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Communication apprehension and communication self-efficacy in accounting students

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INTRODUCTION

There has been a clear history of concern expressed by employers and professional bodies that the current accounting education process is failing to produce accountants who possess the requisite communication skills. This is not because of a lack of effort as there was early and clear recognition of the need for change but despite many efforts to remedy this problem the concern is still prevalent. Research has indicated that a barrier in the form of communication apprehension is apparent in many of the individuals who are attracted to careers in the accounting profession. In the current system of mass education of which accounting education is part individuals with high levels of communication apprehension are unlikely to receive treatments that would alleviate this problem.

A link is suggested to the concept of self efficacy which if established presents the possibility of a redirection in the process of communication skills development for accountants. The implications of this redirection are outlined and possibilities for future research identified.

THE CHANGING ROLE OF ACCOUNTANTS

The recent technological advances coupled with globalization means that accountants are increasingly being asked to work in a constantly changing complex and demanding environment (Parker 2001, Elliot and Jacobsen 2002) and this has brought about changes in the way accountants carry out their work (Holtzman 2004, Walker 2004, Palmer et al 2004). Software developments have in particular facilitated the allocation of increased focus on the interpretation of financial information and an increased involvement in strategic planning (Wilder and Stocks 2004, Olivier 2001). IFAC (2002) has also recognized this change commenting that the role of accountants is moving from that of transaction manager to communicator and strategist. The use of information technology has resulted in less emphasis on the preparation of accounts and an increasing focus on their communication. Harrington (2005) believes that in the future the role and contribution of

accountants in practice will continue to grow but that this will be dependent on their ability to meet the new demands by acquiring new skills. Accountants in business also recognize that change is occurring Russell et al (1999) observe that many management accountants have physically moved from the accounting department to be located in operating departments. They are increasingly working in cross-functional teams and are now more actively involved in decision making. This demands that management accountants spend more time communicating with people in their firm and that good interpersonal skills are essential for success. The role of the accountant is changing from the more traditional "bean counter" to that of a broad market orientated, business advisor and financial expert.

Howieson (2003) notes the confusion in future roles for accountants that a balance will have to be struck between being "generalists" and "specialists". Whilst working in a specific industry they will be required to have specialist knowledge of that industry and the ability to interpret information in the context of an organizations strategy. He goes on to state that in this new competitive environment accountants must position themselves as the "gurus" of knowledge management by thinking globally in a way that provides their clients with value added services. This will position them as the elite top advisors to businesses. This view is supported by Covalski et al (2003) who also stress the importance to the emerging accountant of knowledge management and the ability to use this to develop a holistic understanding of economic changes. There is a clearly established need to change the way in which accountants will approach their work in the future. This is in terms of the newer more value added activities such as long term strategic planning, customer and product profitability and process improvement. In order to do this consideration needs to be given to the skills that will be essential for future success.

THE SKILLS EXPECTATIONS GAP

The profiles of Financial Managers will need to change so that they are equipped to meet the challenges posed by the new environment. In order for future accountants to meet these challenges

there is substantial evidence that the development of communication skills will be vital. In order to assume these new roles, finance managers of the future will need to possess strong communication skills, the ability to interpret complex financial data and a broad knowledge of global economic markets and cultural issues (IFAC 2002). A major US survey of management accounting by Siegel and Sorenson (1999) notes the changing role of management accountants. Their survey also asked employers to identify the most important knowledge, skills and abilities necessary for success. These were; communication (oral written and presentation) skills, ability to work on a team, analytical skills, a solid understanding of accounting and an understanding of how a business functions. In order to respond to the changing environment and to react to employers' requirements, the specific needs of the employers must be identified. These findings are consistent with the recent findings of Palmer et al (2004) in a professional practice context.

