



The face of the phone: studies of public and private mobile-phone use

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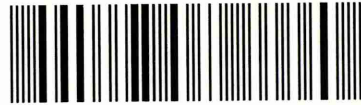
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The Face of the Phone: Studies of Public and Private Mobile-Phone Use

Eleanor Grace Lockley

**A thesis submitted in partial fulfilment of the requirements of
Sheffield Hallam University
for the degree of Doctor of Philosophy**

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Table of Contents

1	Introduction to the Face of the Phone	1
1.1	Ubiquity in context.....	2
1.2	Aims and objectives	9
1.2.1	Aims and objectives of Study 1: public mobile phone use.....	9
1.2.2	Questions for Study 1: Public use of the mobile phone	10
1.2.3	Aims and objectives of Study Two: private use of the mobile phone.....	10
1.2.4	Questions for Study Two: Private use of the Mobile Phone	11
1.3	Some justifications for researching mobile phone use	11
1.4	Thesis Design	13
1.5	Focus of the thesis	15
2	Literature review for mobile phone use in public.	17
2.1	Introduction	17
2.2	Managing the remote and co-local simultaneously	19
2.2.1	Summary	23
2.3	Goffman and the mobile phone	24
2.3.1	Performance.....	25
2.3.2	Face engagements.....	27
2.3.3	Civil inattention.....	28
2.3.4	Impression management.....	28
2.3.5	Self defence mechanisms	29
2.3.6	Involvement shields.....	29
2.3.7	Focused and unfocused interaction	30
2.3.8	Main and side involvements.....	31
2.3.9	Social norms: singles and withs	32
2.3.10	Boundaries.....	33

2.3.11	Summary	34
2.4	Use of Goffman and related ideas in mobile phone literature.....	35
2.4.1	Humphrey's.....	35
2.4.2	Persson	38
2.4.3	Ling	40
2.4.4	Summary	42
2.5	Multiple roles and the mobile phone.....	42
2.5.1	Summary	46
2.6	Mobile phones, norms, annoyance and inappropriate use.....	47
2.6.1	Summary	51
2.7	Conclusion.....	52
3	Literature review for mobile phone use in private.....	56
3.1	Introduction	56
3.2	Text messaging.....	57
3.2.1	Summary	65
3.3	Emotion and the mobile phone.....	66
3.3.1	Summary	72
3.4	Constant connectivity.....	73
3.4.1	Summary	77
3.5	Sharing the mobile	78
3.5.1	Summary	79
3.6	Conclusion.....	79
4	Methods.....	82
4.1	Introduction	82
4.2	Online questionnaire – mobile phone use in public	83
4.2.1	Processes and practicalities	84

4.2.2	Pilot questionnaire.....	84
4.2.3	Problems with the pilot questionnaire	85
4.2.4	Explanation of the questionnaire.....	86
4.2.5	The questionnaire sample.....	90
4.2.6	Advantages and disadvantages of the online questionnaire	91
4.3	Observations for mobile phone use in public.....	92
4.3.1	Ethical considerations.....	95
4.3.2	Processes and practicalities	96
4.4	Photographs.....	100
4.4.1	Processes and practicalities	101
4.5	Ethics.....	102
4.6	Questionnaire – mobile phone use in private	103
4.6.1	Processes and practicalities	104
4.6.2	Explanations for the questionnaire questions.....	105
4.6.3	Sample.....	107
4.7	Semi-structured interviews.....	108
4.7.1	Problems with the focus groups	108
4.7.2	Pilot interviews.....	109
4.7.3	Interviews – processes and practicalities.....	110
4.7.4	The interview questions.....	111
4.7.5	Sample.....	113
4.8	Conclusion.....	114
5	Data Analysis observations – mobile phone use in public	117
5.1	Introduction	117
5.2	Single user behaviour	118
5.2.1	Key findings	119
5.2.2	Summary	128

5.3	Dyad behaviour	129
5.3.1	Key findings	130
5.3.2	Summary	135
5.4	Group dynamics	136
5.4.1	Key findings	136
5.4.2	Summary	142
5.5	Indoor phone use	143
5.5.1	Key Findings	143
5.5.2	Summary	148
5.6	Outdoor phone use	149
5.6.1	Key findings	149
5.6.2	Summary	154
5.7	Locations	155
5.7.1	Key findings	155
5.7.2	Summary	158
5.8	Conclusion.....	159
5.8.1	Singles	159
5.8.2	Dyads.....	160
5.8.3	Groups	161
5.8.4	Indoor places	161
5.8.5	Outdoor spaces	162
5.8.6	Locations	163
6	Data Analysis questionnaire mobile phone use in public.....	165
6.1	Introduction	165
6.2	General phone use	168
6.2.1	Thinking about an average day, how many texts do you think you SEND?	168
6.2.2	Thinking about an average day, how many texts do you receive?	171

6.2.3	How many phone calls on average do you make per day?.....	173
6.2.4	How many phone calls on average do you receive per day?.....	174
6.2.5	On an average day, how many calls would you say you answer in public?.....	176
6.2.6	On an average day, how many calls would you say you make in public?	178
6.2.7	Summary	180
6.3	Patterns of mobile phone use in public	181
6.3.1	If you were with a group of people in a public place would you answer a phone call?	181
6.3.2	If you were with a group of people in a public place would you make a phone call?	184
6.3.3	If you were with one other person in a public place - would you answer a phone call?	186
6.3.4	If you were with one other person in a public place - would you make a phone call?	187
6.3.5	Summary	188
6.4	Management strategies for public phone use	188
6.4.1	When in a group situation have you ever split your conversation between a person on the phone and the people present in the group?	188
6.4.2	When with one other person, have you ever split your phone conversation between the other person on the phone and the person in your company?	190
6.4.3	Under which of the following circumstances would you reject an incoming call?	193
6.4.4	In which of the following places would you reject an incoming call?	196
6.4.5	When receiving an incoming call in public have you ever done any of the following actions?	200
6.4.6	Summary	204
6.5	Social norms and acceptance of public mobile phone use	205
6.5.1	Have you ever listened to or overheard a mobile phone conversation in public?.....	205
6.5.2	Generally do you feel embarrassed by hearing other people's mobile phone conversations?	206
6.5.3	Generally, do you mind if people can overhear your mobile phone conversation when in public?	208

6.5.4	In your opinion is it generally acceptable to use mobile phones in public?	210
6.5.5	Do you ever get annoyed when other people use their mobile phones in public?211	
6.5.6	Please indicate which of the following actions you think you would find annoying about other people's mobile phone use in public?	213
6.5.7	Do you think that people should use any etiquette rules when using a mobile phone in public?	218
6.5.8	Generally would you consider it rude to use your phone whilst in the company of others?	218
6.5.9	Generally would you consider it rude if someone else was using their phone in the presence of your company?	218
6.5.10	Have you ever checked your phone for messages or missed calls even though the ring tone is turned on and it hasn't sounded?	220
6.5.11	Do you turn off your phone when you go to sleep?	223
6.5.12	Do you believe that everyone should own a mobile phone?	224
6.5.13	Summary	225
6.6	Conclusion.....	226
7	Data Analysis - mobile phones in private interactions.....	230
7.1	Interviews	230
7.2	Attachment to the phone.....	231
7.2.1	Losing the mobile phone	234
7.2.2	Summary	237
7.3	Socio-emotional texts.....	237
7.3.1	Summary	242
7.4	Texting mishaps?.....	243
7.4.1	Texting a person by mistake: sending a text message about the person in question to the person.	243
7.4.2	Pretending to text a person accidentally.....	246
7.4.3	Summary	249
7.5	The good: How SMS are used to support and maintain relationships.....	250

7.6	The Bad: How SMS use can hinder relationships	256
7.7	The Ugly: Ending a relationship via text message	260
7.7.1	Summary	262
7.8	Emotional reactions to mobile phone use.....	264
7.8.1	Positive emotion.....	264
7.8.2	Negative Emotion.....	266
7.8.4	Summary	268
7.9	Mobile phones and dating	268
7.9.1	The waiting dating game	268
7.9.2	Initiating dates	272
7.9.3	Developing relationships.....	274
7.9.4	Meeting new people	276
7.9.5	Summary	278
7.10	Conclusion.....	279
8	Data Analysis questionnaire mobile phones in private interactions.....	281
8.1	Introduction	281
8.2	Emotion and the mobile phone.....	283
8.2.1	Excitement.....	283
8.2.2	Happiness	284
8.2.3	Pleasure	285
8.2.4	Contentment	287
8.2.5	Stress	288
8.2.6	Anxiety.....	289
8.2.7	Sadness.....	292
8.2.8	Annoyance.....	294
8.2.9	Summary	296
8.3	Relationships and the mobile phone.....	297

