dryden Press.
- Twenge, J. M. (2006). *Generation Me: Why today's young people are more confident, assertive, entitled—and more miserable than ever before*.
- Ulinski, M., and O'callaghan, S. (2002). A comparison of MBA students' and employers' perceptions of the value of oral communication skills for employment. *Journal of Education for Business*, 77(4), 193-197.

- Urbach, N., and Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *JITTA: Journal of Information Technology Theory and Application*, 11(2), 5.
- Usher, R. (1997). Telling a story about research and research as story-telling: Postmodern approaches to social research. *Social Research and Educational Studies Series*, 16, 27-41.
- Vangermeersch, R. (2000) Fifty reasons for the decline in the quantity and quality of accounting majors. *The CPA Journal* 70.1, p.52.
- Velayutham, S. and Rahman, A. (2000). Towards market differentiation in the accounting profession: The case of Australia and New Zealand. *Critical Perspectives on Accounting*, 11(6), p.691-711.
- Vidich, A.J, Lyman, S.M (2000) *Qualitative Methods: Their Social History in Sociology and Anthropology*, in Denzin, N.K, Lincoln, Y.S (2000)*Handbook of Qualitative Research (2nd Ed)*, London:Sage.
- Visser PS, Krosnick JA, Marquette J, CurtinM. 1996. Mail surveys for election forecasting? An evaluation of the Columbus Dispatch poll. *Public Opin. Q.* 60:181-227.
- Violette, G., & Sanders, J. (2004) Helping Students Identify Opportunities in the Accounting Profession. *The CPA Journal*, 74(11), p.68.
- Wainwright, D. (1997). Can sociological research be qualitative, critical and valid?. *The qualitative report*, 3(2), 1-17.
- Walker, M. (2004) Recovering Accounting: an economic perspective, *Critical Perspectives on Accounting*, 15, p519-527.
- Wallace, R. A., and Wolf, A. (1999). Peter Berger and Thomas Luckmann: The Social Construction of Reality. *Sociological Theory, Expanding the Classical Tradition*,, 276-283.
- Warner, S. L. (1965). Randomized response: A survey technique for eliminating evasive answer bias. *Journal of the American Statistical Association*, 60(309), 63-69.
- Watkins, D. (1983). Depth of processing and the quality of learning outcomes. *Instructional Science*, 12(1), 49-58.

- Watson, A. and Munroe, E. (1990) Academic achievement: A study of relationships of IQ, communication apprehension, and Teacher perception, *Communication Reports*, vol 3(1), p28-36.
- Watts, M. Ebbutt, D. (1987) More than sum of the parts: research methods in group interviewing. *British educational research journal*,13, pp 25-34
- Watts, R., and Zimmerman, J. (1986). *Positive theory of accounting*. Englewood Cliffs, NY: Prentice-Hall.
- Weber, M. (1927) *General Economic History*, New Brunswick, NJ: Transaction Books
- Weiner, B. (1972) *Theories of motivation*. Chicago: Markham.
- Weis, W. L. (1990). What's going on in business schools?. *Strategic Finance*, 71(11), 49.
- Wells, J. (1970) A study of the effects of systematic desensitization on the communicative anxiety of individuals in small groups.
- Wells, P., Gerbic, P., Kranenburg, I. and Bygrave, J. (2009) Professional Skills and Capabilities of Accounting Graduates: The New Zealand Expectation Gap? *Accounting Education: an international journal*, 18(4-5), p403-420.
- Wenzlaff, V. J. (1972). *The prediction of leadership: A consideration of selected communication variables*. Unpublished master's thesis, Illinois State University Normal.
- Werts, C. E., Linn, R. L., and Jöreskog, K. G. (1974). Intraclass reliability estimates: Testing structural assumptions. *Educational and Psychological measurement*, 34(1), 25-33.
- Wheeless, L. R. (1971). *Communication apprehension in the elementary school*.
- Wheeless, L. R., and Scott, M. D. (1976, April). The nature, measurement and potential effects of receiver apprehension. In meeting of the International Communication Association, Portland, OR.
- Whitley, R. (1988) The Possibility and Utility of Positive Accounting Theory, *Accounting, Organisations and Society*, pp 631-645.
- Wiggin, M. (1997). Bridging the gap between theory and practice. *Reflecting on University Teaching Academics Stories*, 249-258.