This process has been ongoing for many years professional and academic associations, predominantly in the USA, have through published reports and statements made public their views of the desired profile of a professional accountant (AICPA 1969, 1987, 1988, 1992, 2001, AAA 1986, Arthur Andersen and Co et al 1989, AECC 1990, Common Content Project 2011, IFAC 1994, 1996, 2010, UNCTAD 1998). Perhaps the most consistent finding to have arisen from these statements is the increasing importance given to non-accounting capabilities and skills. Research carried out by Albrecht and Sack (2000) indicated agreement between educators and practitioners on which skills are the most important. The three skills identified by both educators and practitioners were written communications, analytical/critical thinking and oral communications. Geographically there is a consensus on the importance to the future accounting profession of communication skills. Diamond (2005) in the USA, Hassall et al (2003 & 2005) and Arquero et al (2001 & 2007) in a European context, from an Australian perspective Kavanagh et al (2008), De Lange (2006), Jackling and De Lange (2009) and from New Zealand Wells et al (2009), Gray (2010) Gray and Murray (2011). All these studies indicate the perceived importance of communication skills in terms of the desired capabilities for the recruitment of current and future accountants.

Various academic studies ranging from the very early; Andrews and Sigbang (1984), Novin and Pearson (1989), Novin, Pearson and Senge (1990), LaFrancois (1990; 1992), Bhamornsiri and Guinn (1991), Deppe, Sonderegger, Stice, Clark and Streuling (1991), Novin and Tucker (1993), Simons and Higgins (1993) through to the most recent mentioned above indicate the importance of communication skills to the future of the accounting profession. These studies also indicate the dissatisfaction with the level of communication skills evidenced by potential and actual members of the accounting profession. Despite knowing that communication skills competence needed to be developed the research suggests that the level of competence is still a major cause of concern (Graham et al 2009, Quible and Griffin 2007). And even though the efforts of academic practitioners Craig and McKinney (2010), Kerby and Romine (2009), Stoner and Milner (2010) and Sharifi et al (2009) a problem exists in the development of the required level of communication competence in the education and development of the accounting profession.

BARRIERS TO COMMUNICATION DEVELOPMENT

Notwithstanding the importance of communication skills, Smythe & Nikolai (1996) note that relatively little is known about the effectiveness of the instruction that students complete, or the obstacles that student's face when attempting to develop their communication abilities (Stanga & Ladd 1990). One of the major obstacles to communication skills development may be communication apprehension (CA). McCroskey (1984) defines CA as "an individual's level of fear and anxiety associated with either real or anticipated communication with another person". Individuals who are apprehensive about participating in communicative situations are less able to communicate effectively. Richmond and McCroskey (1989) described people who had high levels of communication apprehension as being afraid to communicate and, because it is natural to avoid things they fear, as being 'quiet'. Communication apprehension is a widely researched area. Payne and Richmond (1984) found nearly a thousand studies in the area.

Current thinking in communication has indicated a split between communication apprehension and communication development. There are clear conceptual differences between the two: individuals

may overcome their apprehension and then go on to develop in terms of communication skills. There are indications, for example Allen and Bourhis (1996) and Spitzberg and Cupach (1984), 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. Boorum, Goolsby and Ramsey (1998) argue that communication apprehension is not a communication competence, but a low level of apprehension is considered to be a necessary, but not sufficient condition, for achieving communication competence

Research has focused on the consequence for the individual and organisations of this communication phenomenon. McCroskey et al. (1976a) and McCroskey and Richmond (1976) identified that there is a major effect on the perceptions of others that are affected by the failure to communicate by an apprehensive individual. There are then several implications for the apprehensive communicator in individual and group situations. The level of an individual's communication apprehension may shape the overall nature of their interpersonal relationships. McCroskey et al. (1976a) indicated that individuals with high levels of communication apprehension tend to be less interpersonally attractive and attracted to others. This may lead to individuals being less likely to be welcomed as a member of a task-orientated group. The volume and quality of contribution is important in terms of membership acceptance. Borgatta & Bales (1956) and Riecken (1958). Sorenson & McCroskey (1977) found that communication apprehension was a significant indicator of small group interaction.

There is evidence to suggest that the effect that communication apprehension has on interpersonal relationships may influence education, recruitment and professional development. In the traditional educational system based on a lecture/seminar approach, communication apprehension may not create a significant problem. However where voluntary student participation, such as group work, is required McCroskey and Andersen (1976) reported that communication apprehension is a factor that influences the attitude of individuals.