8.3.1	On an average day, how many times do you text your partner?.....	298
8.3.2	On an average day, how many phone calls do you make to your partner?	299
8.3.3	Sending and receiving text messages to a partner / loved one has made me feel happy.	300
8.3.4	Sending and receiving text messages to a partner / loved one has made me feel excited.	302
8.3.5	In the past I have used my mobile phone to initiate a relationship (e.g. through a text conversation).	304
8.3.6	In the past I have arranged 'dates' by using my mobile phone.	306
8.3.7	Using my mobile phone to text allows me to develop relationships a lot easier when I first start dating.....	308
8.3.8	I or someone I know has had a friendship / relationship ended by text message in the past	310
8.3.9	I have kept / saved text messages from a partner / loved one.	312
8.3.10	Summary	314
8.4	Socio-emotional contexts and the mobile phone.....	315
8.4.1	My mobile phone allows me to text things I would not normally say if I was face-to-face with a person.	315
8.4.2	I once told a current partner / previous partner my first true feelings for them via a text message.....	317
8.4.3	A current partner / previous partner once first told me their true feelings for me via a text message.....	319
8.4.4	I have phoned up a partner / friends / family to tell them 'I love them' when drunk after a night out.	321
8.4.5	I have text a partner / friends / family to tell them 'I love them' when drunk after a night out.....	322
8.4.6	Summary	325
8.5	Conclusion.....	325
9	Discussion.....	329
9.1	Research aims.....	329
9.2	Mobile phone use in public	332

9.2.1	Interaction management	332
9.2.2	Management of the remote and co-local	332
9.2.3	Co-local and Remote Interaction Management Model.....	333
9.3	Management strategies for single behaviour.....	334
9.4	Management strategies for dyad interaction.....	335
9.4.1	Dual front interaction	336
9.4.2	Three-way talk.....	336
9.4.3	Flight	336
9.4.4	Civil inattention.....	336
9.5	Management strategies for group interaction	337
9.5.1	Dual front interaction	337
9.5.2	Three-way talk.....	337
9.5.3	Flight	338
9.5.4	Other strategies.....	338
9.6	Interaction management and multiple roles	339
9.7	Interaction management and Goffman	339
9.7.1	Face management	340
9.7.2	Impression management.....	340
9.7.3	Performance.....	340
9.7.4	Main and Side involvement.....	340
9.7.5	Civil inattention.....	341
9.7.6	Singles	341
9.7.7	Involvement shields.....	341
9.7.8	Boundaries.....	342
9.8	Interaction management and age.....	342
9.9	Interaction management and user type.....	344
9.10	Interaction management and gender.....	345
9.11	Indoor locations / contexts	346

9.12	Outdoor spaces / contexts.....	347
9.13	Interaction management and etiquette and social norms.....	348
9.14	Acceptance and the mobile phone.....	348
9.15	Annoyance and the mobile phone	350
9.16	Public phone use and opinion.....	350
9.17	Study One conclusive comments	351
9.18	Mobile phone use in private	352
9.19	Relationship management	353
9.20	Face management.....	353
9.21	Emotion and the mobile phone.....	355
9.22	Attachment to the phone.....	357
9.23	Constant connectivity	358
9.24	Socio-emotional context.....	359
9.25	Socio-emotional texts.....	361
9.26	Role of text messaging	362
9.27	Private use and social factors	363
9.27.1	Age	363
9.27.2	User type	364
9.27.3	Gender	364
9.28	Private use and etiquette and social norms.....	365
9.29	Study Two conclusive comments.....	366
9.30	Conclusive comments.....	366
9.30.1	Future work	368
Bibliography		370

The Appendices can be found in the disk attached

1. Copy of the pilot questionnaire (Study One)
2. Copy of questionnaire (Study One)

2(a) Results for emotion and the mobile questions

3. Observation Notes
4. Observation photo examples
5. Pilot Focus group design
6. Interview design
7. Interview transcripts
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10
 - 11
8. Copy of questionnaire (Study Two)

List of Figures

Figure 1.1 Mobile phone compared with fixed line use 1999 - 2003	3
Figure 1.2 Mobile voice call volumes 2002 - 2007	4
Figure 1.3 Mobile messaging volumes 2002 - 2007	4
Figure 1.4 Monthly outbound messages per mobile connection.....	5
Figure 1.5 Take up of fixed and mobile services	5
Figure 1.6 Monthly outbound minutes per fixed line 2002 - 2007	6
Figure 1.7 Predicted figures for fixed and mobile use for 2009 - 2014.....	7
Figure 5.1 'Single' phone user adopting closed positions whilst on the phone.....	119
Figure 5.2 'Single' phone user adopting closed positions whilst on the phone.....	120
Figure 5.3 'Single' phone user crossing arms whilst on the phone.....	120
Figure 5.4 'Single' phone user crossing arms whilst on the phone.....	121
Figure 5.5 'Single' phone user crossing legs whilst on the phone.....	121
Figure 5.6 'Single' phone user crossing legs whilst on the phone.....	122
Figure 5.7 'Single' phone users walking and texting.....	123
Figure 5.8 'Single' phone user texting.....	124
Figure 5.9 'Single' phone user texting.....	124
Figure 5.1 'Single' phone user looking to the ground whilst on the phone.....	125
Figure 5.11 'Single' phone user looking down whilst texting on the phone.....	126
Figure 5.12 Phone user sitting and playing with their phone.....	127
Figure 5.13 'Single' phone user playing with their phone.....	128

Figure 5.14 A non-phone user adopting 'civil inattention' whilst the phone user is talking on the phone	130
Figure 5.15 A dyad interacting without the remote person's knowledge.....	133
Figure 5.16 The phone as the centre of the dyads attention.....	134
Figure 5.17 Phone users sharing the contents of their phones.....	137
Figure 5.18 Phone user calling whilst in a group.....	138
Figure 5.19 Phone user calling whilst in a group.....	138
Figure 5.20 Group member using the phone to talk and also adopting a closed position.....	140
Figure 5.21 'Single' phone user using closed body language.....	143
Figure 5.22 'Single' phone user using closed body language.....	144
Figure 5.23 Phone user using open body language.....	145
Figure 5.24 Phones displayed on a table in a bar.....	145
Figure 5.25 Phone displayed on a table in a pub.....	145
Figure 5.26 Phone user conducting a call in a doorway.....	147
Figure 5.27 Phone users walking and talking on their phones	150
Figure 5.28 Phone user leaning up against a shop doorway.....	151
Figure 5.29 Phone user leaning up against a wall and speaking on the phone.....	152
Figure 5.30 Phone user pacing and talking on the phone.....	153
Figure 5.31 Phone user kicking the wall whilst talking on the phone.....	153
Figure 6.1 A graph to show age and number of texts sent	170
Figure 6.2 A graph to show age and number of texts received	172
Figure 6.3 A Graph to show age and number of calls made per day	174

Figure 6.4 A graph to show age and the number of phone calls received per day	176
Figure 6.5 A graph to show age and the number of calls answered in public	178
Figure 6.6 A graph to show age and the number of calls made in public	179
Figure 6.7 A graph to show age and answering calls in a group in public	183
Figure 6.8 A graph to show age and the number of calls made in a group in public ...	185
Figure 6.9 A graph to show user type and splitting a phone conversation in a group ..	189
Figure 6.10 A graph to show age and splitting a conversation when with one other person	192
Figure 6.11 A graph to show gender and annoyance at texting during a serious conversation	194
Figure 6.12 A graph to show gender and walking away from a group to answer a call	201
Figure 6.13 A graph to show age and walking away from one person to answer a call	203
Figure 6.14 Age and walking away from a group to make a call	204
Figure 6.15 A graph to show age and embarrassment by other's mobile phone conversations	207
Figure 6.16 A graph to show age and overhearing mobile phone conversations	209
Figure 6.17 A graph to show age and annoyance of other people's mobile phone use	212
Figure 6.18 Age and checked phone even though it's not sounded	222
Figure 6.19 Age and turned phone off	224
Figure 8.1 Age and Happiness	285
Figure 8.2 Age and Pleasure	286
Figure 8.3 User type and Stress	289

Figure 8.4 Gender and Anxiety	290
Figure 8.5 User type and Anxiety	291
Figure 8.6 A graph to show Gender and Sadness	292
Figure 8.7 Age and Sadness	293
Figure 8.8 Age and Annoyance	295
Figure 8.9 User type and Annoyance	296
Figure 8.10 Age and average calls made to partner	299
Figure 8.11 User type and average calls made to partner	300
Figure 8.12 Age and Happiness at SMS with Partner	302
Figure 8. 13 Excitment at SMS with Partner	303
Figure 8.14 A graph to show age and using phone to initiate a relationship	304
Figure 8.15 A graph to show user type and using phone to initiate a relationship	306
Figure 8.16 A graph to show age and arranging dates using a mobile phone	307
Figure 8.17 A graph to show age and phone allowing the development of relationships	309
Figure 8.18 A graph to show age and ending relationships	311
Figure 8.19 A graph to show user type and ending relationships	312
Figure 8.20A graph to show age and saving text messages	313
Figure 8.21 A graph to show age and texting things wouldn't say face-to-face	316
Figure 8.22 User type and declaring true feelings via a text message	318
Figure 8.23User type, current partner declaring true feelings via text message	320
Figure 8.24 Age and partner declaring true feelings via text message	321
Figure 8.25 User type and drunken texts	323
Figure 8.26 A graph to show age and texting feelings when drunk	324
Figure 9.1 Co-local and Remote Interaction Management Model	333