- Wigley III, C. J. (1995). Disclosiveness, willingness to communicate, and communication apprehension as predictors of jury selection in felony trials. *Communication Quarterly*, 43(3), 342-352.
- Wilder, M.H. and Stocks, W.M.(2004) Are Accounting Graduates Favourably Recruited for Entry Level Management positions? *Management Accounting Quarterly*, 5(3), p1-28.
- Wilensky, H. L. (1964). The professionalization of everyone?. *American journal of sociology*, p.137-158.
- Williams, D. Z. (1993). Reforming accounting education. *Journal of accountancy*, 176(2), p.76.
- Williams,M., May, T.(1996) Introduction to social research. London: UCL Press.
- Williams, P. F. (2001). Who gets to speak and what must they say?: a commentary on the Briloff affair. *Critical Perspectives on Accounting*, 12(2), 213-219.
- Williams, P. F. (2004). Recovering accounting as a worthy endeavor. *Critical Perspectives on Accounting*, 15(4), 513-517.
- Willmott, H. (1986) Organising the profession: a theoretical and historical examination of the development of the major accountancy bodies in the UK. *Accounting, Organizations and Society*, 11(6), p.555-580.
- Wilson, F., Kickul, J. and Marlino, D. (2007). Gender, entrepreneurial Self - Efficacy, and entrepreneurial career intentions: Implications for entrepreneurship Education1. *Entrepreneurship theory and practice*, 31(3), p.387-406.
- Wiltse, E. (2006) Using writing to predict students' choice of majors, *Journalism and Mass Communication Educator*, vol 61(2), p179-194.
- Wissmiller, A. P. and Merker, G. E. (1976). Communication apprehension, social distance, and interpersonal judgments in small groups. In *Speech Communication Association convention*, San Francisco.
- Wolcott, S. K., and Lynch, C. L. (1997). Critical thinking in the accounting classroom: a reflective judgment developmental process perspective. *ACCOUNTING EDUCATION-GREENWICH-*, 2, 59-78.
- Wold, H. (1980). Model construction and evaluation when theoretical knowledge is scarce. In *Evaluation of econometric models* (pp. 47-74). Academic Press.

- Wold, H. (1985). Partial least squares. Encyclopedia of statistical sciences.
- Wolk, C. and Nikolai, L. A. (1998). Personality types of accounting students and faculty: Comparisons and implications. *Journal of Accounting Education*, 15(1), p.1-17.
- Wolpe, J. (1958). *Psychotherapy of. Reciprocal Inhibition*.
- Wolpe, J. (1966). *The conditioning and deconditioning of neurotic anxiety*. Anxiety and Behavior, Academic Press, New York.
- Wolpe, J. (1974) *The practice of behaviour therapy*, New York: Pergamon Press.
- Wood, R. and Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. *Journal of personality and social psychology*, 56(3), 407.
- Woodward, J (1965) *Industrial organization: Theory and practice*. New York: Oxford University Press.
- Wrench, J., Brogan, S., McCroskey, J. and Doreen, J. (2008) Social communication apprehension: The intersection of communication apprehension and social phobia, *Human Communication*, Vol 11 (4), p409-430.
- Wright, S. (1921). Correlation and causation. *Journal of agricultural research*, 20(7), 557-585.
- Wyatt, A. R. (2004). Accounting professionalism-They just don't get it!. *Accounting horizons*, 18(1), p.45-53.
- Wygol, D. E., and Stout, D. E. (1989). Incorporating writing techniques in the accounting classroom: Experience in financial, managerial and cost courses. *Journal of accounting education*, 7(2), 245-252.
- Zaid, O. and Abraham, A. (1994) Communication skills in accounting education: Perceptions of academics, employers, and graduate accountants. *Accounting Education*, 3(3), 205-221.
- Zeff, S. A. (2003). How the US accounting profession got where it is today: Part I. *Accounting Horizons*, 17(3), 189-205.
- Zerbe, W.J., Paulhus, D.L. (1987) Socially desirable responding in organizational behavior: a reconception. *Academy of Management Review*, vol 12, pp250-264.

Zikmund, W.G. (2003). *Business Research Methods*, 7th Ed. Thomson South-Western, Mason, OH and Great Britain.

Zimbardo, P. (1977). Shyness--the People Phobia. *Today's Education*, 66(1), 47-49.

Zimmerman, B. J. (2000) Self-efficacy: An essential motive to learn, *Contemporary Educational Psychology* 25, 82-91.

Zimmerman, B. J., Bandura, A., and Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American educational research journal*, 29(3), 663-676.

Zimmerman, B. J., and Schunk, D. H. (2003). *Albert Bandura: The scholar and his contributions to educational psychology*.

Zuker, E. (1983) *Mastering Assertiveness Skills*, New York, AMACOM.