Comment [JLAM1]: the references are separated from the quote, so we don't know where they should go

There is not a problem of correlation between apprehension levels and intelligence: McCroskey and Andersen (1976) used a wide range of personality and intelligence measures but found no evidence of a relationship with communication apprehension. However, high levels of communication apprehension may lead to avoidance behaviours such as sitting at the back of classrooms, choosing modules that do not require participation/interaction, and not seeking tutor assistance. These behaviours will restrict the relationship between student and tutor, hinder the recognition of the student's progress and needs, and may impair educational performance (Fordham and Gabbin 1996). In fact, results of research (Allen y Bourhis, 1996; Arquero, Hassall, Joyce y Donoso, 2007; Bourhis and Allen, 1992; Gardner, Milne, Stringer and Whithing, 2005; McCroskey and Andersen, 1976; Spitzberg and Cupach, 1984, among others) indicate a significant relationship between CA and academic performance, usually linked to writing CA.

Specifically within an accounting context, Stanga and Ladd (1990) concluded that accounting majors in the USA appear to have above average levels of oral communication apprehension (OCA). Research by Simons, Higgins and Lowe (1995) on USA students confirms this finding for OCA and also reported written communication apprehension (WCA). Further studies, Arquero et al. (2007), Elias (1999), Fordham and Gabbin (1996), also confirmed the high level of CA in accounting majors and emphasised the need for accounting educators to pay special attention to communication apprehension separate from, and in addition to, communication skills. Classroom interventions used by Ruchala & Hill (1994) achieved some success in reducing CA in accounting students. However, Aly & Islam (2003) conducted a longitudinal study that found no significant differences in the levels of CA in students entering and leaving an accounting course.

Traditionally, the most common method used by organisations when selecting new employees is to interview them. It is likely that individuals with high levels of oral communication apprehension will experience difficulties in this situation (Bui and Porter, 2010; Daly et al. 1979). Ayers et al., (1993) found that existing employees with high levels of communication apprehension but otherwise as qualified in all other respects as their colleagues were less likely to be granted job interviews.

Comment [JLAM2]: These paragraphs appear unconnected. the arguments that link them should be more explicit and are not about barriers to development, but about consequences of CA

Daly & McCroskey (1975), Daly and Miller (1975) found evidence that communication apprehension was significantly related to the perceived desirability of certain professions. A major problem could occur if student's perceptions of the role of the accountant are such that those of them with high CA are attracted to the vocational area.

The two approaches to reducing CA are: pedagogic and behavioural. Pedagogic approaches to reduce CA focus on the use of pedagogical strategies such as restructuring programmes (Daly and Miller, 1975). These techniques are complex, contextual and again potentially resource intensive. There is little evidence of their success. Behavioural approaches include techniques such as systematic desensitisation (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 these techniques can reduce CA. The application of these techniques is normally on an individual basis by qualified practitioners. This is time consuming and resource intensive and is therefore inappropriate for 'mass' education.

A POSSIBLE LINK?

Hassall et al (2005B), (2006) identify the correlation between academic self-confidence and communication apprehension in accounting students. Students who have high levels of communication apprehension exhibit low levels of academic self confidence. This is supported by Allen and Bourhis (1996) and McCroskey et al (1976) who found relationships between high levels of communication apprehension and negative academic performance. This has resonance with Bandura (1977, 1986, 1997) who linked confidence and achievement in his concept of self efficacy. Self-efficacy has been recognized as a construct in career choice (Ackerman et al 2011, Hackett and Lent 1992, Lent and Hackett 1987) and specifically in accounting (James 2008, Tourna and Hassall 2006). The findings indicate that undergraduates choose degree courses and career areas in which they feel most competent and avoid those in which they believe they are less competent.

Self-efficacy as identified by Bandura (1977) proposes that an individual's self-belief is a critical force in determining achievement. Self-efficacy is defined as the levels of confidence individuals have in their ability to execute courses of action or attain specific performance outcomes. Self-efficacy is an individual's self-belief in their ability to achieve a specific outcome. This is both individual and context specific. This self-belief is independent of the skill requirement to actually achieve the specific outcome. If the individual's self-efficacy is substantially below the skill required then this will become a major barrier to development in that contextual area.