List of Tables

Table 1.1 Communications available since 1800.....	3
Table 4.1 Time line for data collection for Study One and Two.....	83
Table 4.2 Existing literature and the questionnaire design.....	87
Table 4.3 Locations and times of observations	94
Table 4.4 Existing literature and the questionnaire design.....	105
Table 6.1 User type and Age	168
Table 6.2 User type and number of texts sent	169
Table 6.3 Gender and number of texts sent.....	169
Table 6.4 Age and number of texts sent.....	169
Table 6.5 User type and number of texts received	171
Table 6.6 Gender and number of texts received.....	171
Table 6.7 Age and number of texts received.....	171
Table 6.8 User Type and number of calls made.....	173
Table 6.9 Age and number of calls made.....	173
Table 6.10 User type and number of calls received	174
Table 6.11 Age and number of calls received.....	175
Table 6.12 User type and number of calls answered in public.....	176
Table 6.13 Age and number of calls answered in public	177
Table 6.14 Age and the number of calls made in public	179
Table 6.15 Age and calls answered when in a group	182
Table 6.16 Age and making calls when in a group	184
Table 6.17 Age and answering a call when with one other person	186
Table 6.18 User type and splitting a phone conversation in a group.....	188
Table 6.19 Age and splitting a mobile phone conversation when in a group.....	190
Table 6.20 Age and splitting a phone conversation when with one other person	191
Table 6.21 User type and reject call in a quiet environment.....	193

Table 6.22 Gender and reject call in a quiet environment.....	193
Table 6.23 Gender and reject call in noisy environment.....	194
Table 6.24 Gender and reject call during a serious conversation.....	194
Table 6.25 Age and rejection if a person could over hear.....	195
Table 6.26 User type and reject in mobile-free zone.....	196
Table 6.27 Gender and reject a call in a mobile free zone	196
Table 6.28 Gender and reject a call in a restaurant	197
Table 6.29 Age and reject a call in a park.....	197
Table 6.30 Age and reject a call in a cafe	198
Table 6.31 User type and reject in a cinema	199
Table 6.32 Gender and reject in a cinema.....	199
Table 6.33 Usertype and reject a call in a theatre.....	200
Table 6.34 Gender and reject a call in a theatre	200
Table 6. 35 Age and walk away from one person to answer a call	202
Table 6. 36 Age and walking away from a group to make a call	204
Table 6.37 gender and overhearing conversations	206
Table 6.38 Age and embarrassment at other people's mobile phone conversations.....	206
Table 6.39 Gender and overhearing mobile phone conversations.....	208
Table 6.40 Age and overhearing mobile phone conversations.....	208
Table 6.41 User type and phone use acceptable in public.....	210
Table 6.42 Age and phone use acceptable in public	210
Table 6.43 User type and annoyed by other people's mobile phone use	211
Table 6.44 Age and annoyance by other people's mobile phone use	211
Table 6.45 User type and texting whilst talking to others	213
Table 6.46 Age and texting whilst talking to others.....	213
Table 6.47 Gender and texting during a serious conversation	214
Table 6.48 User type and sharing a phone conversation	214
Table 6.49 Age and annoyed at splitting a conversation.....	214

Table 6.50 User type and texting when in company	215
Table 6.51 Age and texting when in company	215
Table 6.52 User type and annoyed by calling when in company	216
Table 6.53 Age and annoyed by calling when in company	216
Table 6.54 User type and annoyed at talking too loudly on the phone	217
Table 6.55 Age and annoyance at Loud talk	217
Table 6.56 Age and etiquette when using a mobile phone.....	218
Table 6.57 User type and etiquette when using a mobile phone.....	218
Table 6.58 User type and phone use rude whilst in company	219
Table 6.59 Age and phone use rude whilst in company.....	219
Table 6.60 User type and phone use rude in company.....	220
Table 6.61 Age and phone use rude in company.....	220
Table 6.62 User type and checked phone even though it's not sounded	221
Table 6.63 Age and checked phone even though it's not sounded	221
Table 6.64 Gender and checked phone even though it's not sounded	222
Table 6.65 User type and turn off phone.....	223
Table 6.66 Age and turned phone off.....	223
Table 6.67 User type everyone should own a mobile phone.....	224
Table 6.68 Age and everyone should own a mobile phone.....	225
Table 8.1 Gender and Excitement	283
Table 8.2 Age and Excitement	284
Table 8.3 Age and Pleasure.....	286
Table 8.4 User type and Pleasure	287
Table 8.5 Age and Contentment.....	287
Table 8.6 Age and Stress.....	288
Table 8.7 Age and Anxiety.....	290
Table 8.8 Age and Sadness.....	292
Table 8.9 Age and Relationships.....	297

Table 8.10 Age and texting partner.....	298
Table 8.11 User Type and calls made to partner.....	300
Table 8.12 Age and Happiness at SMS with partner.....	301
Table 8.13 Age and initiating relationship via the phone.....	304
Table 8.14 Age and arranging dates via the phone	306
Table 8.15 Age and developing relationships via SMS	308
Table 8.16 Age and relationship ended by text.....	310
Table 8.17 Age and saved text messages	312
Table 8.18 Age and texting	315
Table 8.19 Age and declaring true feelings via text message	318
Table 8.20 Age and declaring true feelings via SMS.....	320
Table 8.21 User type and drunken calling.....	322
Table 8. 22 Age and drunken calling	322
Table 8.23 Age and drunken texting	323

Abstract

The following thesis provides two studies which explore the social impact of the mobile phone on the public and private spheres. Study One focuses upon the interaction management strategies used by people in public contexts: singles; groups; dyads; indoor; and outdoor locations and shows that interaction management strategies are particularly used when phone users have to simultaneously manage their 'remote' and 'co-local' communication. The study consists of eighteen hour-long observations which focus upon how mobile phone interactions affect dyad and group behaviour, and an online survey which draws upon eight-hundred responses about patterns and opinions of public mobile phone use.

Study Two focuses upon the mobile phone as an affective device for communicating emotions and explores opinions about socially acceptable etiquette for the management of relationships via the mobile phone. This study focuses upon the socio-emotional contexts for private mobile phone use and looks at how people use their mobile phone to manage face in their personal relationships. Study Two makes use of data from eleven interviews and a nationally representative telephone survey gaining twelve hundred responses. The interview data presents several key themes: attachment to the phone; emotion and the mobile phone; socio-emotional use of the mobile phone; text messages in relationships; mobile phones as a method for facilitating and maintaining new dynamic 'always on' relationships. The survey data shows that mobile phones are affective devices for mediating emotion and are intrinsically linked to emotion.

The thesis draws on and develops ideas from Goffman's (1959, 1963) key works on interaction in public to help show how the phone is used in both the public and private spheres for interaction management, relationship management and face management. The thesis proposes and evaluates developments of Goffman's ideas so as to take into account the new contexts of interaction provided by mobile communications devices. In short, this research aims to present ordinary everyday occurrences of mobile phone use. In doing so, it will show that mobile phone use in both the public and private spheres is an extension upon existing social interactions.

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1 Introduction to the Face of the Phone

'In a phrase, I want to show that the mobile age is not rendering our society into some new form, it is, rather, enabling the same patterns that have been in existence for quite some time to evolve in small but socially significant ways. The changes are about finessing ordinary, everyday social processes that too many researchers tend to ignore for fear that they are just too little to worry about. The world is indeed changing, but it is doing so in small ways. Though they are small, they are no less consequential for being so' (Harper, 2003 p.3).

The above quote sums up the essence of this thesis. This research aims to present ordinary everyday occurrences of mobile phone use in public and private spheres. In doing so, it will show that mobile phone use is an extension upon existing social interactions. The aim of this thesis is therefore to adapt existing concepts to the use of mobile phone technologies.

The following chapter provides a brief overview of the uptake of the mobile phone. It presents data which contextualises how prolific the device is today and how quickly it's become a ubiquitous commodity. By demonstrating the mobile phone's ubiquity, this research becomes partially justified: there is a distinct need for sociological data on and around the subject of mobile phone use.

This thesis consists of two studies. 'Study One' addresses mobile phone use in public whilst 'Study Two' concerns private mobile phone use. Study One draws upon data from:

- An online survey which gained 800 responses about patterns and opinions of public mobile phone use.
- Eighteen one-hour observations of public mobile phone use.
- 200 photographs capturing people using their phones in public places.

Study Two derives from:

- A national telephone survey gaining 1200 responses.

- Data from eleven interviews about people's private mobile phone use.

Existing theory from Goffman (1959, 1963) will help to show how the phone is used in both the public and private spheres for interaction management, relationship management and face management.