Efficacy expectations are proposed to influence task selection and the effort expended in task completion. Self-efficacy as defined by Bandura is seen as both individual and contextual. Basically 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. Conversely, people with self-efficacy that is significantly above their actual ability can lead to difficulties. A self-efficacy level a little above actual ability seems optimum in that it encourages individuals to attempt tasks and therefore gain experience.

A large body of research in different discipline areas has substantiated these findings. Initially in medical and clinical fields for example, phobias (Bandura 1983), stress (Jerusalem and Mittag 1995) and addiction (Marlatt et al 1995). Educational research has also developed in several distinct areas. Academic self-efficacy has been developed as a predictor of academic performance (Pajares 1996). This approach has also been used in an accounting context (Christensen et al 2002). As indicated previously in the choice of study discipline and career choice and in the area of the self-efficacy of academics themselves Schoen and Winocur (1988).

SEARCHING FOR THE LINK: objectives and methodology

As indicated above, many research studies have identified that accounting students have higher levels of communication apprehension than students in other careers, or in comparison with national norms. Unfortunately there appears to be no interventions that can help to reduce this phenomenon in the context of the mass education system in which accounting education operates. The suggested link between communication apprehension and self-efficacy may provide the insight needed to develop effective techniques to improve the communication skills of potential and existing accountants.

This paper carried out a study to search for a link between communication apprehension and communication self-efficacy. The study investigated accounting undergraduate students at a UK university. The instrument used had two sections. Firstly it was based on two communication apprehension questionnaires: the Personal Report of Communication Apprehension (PRCA-24) developed by McCroskey (1984) to measure oral communication apprehensionⁱ (OCA) and the WCA-6 (Arquero, Fernandez, Hassall & Joyce, 2012), a short instrument developed from the Daly and Miller (1975) writing CA measure. The resulting instrument allows two main measures to be calculated: one each for OCA and WCA. The OCA score consists of two basic constructs: formal settings (represented and explained as interview and presentation situations), and informal settings (represented and explained as conversation and group discussion situations). Secondly there was a questionnaire to measure communication self-efficacy. This had been developed using the guidelines set out by Bandura (2006). It was designed to measure two constructs: oral communication self-efficacy, and written communication self-efficacy. Oral communication self-efficacy and written communication self-efficacy are each divided into two subsections of communication context and communication skills as shown in Figure 1.

Figure 1: Constructs in the questionnaire

Communication apprehension		Written CA
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	Oral CA	Formal settings	Presentations
			Interviews
		Informal settings	Conversation
			Group
Communication self confidence	Written SC	Context	
		Technical	
	Oral SC	Context	
		Technical	

Cronbach's alpha values for the resulting CA scales range from 0.73 for the reduced WCA scale to 0.85 for the presentation scale. The reliability for the self-efficacy scales range from 0.818 to 0.922. These values are within the range that is considered to be acceptable.

These questionnaires were completed by 228 undergraduate students from a UK university. The population was made up of 57 per cent male students and 43 per cent female students. The students were all on a three year accounting degree.

Communication apprehension scores that are high indicate a reluctance to engage in communication whereas low communication self-efficacy scores also indicate a lack of confidence to engage in communication. Two separate statistical approaches were used to try to identify any prospective connection between these two concepts: a correlation analysis and then cluster analysis by CA profile.

Results

The results of the correlation analyses for efficacy are shown in table 1 for WCA and in tables 2 and 3 for OCA. It can be seen in table 1 that strong negative correlations exist between written CA and written self-efficacy. Both correlations are significant at 1 per cent level but the connection seems to

be stronger with the technical aspects of written communication. The results also show that there is a strong relationship between the self-efficacy divisions of “context” and “technical”.

Table 1: WCA and written self-efficacy correlations

		Written SE context	Written SE technical
Written CA	Pearson corr. coef.	-0.475	-0.518
	Sig. (2 tails)	0.000	0.000
Written SE context	Pearson corr. coef.		0.520
	Sig. (2 tails)		0.000

N: 228

The pattern of strong, significant relationship between CA and self-efficacy measures is also present for oral communication (table 2). The strongest correlations are between the formal measure of CA and both self-efficacy scores.

Table 2: OCA and oral self-efficacy correlations

		OCA informal	OCA oral	Oral SE context	Oral SE technical
OCA formal	Pearson corr. coef.	0.564	0.904	-0.623	-0.540
	Sig. (2 tails)	0.000	0.000	0.000	0.000
OCA informal	Pearson corr. coef.		0.863	-0.502	-0.496
	Sig. (2 tails)		0.000	0.000	0.000
OCA	Pearson corr. coef.			-0.641	-0.588
	Sig. (2 tails)			0.000	0.000
Oral SE context	Pearson corr. coef.				0.708
	Sig. (2 tails)				0.000

N: 228

Table 3 shows the breakdown of OCA into the sub-divisions of formal (interview and presentation) and informal (conversation and group) oral communication apprehension and the resulting correlations with oral self-efficacy. The results in table 3 show that the strong relationship between CA and self-efficacy is driven by the apprehension for “presentation”.

Table 3: OCA sub-divisions and oral self-efficacy correlations

		Interview	Conversation	Presentation	Oral SC context	Oral SC technical
Group	Pearson corr. coef.	0.445	0.580	0.429	-0.474	-0.444

	Sig. (2 tails)	0.000	0.000	0.000	0.000	0.000
Interview	Pearson corr. coef.		0.486	0.570	-0.475	-0.372
	Sig. (2 tails)		0.000	0.000	0.000	0.000
Conversation	Pearson corr. coef.			0.426	-0.418	-0.438
	Sig. (2 tails)			0.000	0.000	0.000
Presentation	Pearson corr. coef.				-0.617	-0.569
	Sig. (2 tails)				0.000	0.000

N: 228

In order to reinforce the results obtained by the correlation analysis a second methodology, cluster analysis, was applied. To undertake the cluster analysis cases were assigned to separate groupings according to their scores in certain variables. Using the scores recorded for formal / informal oral communication apprehension and written communication apprehension two groups were defined: one group being the students who reported high communication apprehension and the other being those with low communication apprehension. Average scores by these groupings is shown in table 4. The results of ANOVA test indicate that both groups are statistically different in terms of CA scores.

Table 4: Cluster splits

	Cluster		Anova
	High CA	Low CA	Sig.
CA formal	43.76	31.00	0.000
Written CA	17.16	14.40	0.000
CA informal	32.17	23.99	0.000
n	104	124	

As indicated in table 5, both groups present significant differences in communication self-efficacy scores.

Table 5: Communication self-efficacy by Cluster

	Cluster	N	Mean	Std. Deviation	t-test sig
Written SC context	High CA	104	55.539	9.751	0.000
	Low CA	124	60.710	8.007	
Written SC technical	High CA	104	58.394	9.968	0.000
	Low CA	124	63.040	8.242	
Oral SC context	High CA	102	47.343	9.801	0.000
	Low CA	124	59.798	7.74	
Oral SC technical	High CA	104	49.327	10.731	0.000

Low CA	123	61.024	7.491
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Students allocated to the low communication apprehension cluster tend to present higher communication self-efficacy scores. Both approaches therefore indicate a strong inverse relationship between the two concepts of communication apprehension and communication self-efficacy scores in total and also in their individual and corresponding components.

DISCUSSION

As previously mentioned several studies have noted the apparent connection between communication apprehension and self-efficacy. A study was carried out to establish if there was a possible link between communication apprehension and self-efficacy. It would be expected that an individual with high levels of communication apprehension would exhibit low levels of communication self efficacy. The population of accounting undergraduates sampled mirrored the previous findings of gender and progression differences in the two separate areas of communication apprehension and self efficacy. The two separate statistical tests to identify the connection between the two concepts both indicated the existence of a strong relationship between the two. This was shown not only in the overall relationship between communication apprehension and self efficacy but also equally strongly in their constituent components. The existence of this relationship is important because it provides a possible development in terms of understanding the barrier to the development of communication skills but also a possible redirection in considering a possible direction for to alleviate and remove the barrier.