This research provides a large amount of primary data concerning public and private mobile phone use. Whilst it makes use of several existing studies (Humphrey's 2005, Vincent 2005) it also explores some new areas of study such as day-to-day socio-emotional contexts for example, and drunken mobile phone use in Study Two. This research supports existing research in the field but also expands upon existing smaller scale studies (Ling 1997, Humphreys 2005, Vincent 2005). It takes Goffman's (1959, 1963) concepts of behaviour in public and adapts them to fit socio-technical contexts.

A clear list of the aims and objectives for both Studies One and Two is provided in section 1.2. The chapter continues by providing some justifications for studying mobile phone use in section 1.3. The thesis design will be then be outlined in section 1.4. However before presenting the thesis literature and data, it is necessary to place the impact the mobile phone has had on the UK into context. The following section provides data which shows how rapidly the mobile phone has penetrated the UK market.

1.1 Ubiquity in context

The mobile phone is a relatively new medium for communication in the history of telecommunication. Table 1.1 shows there are now more media available than ever before in the history of human communication. Although the mobile phone is one of many new media the graphs on the following pages show that it is a key device within the UK telecommunications market.

Date	Communications available
<1800	Face-to-face, Speech, Letter, Telegrams (Visual)
1800-1850	Face-to-face, Speech, Letter, Telegrams (Visual and Electronic)
1850-1900	Face-to-face, Speech (Radio and Telephone), Letters, Telegrams (Visual and Electronic), Faxes (analogue)
1900-1970	Face-to-face, Speech (Radio, Telephone and Recorded), Letters, Telegrams, Faxes (analogue), Television
1970-Present	Face-to-face, Speech (Radio, Telephone, Recorded, Video Phones and Mobile Phones), Letters, Faxes (analogue and digital), Television, E-mail, Online Chat SMS, Multimedia, Virtual Worlds....

Table 1.1 Communications available since 1800

Figure 1.1 shows the growth of mobile phone use compared with fixed line use from 1999 to 2003. Ownership grew from 29% to 75% within five years.

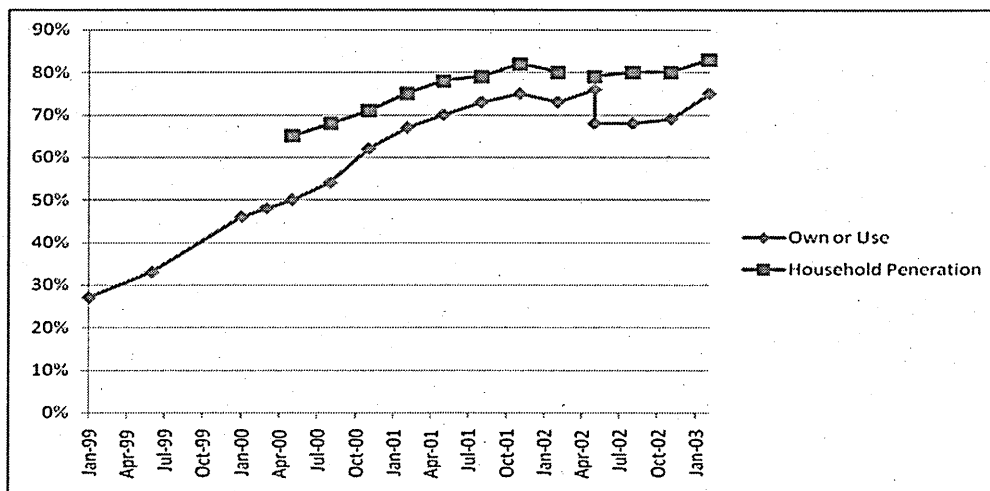


Figure 1.1 Mobile phone compared with fixed line use 1999 - 2003

The UK Ofcom 2008 report highlights the penetration levels of mobile phones in the UK and demonstrates further still how ubiquitous the technology is. According to Ofcom nearly 100 billion outbound mobile call minutes were made in 2007.

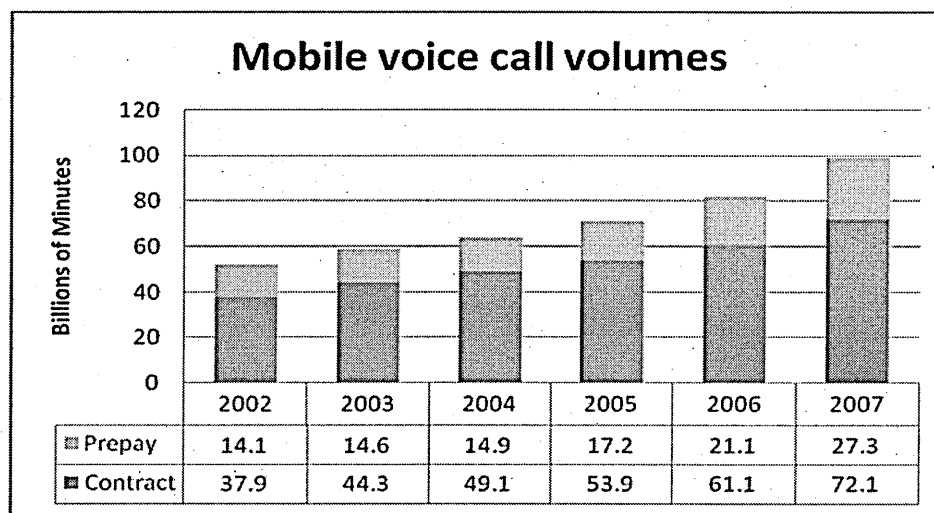


Figure 1.2 Mobile voice call volumes 2002 - 2007

There was also strong growth in messaging volumes in 2007, with the total number of outgoing short message service (SMS) and multimedia messaging service (MMS) messages increasing by 36% to 59.1 billion messages (see figure 1.3). Over 99% of these messages (58.8 billion) were SMS text messages. These figures show that as well as using mobile phone to call, text messages are an important method for communication.

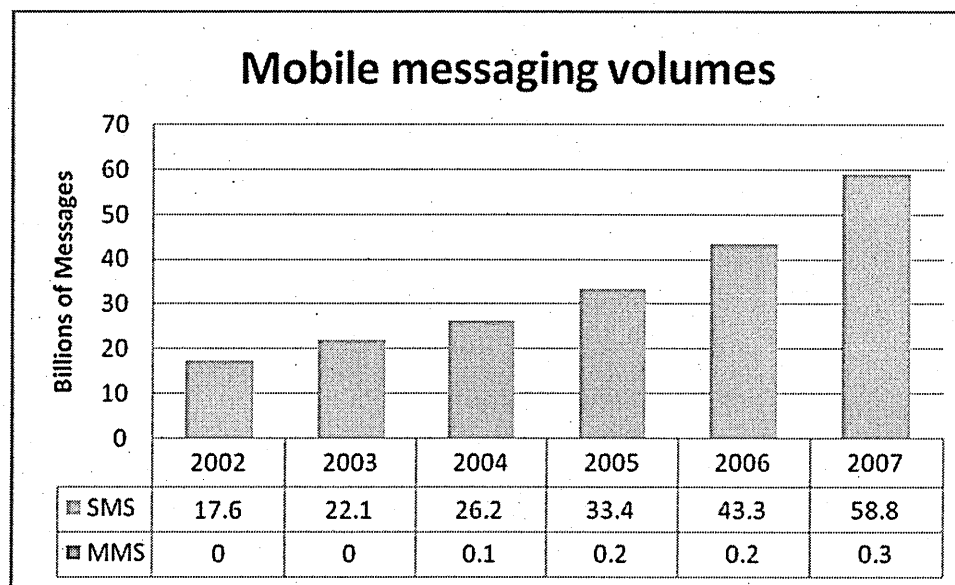


Figure 1.3 Mobile messaging volumes 2002 - 2007

The Ofcom report also suggests that SMS use rose by 28% per user. In 2007, an average of 68 text messages per month were sent from every UK mobile connection (see figure 1.4).

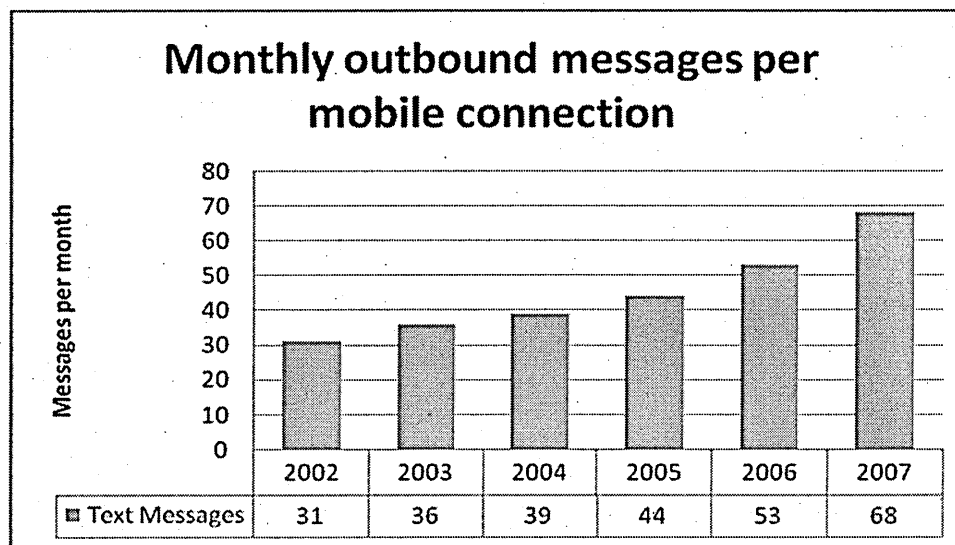


Figure 1.4 Monthly outbound messages per mobile connection

This data demonstrates how integrated mobile phone communication has become in the UK. To contextualise this information even more it is worth comparing statistics on the penetration levels for both the mobile phone and the telephone or what is now referred to as the landline or fixed line. Figure 1.5 shows that in 2007 twice as many people took up mobile services than fixed line services.