Indications in this respect are provided by Bandura (1986) who identifies the sources of self-efficacy beliefs in individuals. He believes that the most influential source is enactive mastery. Bandura identifies three elements that describe enactive mastery experiences; the event is real (non-simulated), the individual concerned directly experiences a sense of success in performing the action and the event is seen as contributing to the attainment of an overarching immediate or long-term

goal. It follows that individual's measure and interpret their performance and those experiences interpreted as successes raise self-efficacy those interpreted as failures erode self-efficacy. The more difficult the task, as perceived by the individual concerned, the greater the increase in self-efficacy. Levels of task based self-efficacy become established so initial failures have a greater adverse effect than later failures. A weaker but important source of self-efficacy belief is vicarious experience. This is where an individual observes a peer succeed at a task which in turn can strengthen the individual's belief in their own abilities. Schunk (1987) has demonstrated the importance of models in this context. Credible feedback can be an important source of verbal persuasion. This is a weaker source of self-efficacy belief than those above but persuaders can play an important part in building self-efficacy belief but it must also be noted that negative persuasions can have an erosive effect. An individual's emotional state can also influence self-efficacy beliefs. A positive approach can be beneficial whilst anxiety is a strong undermining factor. These sources of self-efficacy beliefs need to be considered carefully in terms of pedagogic approaches that can be used in accounting courses and specifically in communication situations.

CONCLUSION

This is a preliminary study and it should be the basis for further research. Further research is necessary in terms of sample size. The study need to be extended in terms of universities and the extension to countries other than the UK. It would be good 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 problems such as engineers. Future research might also focus on a clearer definition of the specific factors underlying and creating the experienced levels of self-efficacy. This could ultimately lead to research focusing on approaches to removing the barriers to communication development.

Comment [JLAM3]: those are future extensions, could be better placed at the end, along with the possible limitations

The potential relationship between communication apprehension and self efficacy highlights three key areas that are important in the recruitment and development of the accounting profession of the future. Firstly both communication apprehension and self efficacy have examined vocational or career choice there are clear indications that a choice will be influenced by avoidance. Individuals who perceive their skill levels as low in a specific area will choose to avoid careers in areas that they perceive as having a high requirement for that specific skill. There is research evidence that suggests that accounting is in certain instances being chosen as a career because it is perceived as having a low level of requirement for communication skills. This is entirely inconsistent with the current reality of ever increasing levels of communication skills requirement. It is clear that there is a difference between the image of accounting held by the accounting profession and the image of the accounting profession held by those influencing and subsequently those making the career choice decision to become an accountant. The accounting profession needs to reconcile these differences in its image. Accounting as a profession needs to engage in implementing a change of image to influence vocational decision makers and the individuals that influence their decision making. This will mean that they will understand the importance to future accountants of having and maintaining a high level of communication competence.

The effect of changing the image of accounting will probably take several years before this is established with vocational decision makers and their influencers. In the meantime and to a lesser extent in the future the barrier to communications skill development will continue to exist. Until we know exactly how it becomes established in an individual it we cannot start to mediate its effect. There also exists the possibility that individuals could develop a barrier to communication at any point in their career. Here is identified another potential research area. Establishing the cause of this barrier possibly by qualitative research methodology could create the possibility of effective removal of the barrier.

Finally, consideration needs to be given to incorporating into the pedagogy of accounting education, especially in those areas involving the development of communication skills, approaches that

increase self-efficacy. Research needs to be carried out particularly on how enactive attainment can be managed, how vicarious experience can be used and how feedback can be improved to achieve the goal of increased self-efficacy in our students. Accounting educators and researchers need to refocus on identifying pedagogic methods that will help to remove any barriers to communication skills development that exist or develop in our future accounting profession.

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Notes

ⁱ Further information on psychometric characteristics of PRCA could be found in Leary (1991: 161 on).