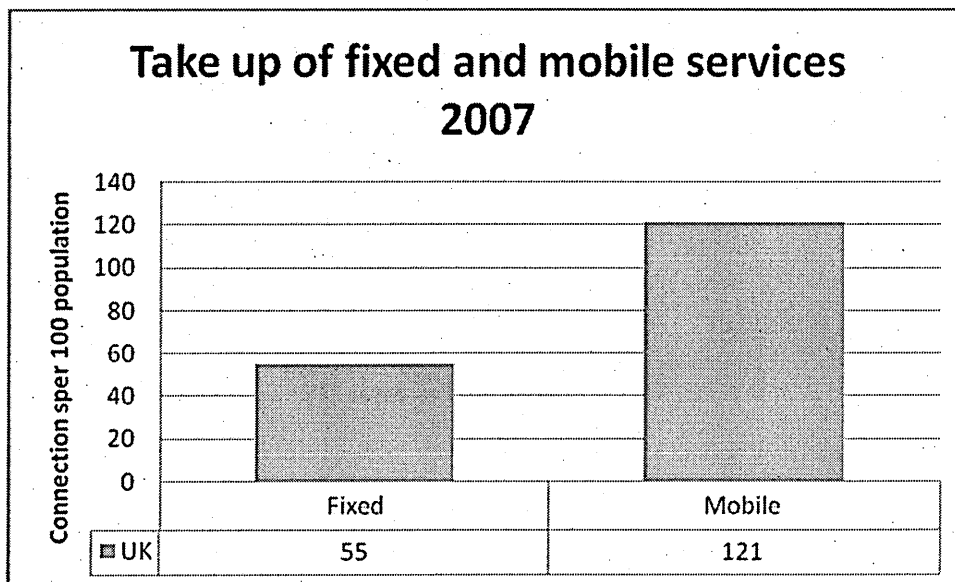


Figure 1.5 Take up of fixed and mobile services

Whilst Figure 1.6 shows the decline in use of the fixed line from 2002 to 2007.

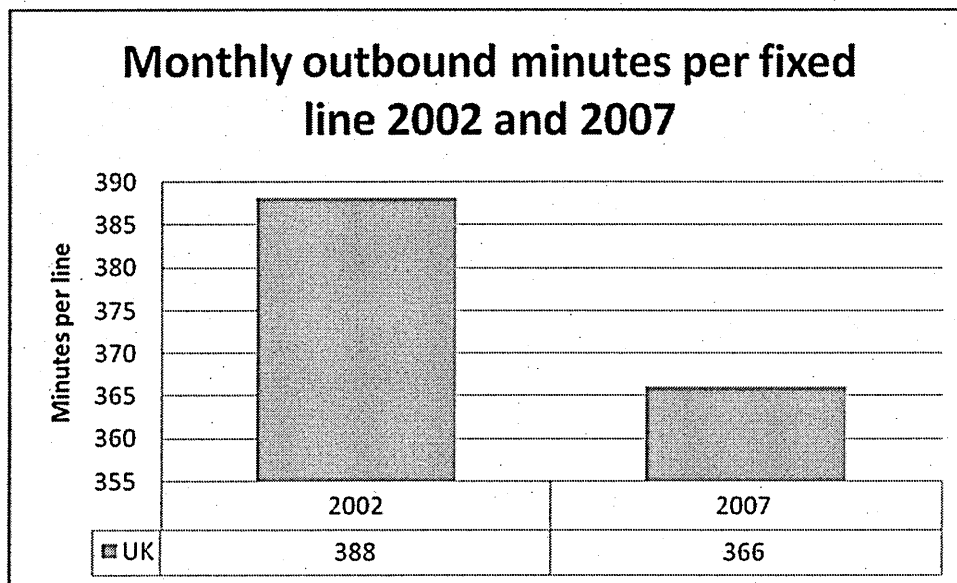


Figure 1.6 Monthly outbound minutes per fixed line 2002 - 2007

Clearly part of the success of the mobile phone compared with the landline is its ability to transcend time and space and this in turn effects context. This will be explored in Study One.

Statistics concerning current usage patterns for both the landline and the mobile phone show that the landline is falling in favour of the mobile phone. This raises the question about what people are using mobile phone for. This is explored in Study Two.

Graph 1.7 presents a prediction of mobile use compared with fixed line use for the next five years based on the existing data of mobile and landline use. It shows that mobile phone use will surpass fixed line use by 2011. What was once an elitist device which denoted wealth and had connotations associated with the business world is now a ubiquitous commodity with ownership spanning across gender, culture and class. It has become an option for alternative communication – no longer do people have to be ‘physically present’ or what this study terms ‘co-local’ in their communication; people are able to be and feel connected to ‘remotely’ present people using these small hand held devices.

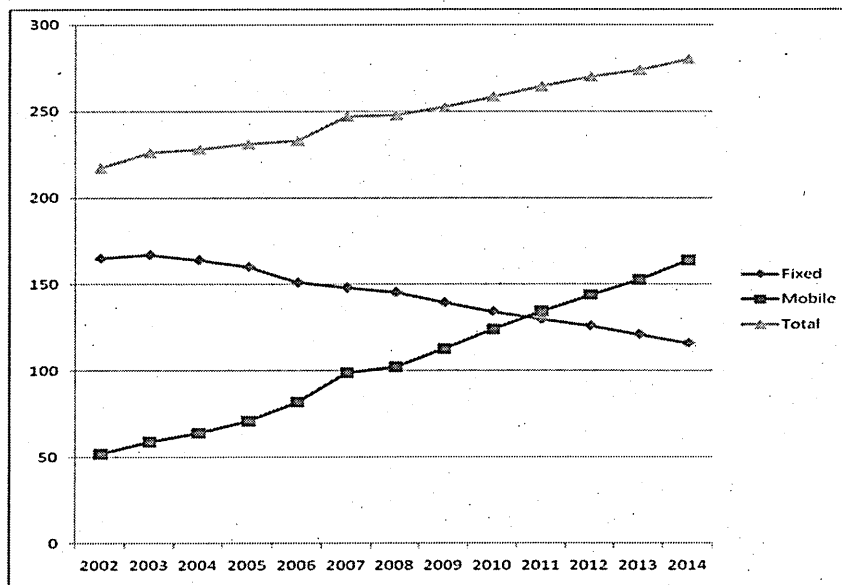


Figure 1.7 Predicted figures for fixed and mobile use for 2009 - 2014

The growth of mobile use has gone along side general growth in the use of Computer-mediated communication (CMC). Such media no longer have the inferior undertones in maintaining and developing relationships that it used to have. With this massive growth and yet distinct lack of UK research in the field, the mobile phone deserves some further sociological attention.

Since technology rapidly develops and progresses, research conducted on how people use the technology on a day-to-day basis can rapidly become dated. However if research about everyday mobile phone use is not conducted, in ten years time, when technology (and perhaps even social norms) has developed further, there will be no record about how it effected every day social life. Documenting how people use the technology on a day-to-day basis is therefore essential for future research. People's opinions, values, attitudes and norms are valuable now, so that future comparisons can be drawn, and changes macro and micro society in relation to mobile phone communication can be observed.

The rapid adoption rate of the mobile phone has been matched by a rapid advancement in the technology. Research in the field is also progressing and trying to keep-up with the latest impact engendered by the latest technology. However McGuigan's argument is applicable here:

'Use of the mobile phone is an immensely significant social and cultural phenomenon. However, market hype, and utopian dreams greatly exaggerate its importance. The fundamental issue for sociology is the process of change. Bound up with contemporary issues of change, the mobile phone is a prime object for sociological attention both at macro and micro levels of analysis' (McGuigan, 2005 p. 45).

Harper makes the following statement which whilst applicable, already seems slightly dated even five years on:

'On the communications side, even more research is needed than has been undertaken to date. After all, the user of mobile devices would find little difference between the devices they currently use and the fixed point telephone user of the 1930s and 40s. The only difference perhaps is the short text messaging service. And yet the possibility of human contact are inordinately rich and diverse' (Harper, 2004 p.3).

Clearly what the technology offers the user today differs dramatically from the land-line telephone. However Harper's statement shows how essential it is to keep recording and documenting the effects of mobile phone use.

It is important to note that communication by mobile phone is no less real for being so. Having relationships that are predominantly managed via a mobile phone, does not mean they are less significant or 'real'. The emotions people feel from the communication exchange, coupled with the content of the communication is as valid as face-to-face interactions; they are just projected through a different medium. The difference in medium does not imply that the level of face management is also different - just because there is no non-verbal communication to assess during an interaction, it does not mean there is any less face management. The engagement via the phone – either through calling or texting still involves the management of impression – and thus face management. The content and tone of a text message is still carefully thought about before being sent, and the tone and content of a phone call is still managed to ensure that it does not contradict existing roles and impressions.

It becomes necessary to analyse the interaction strategies people use to manage mobile- phone calls in the public domain. It is also useful to gauge people's perceptions of this 'additional' communication in the public sphere. It will be interesting to see to what extent the users are able to articulate/account for personal and group 'rules/conventions' around mobile phone practices in relationship work.

1.2 Aims and objectives

The aim of this thesis is to show that the mobile phone is simply another medium for interaction which opens up new contexts for communication. The mobile phone provides people with another means to communicate in both public and private.

This thesis will therefore present two studies. Study One focuses upon mobile phone use in public and Study Two focuses upon the private use of mobile phone use. The aims of Study One are:

- To gain attitudes and opinions of public mobile phone use
- To observe how people manage their phone use in public

This study will predominantly although not exclusively look at calling whilst Study Two will predominantly although not exclusively look at text messaging. The aims of Study Two are as follows:

- To gain perceptions of mobile phone use in the private domain
- To establish patterns of mobile phone use in the private domain

1.2.1 Aims and objectives of Study 1: public mobile phone use

Study One will make use of Goffman's (1959, 1963) concepts concerning public behaviour and will aim to show how the mobile phone fits into Goffman's approach. By applying Goffman's theory to the phone use – this will provide an extension of Goffman which fits into today's social norms in a technology driven sphere. Through observing people's mobile phone use in public, this study aims to find out how people manage both their remote (i.e. people on the phone) and co-local (i.e. people situated in the local environment) contacts simultaneously. The

survey data provides information about people's opinions about their own and other people's mobile phone use in public. The data analysis in Study One will aim to provide an analysis about the patterns in the data between user type, age and gender.

There are several key themes which are apparent in Study One:

- Goffman and the mobile phone.
- Interaction management strategies for the management of the co-local and remote contacts simultaneously.
- Etiquette and social norms – the opinions of acceptable public phone use.

1.2.2 Questions for Study 1: Public use of the mobile phone

- How do people manage their remote contacts and their co-local contacts simultaneously?
- What non-verbal cues do phone user's use to convey to others that they are on the phone?
- Are there any etiquette rules when using the phone in public when in the company of others?
- How do people manage the 'interruptions' mobile phone interactions create?
- What techniques are employed by the non-phone user when a mobile phone interrupts communication?
- Do people get annoyed when other's use their phones in public?

1.2.3 Aims and objectives of Study Two: private use of the mobile phone

By gathering interview data and survey data Study Two aims to gain an insight into, and document patterns of, people's use of their phone in private spheres. The study also aims to gain opinions about socially acceptable etiquette for the management of relationships via the mobile phone. Study Two gathered data about people's attachment to their phones and also about emotion and the mobile phone. Linked to these themes, the research focuses upon the socio-

emotional contexts for private mobile phone use and looks at how people manage face in their personal relationships using their mobile phone.

Study Two consists of the following key themes:

- Constant connectivity.
- Use of text messaging to facilitate and manage relationships.
- Goffman's face management.
- Attachment to the mobile phone.
- Emotion and the mobile phone.

1.2.4 Questions for Study Two: Private use of the Mobile Phone

- How is the mobile phone used to manage personal relationships?
- Are people attached to their mobile phones?
- Do people associate emotion with their mobile phone?
- How do people manage face using their mobile phone?

1.3 Some justifications for researching mobile phone use

This study makes use of Harper's (2004) notion: that the mobile phone is an additional medium for human communication. As Harper notes:

'Overall however, mobile telephony created an addition to people's lives rather than substitution of previously existing telephony and communication systems. The result was that mobile phones expanded what is called in the literature the 'ecology' of communications technologies, and in so doing became as important to work, family and personal life as the fixed phone and other communications system' (Harper, 2004 p.2).

Whilst there is a body of research surrounding mobile phone technology available, most of it has been conducted in Scandinavia, central Europe and Asia. Therefore with few studies concerning mobile phones in the UK it seemed appropriate to carry out research in the field.

Townsend suggests that there is little sociological data on mobile phone use and uses:

'The advent of inexpensive mass-produced mobile communications in particular, has avoided scholarly attention, perhaps because it seems pedestrian compared to the

nebulous depths of cyberspace. Yet the cellular phone, merely the first wave of an imminent invasion of portable digital communications tools to come, will undoubtedly lead to fundamental transformations in individuals' perceptions of self and the world, and consequently the way they collectively construct that world' (Townsend, 2000 p. 1).

There is still very little sociological research held or conducted on mobile phone use in comparison to its mass penetration. In addition to the need for empirical data. Geser notes that:

'On the theoretical level - this situation calls for the development of highly elaborated analytical concepts and typologies suited for grasping the major differences in usage patterns, as well as the various symbolic meanings attributed to mobile phones, messages and users; on the methodological level - it implies the need for survey studies, as well as ethnographic approaches, for assessing such variables empirically in quantitative as well as quantitative ways' (Geser, 2004 p.6).

Further to this Humphreys argued that:

"Further research needs to be conducted on the social uses and effects of wireless technologies on both a macro and micro level...The prevalence of cellphones in society calls for a better understanding of how this technology reflects social relations and process as well as how it influences them" (Humphreys, 2005 p.828).

The difficulty with mobile phone research is exactly what area to study. The implications and consequences of mobile phone use are so vast it is difficult to pin point exactly which area to research. Some studies have concentrated on teenager's use of the device (Weillenman and Larsson 2001, Taylor and Harper 2003,) whilst others have analysed text message use (Reid and Reid 2004, Hoflich 2006, Retti 2006). Yet many of the articles written about mobile phones are aimed at a commercial audience. There is academic literature available but little holds substantial empirical evidence and rather consists of author's opinions and general overviews of patterns and practise of mobile phone use. That is not to say it is less valuable, rather that UK research in this field is a little thin on the ground.

Harper (2003) explains that changes in society are indeed observable in our current social landscapes - but not quite as dramatic as some sociologists would believe. Generally people will not think about their behaviour in terms of micro and macro interactions – they may not even think about why or how they use their phones – or the impact their own use has on other people's behaviour. The penetration levels of the mobile phone in the UK clearly show that they have had a massive impact upon society. Therefore it is imperative that people's every day mobile phone behaviour is observed, analysed and documented. Especially since the mobile phone has become a ubiquitous object, to the point where it's almost taken for granted and has blended into everyday social activity. The mobile phone is no longer a device for the elite – it is a commodity for all. The 'perpetual contact' that the mobile brings to people challenges, and provides opportunities for the construction and maintenance of identities.

This thesis presents the data collected about public and private mobile phone use and adapts existing concepts to mobile phone interactions. Without being 'paradigm shifting,' this thesis takes inspiration from Harper (2003) to show that micro mobile phone interactions, although small are no less significant for being so.

1.4 Thesis Design

The thesis consists of eight chapters. The first two chapters address literature from existing studies of mobile phone use. Chapter Two provides a literature review which explores several key concepts relevant to public mobile phone use: managing 'remote' and 'co-local' interactions; managing multiple roles and the mobile phone; social norms, etiquette and inappropriate use. In particular, several of Goffman's (1959, 1963) key concepts concerning behaviour in public are applicable and can be adapted to fit public mobile phone interactions. The chapter concludes that a key concept in public mobile phone use is the management of the remote and co-local interactions simultaneously, and Goffman is particularly useful in this context.

Chapter three concerns the literature pertinent to private mobile phone use. Several topics are addressed to gain an insight into the existing studies in the field:

- Text messaging
- Emotion and the mobile phone
- Constant connectivity
- Sharing the mobile

This chapter highlights the importance of Goffman's concepts from Chapter Two and shows that the mobile phone is intrinsically linked to emotion, attachment, and is an important source of constant connectivity for the users.

The methods employed for the data collection for Studies One and Two are discussed in Chapter Four. The processes and practicalities are described for four methods: online questionnaire; observations (including photographs); telephone survey; and interviews.

Chapter's Five to Eight provide a data analysis for the data gathered from each of the methods employed. Chapters Five and Six consider the data for Study One and Chapters Seven and Eight consider the data for Study Two.

Chapter Five presents the observational data. The results from a set of eighteen observations are analysed and the observed patterns of public phone use are established. This chapter contains several examples of the photographs collected of public mobile phone use. This chapter shows that there are interaction management strategies for phone use in 'single' dyad and group contexts.

Chapter Six analyses the online survey data. Cross tabulation analysis are conducted on the survey questions using user type, age, and gender as measures. Opinions of public use and patterns of public use are established from the data. This chapter shows that age particularly affects people's patterns and opinions of public mobile phone use.

Chapter Seven analyses the interview data. Eleven interviews are analysed and several key themes within the data are presented:

- Attachment to the phone

- Emotion and the mobile phone
- Socio-emotional use of the mobile phone (including texting whilst drunk and texting "mishaps")
- Text messages in relationships
- Mobile phones as a method for facilitating and maintaining new dynamic 'always on' relationships.

Excerpts from the interview transcriptions are provided as examples throughout the chapter and the full transcripts can be found in Appendix 7.

The telephone survey data is analysed in Chapter Eight. The chapter is split into several sections: emotion and the mobile phone; relationships and mobile phone use; socio-emotional contexts and the mobile phone. The data is categorized by age, gender and user type and is presented in tables and graphs. This chapter shows that mobile phones are affective devices for mediating emotion and are intrinsically linked to emotion. The mobile phone can be a key tool for managing personal relationships.

A detailed discussion is presented in Chapter Nine for both Studies One and Two. It shows that there are a number of key issues for both public mobile phone use and private mobile phone use. This chapter provides some conclusive comments and recommendations for future research in the field.

1.5 Focus of the thesis

Overall the thesis focuses upon three forms of management via the mobile phone:

- Interaction Management (how people manage their remote and co-local communication simultaneously).

- Relationship Management (how people use their mobile phone to manage and maintain their personal relationships and how people set up and maintain new dynamic 'always on' social relations).
- Face Management (how people manage face in public interaction management and private relationship management).

These themes appear in both studies. Study One makes use of interaction management and face management for everyday mobile phone use. It establishes several interaction management strategies for managing multiple roles in front of both the 'remote' and 'co-local' contacts simultaneously. Study Two makes use of relationship management and face management for private mobile phone use.

Goffman's (1959, 1963) concepts of behaviour in public are applied throughout the thesis and this research shows that Goffman can be updated to fit the social norms which exist in today's technologically driven sphere. Furthermore interaction management, face management and relationship management all impact upon one another and effect both public and private use.

Study One draws upon data from an online survey about patterns and opinions of public mobile phone use and eighteen one-hour observations of public mobile phone use. Study Two derives from a national telephone survey and data from eleven interviews about people's private mobile phone use. Before the data for each of the studies is presented and analysed, Chapters Two and Three provide an overview of the existing literature relevant to Studies One and Two. The literature for Study One will be reviewed in the following chapter.

2 Literature review for mobile phone use in public

'Mobile phones also result in more private behaviours in public spaces than ever before, with gradually fewer boundaries to acceptance of where and when people can use their mobile phone' (Harper, 2004 p.6).

2.1 Introduction

The following chapter discusses academic and other literature relating to people's management of the mobile phone in public places. This literature underpins Study One on public mobile phone interactions. This chapter aims to show that Goffman's (1959, 1963) work is still relevant to today's social interactions. The chapter will also review existing literature that examines mobile phone use in public. It will examine the relevance of prior research and will highlight issues relevant to Study One.

A key issue within this chapter is the concept of 'virtual' communication and 'physical' communication; that is the remote communication and the co-located communication that occurs as a result of making and receiving calls when in the presence of others in public. How people manage the two types of communication at once is addressed. At any point during an interaction a mobile phone contact can 'interrupt' on going 'co-local' communication and the 'remote' interaction takes precedence. The phone user is left to then manage the interruption of the co-local communication, and manage the remote communication in front of the co-located person. People's management of calls in public is more easily recognisable, and mobile phone conversations are more intrusive to the co-local interaction and the surrounding environment than SMS. Therefore the mobile phone use in public study will focus upon, but is not exclusive to the making and taking of calls.

There is also a growing body of academic and commercial research literature on mobile phone use which will be reviewed in the following sections. However although the mobile phone is a global phenomenon, there are few extensive UK based academic studies of the use of mobile

phone technology, both generally and more specifically on mobile phone use in public. This suggests it is necessary to conduct research of this nature. Humphreys notes:

"Further research needs to be conducted on the social uses and effects of wireless technologies on both a macro and micro level...The prevalence of cell phones in society calls for a better understanding of how this technology reflects social relations and process as well as how it influences them" (Humphreys, 2005 p.828).

There are however several accessible commercial research studies, (Plant 2001, Crabtree et al 2003, Harkin 2003, Fox 2006) and a small number of UK academic studies about the device and its social effects (Taylor and Harper 2003, Vincent and Harper 2003, Love and Perry 2004, Vincent 2005).

It is worth noting that due to constant developments in the technology, the literature is often quickly out of date. Changes to features of a mobile phone can immediately change aspects of the way people interact with the device for example the addition of high quality cameras on current phones. That is not to say, however, that information from five or six years ago is not relevant. It is a useful guide to measure and analyse how mobile phone interactions change and develop in short periods of time.

As noted above there are only a few social science studies about mobile phone use in public in the UK, (see Taylor and Harper 2003, Vincent and Harper 2003, Love and Perry 2004). Until recently most of the studies were not systematically empirical and tended to be generalist and commercial (see Plant 2003, Harkin 2003, Crabtree et al 2003). This chapter explores the above studies as well as non-UK literature in order to provide the rationale for this study. It does this in two ways, first by highlighting the lack of empirical studies in the UK, second by examining the need (or not) for reviewing and rethinking existing social theories over creating 'new theory' to explain mobile practises.

In relation to existing theory, the review will look at relevant ideas from Goffman (1959, 1963) which were of course written prior to the development of contemporary forms of computer

mediated communication. Therefore this study will present some revisions and changes to Goffman's work that could not be considered prior to the development of mobile phone technology. As well as reviewing mobile phone specific literature, an outline of Goffman's concepts that are particularly applicable to mobile phone use in public will be provided.

New complexities can be added to Goffman's concept of behaviour in public since the mobile phone offers new contexts within communication. Goffman's concepts only consider interactions and communicative effects within the immediate environment, whereas the mobile phone opens up new contexts for the communicative environment that are free from boundaries. Goffman's work focuses upon face-to-face interactions, whereas the mobile phone introduces a new medium for engagement which is not dependent upon direct face-to-face communication but is still dependent upon face management. With the introduction of mobile phones came a more complex method for managing communication, since a person no longer just has to manage their co-local interactions. A phone user must now consider how they balance the demands of communication from their phone with the demands of communication in the local environment. Rather than creating new theories, it is perhaps more relevant to extend and develop upon Goffman's ideas, since they are still applicable to everyday interactions; the mobile phone becomes an added and complex context for communication.

2.2 Managing the remote and co-local simultaneously

It is relevant to look at work relating to managing 'virtual' and 'physical' spaces since this is a key issue in public mobile phone use. Several researchers have highlighted that mobile phone users are constantly negotiating their interactions between their phone communication and face-to-face communication. Puro (2002) suggests that the mobile phone blurs the distinctions between the public and private spaces and has been extensively cited in other works. The study explores Finnish mobile phone culture and analyses phone ownership, gender, work and age. It aims to find out whether Finnish culture is changing in the era of mobile phone technology. Puro points out that one of the most distinctive characteristics of mobile phones is that they privatize public spaces.

'Talking on the mobile phone in the presence of others lends itself to a certain social absence where there is little room for other social contacts. The speaker is physically present, but his or her mental orientation is towards someone who is unseen' (Puro, 2002 p.23).

Puro (2002) is suggesting that non-verbally, mobile phone use in public spaces leads to 'closed' and 'passive public behaviour.' Puro continues to discuss the public and the private as an issue which needs to be better understood in social spaces. The non verbal communication of the mobile phone use in public ironically contradicts the fact that often the person talking airs private matters in public. Therefore there appears to be a dilemma for a common understanding of the norms of 'openness' and 'closedness' in a mobile information society. What is particularly interesting is that Puro concludes that Finns find public displays of mobile phone use annoying. They feel like they are involuntarily intruding into other people's lives. Puro's research is particularly applicable to this study as it addresses the fact that people have to manage their relationships between the 'remote' people and the 'co-located'. This is addressed in Chapter Four and underpins some of the survey questions.

A similar point is made by Palen et al (2001) who argue that when people are on the phone they are simultaneously in two spaces: the space they physically occupy and the virtual space of the conversation. The phone necessitates multiple activities and also multiple public faces. The person making a mobile telephone conversation has to choose between the social norms of the physical social space or the norms of the conversational space and often the two can cause conflict. The norms of one space may have to be altered in order to fit with the other space and what's more the behavioural requirements may also have to alter. Their conclusion is that social norms are under development as new technology is adopted for social use.

Humphreys (2005) discusses Meyrowitz (1985) suggestion that people no longer have a sense of place when they are engaging with electronic media. *'When we communicate through telephone, radio, television, or computer, where we are physically no longer determines who we*

are socially' (Humphreys, 2005 p.370). So when people are using their mobile phones they are blurring the boundaries between their physical location and their social sense of self.

Plant (2001) studied the effect that mobile phones have on social and individual life on behalf of Motorola. The research conducted over one year across various continents and countries, involved observational studies and photographs detailing people's behaviour and actions in relation to mobile phones. Plant makes a valuable observation concerning how people manage their virtual and physical spaces.

'There can be something comical about the mobile user attempting the difficult task of managing a call whose purpose and emotional registers are at odds with those around them: the conversation with a lover on a train, or with an irate boss in a bar. Certain conversations can induce emotional and bodily responses, which may be quite incompatible with their perceptions of their physical location. Their participants often look as though they don't quite know what to do with themselves, how to reconfigure the tones of voice and postures which would normally accompany such conversations. The mobile requires its users to manage the intersection of the real present and the conversational present in a manner that is mindful of both' (Plant, 2001 p.26).

As a result Plant (2001) points out that phone users have to manage their own actions, when considering virtual and physical spaces. Ling (2002) also has a similar point to make:

'...Mobile telephony in public spaces demands that one uses various non-verbal techniques to mark the special nature of their activity...there are strategies for maintaining one's quasi-isolated status during conversation, there are the issues of reintegration back into the flux of the local setting after the call and finally there are the considerations of the other co-present person before, during and after the call itself' (Ling, 2002 p.3).

In an earlier study however Ling (1997) points out that phone user's companions are also affected by the interrupted communication within their environment. He says:

'During the period of the call the dining partners are left in a particularly stressful sort of suspended status in that they are asked to wait. They are not dismissed, rather, they are left hanging...While waiting they must engage themselves in some type of waiting strategy that is easily discarded when the other summons them back. This is a particularly difficult social juxtaposition' (Ling, 1997 p.12).

So managing 'virtual' and 'physical' space isn't just a matter which affects the phone user, it also has an impact on the communication of the 'bystanders'.

Humphreys (2005) concept of 'dual front interaction' (see section 2.5.2) is useful when considering this. As previously mentioned, the phone user is sharing social obligations between the co-located and the remotely present. The bystander often performs Goffman's (1963) civil inattention (see section 2.3.4) whilst the caller performs the management of communication between their dominant and subordinate involvements (see section 2.3.10).

Kleinman (2004) looked at the effects of technology use on community using Gergen's (2002) concept of 'absent presence'. Kleinman describes absent presence as:

'individuals who use ITCs while in the physical presence of others who may or may not be engaged in the same' (Kleinman, 2004 p.1037).

Kleinman continues by saying:

'This idea suggests that individuals are removing themselves from a present context of shared meanings to become involved in a virtual world that is not available to those around them' (Kleinman, 2004 p.1037).

The virtual communication people conduct in public has implications for how groups interact. Use of technology in public spaces is not just an issue of etiquette; it has implications for how technology manages our face-to-face communication with others. What Kleinman (2004) is asking is how people can manage both their 'virtual' and 'physical' communication at once. However added to this Kleinman asks whether face-to-face communication can maintain richness when people can connect to other sources of information when in the presence of others.

Kleinman does not aim to answer these questions, but simply raises them as issues to consider when researching communication technologies. Ultimately Kleinman provides some positive and negative effects of ITCs on conceptual development. It is suggested that multitasking, shared information from ICTs and virtual communication are positive effects. Whilst negative effects are that people can miss physical cues from group members, distract others using ITCs and appear disinterested (Kleinman 2004).

2.2.1 Summary

The mobile phone then, can force people to be in two places at once - the 'physical space' (shared with the co-located) and the 'virtual space' (where remote communication occurs). Consequently the phone necessitates multiple activities and also multiple faces. Whilst Palen et al (2001) believe that social and behavioural norms are under development as new technology is adopted, Humphreys (2005) suggests that mobile phones are blurring the boundaries between the physical location and the social sense of self. Ling (1997) highlights that the negotiation of role switching and management of face can have an impact on bystanders and they can be often left suspended whilst a person answers a call mid conversation. In considering these ideas Kleinman (2004) asks whether face-to-face communication can maintain richness when people can connect to other sources of information when in the presence of others. The management of 'virtual' and 'physical' spaces will be address in later chapters (see Chapters Six and Nine).

In order to address these issues of managing the co-local and remote communication, Study One will draw upon Goffman's (1959, 1963) concepts, and people's attitudes to the use of the mobile

phone in public (gathered from a questionnaire) will be analysed. It is important to highlight that mobile phones have created new contexts for communication; therefore Goffman's concepts will be adapted to fit these. Much of the literature available about public mobile phone use is descriptive and attempts to establish new theories relating to the use of mobile phones. However the following section will argue that Goffman's existing concepts of behaviour in public can be updated to include the technological contexts that exist in current every day interactions.

2.3 Goffman and the mobile phone

Although Goffman has been criticised for his lack of “scientific rigour” and lack of empirical methodology, (Meryowitz 1985, Giddens 1984) Goffman's (1963) key work '*Behaviour in public places*' describes a range of valuable ideas which this research can draw upon. The key ideas from Goffman will be discussed in the following sections are:

- Performance
 - Face engagements
 - Civil inattention
 - Impression management
 - Self defence mechanisms
 - Involvement shields in unfocused interaction
- Focused / Unfocused Interaction
- Main and side involvements
- Singles and withs
- Boundaries

Goffman's work is particularly applicable to this study as it explores how and why people act the way they do when they are in public. Goffman provides a good framework which can be developed upon and applied to today's technological mediated social contexts.

For Goffman, people are always 'acting' or 'performing'. They are putting on a show for an audience - the audience being other members of the public with whom they are or could potentially be communicating. Social acting today involves new apparatus such as the mobile phone and this opens new contexts for social interaction. The mobile phone therefore has consequences for negotiation and even renegotiation of existing social norms. Therefore it is important to address some of Goffman's framework in order to apply it to today's wireless era.

2.3.1 Performance

Goffman explains that when people are interacting they are constantly performing. Performers ask that others take the impression (and performance) given before them seriously. The performance will often incorporate the accredited values of society and these performances manufacture social reality through the work done by them. In fact, there maybe no other 'reality'. Goffman notes:

'To stay in one's room away from the place where the party is given, or away from where the practitioner attends his client, is to stay away from where reality is being performed.

The world, in truth, is a wedding' (Goffman, 1959 p.45).

Goffman (1959) refers to the word 'front' or 'front stage' when considering performance. This is when the performance is consistently undertaken. The setting of the scene is important in performances as it must be present in order for the 'actor' to perform. Personal front can include items or equipment needed in order to perform. The personal front also consists of two different aspects; 'appearance' and 'manners'. Appearance refers to the items of the personal front that are a reflection of the actor's social status. Manners refer to the way an actor conducts themselves. The actor's manner tells the audience what to expect from their performance.

Goffman says:

'Manner may be taken to refer to those stimuli which function at the time to warn us of the interaction role the performer will expect to play in the oncoming situation. Thus a haughty, aggressive manner may give the impression that the performer expects to be the one who will initiate the verbal interaction and direct its course. A meek, apologetic manner may give the impression that the performer expects to follow the lead of others, or at least that he can be led to do so' (Goffman, 1959 p.35).

A phone call could present a person with a situation whereby they have to alter the impression they usually give to others. This relates to section 2.5 which looks at multiple roles and the mobile phone.

Back stage is where performers are present but audience is not, and the performers can step 'out of character' without fear of disrupting the performance. The back stage is where facts hidden or suppressed in the front stage, or various kinds of informal actions may be displayed. The back stage is completely separate from the front stage. No members of the audience can appear in the back. The actor takes many methods to ensure this. It is difficult to perform once a member of the audience is in the back stage. Goffman (1959) says:

'A back region or back stage may be defined as a place, relative to a given performance, where the impression fostered by the performance is knowingly contradicted as a matter of course...it is here that the capacity of a performance to express something beyond itself may be painstakingly fabricated; it is here that illusions and impressions are openly constructed' (Goffman 1959 p.114).

The mobile phone is blurring the boundaries between the 'front' and 'back' stages. Phone users must try to carefully manage their 'front' and 'back' stage performance when mobile phone calls 'interrupt' their co-local communication since the co-local person may witness a back stage performance that contradicts the front stage they are familiar with. A call from a mobile phone brings the possibility of the back stage and thus 'other' roles to the front stage at any moment

and the management of the two stages is important for managing face. The following sections will address aspects of performance.

2.3.2 Face engagements

Face engagements usually consist of a single mutual activity and a simple example of this is talk. Goffman (1963) says:

'Mutual activities and the face engagements in which they are embedded comprise instances of small talk, commensalisms, love-making, gaming, formal discussion, and personal servicing (treating, selling, waitressing, and so forth)' (Goffman, 1963 p.89).

In some cases the activity does not have an instrumental rationale although other encounters do.

Goffman says:

'Where there are only two participants in a situation, the encounter, if there is to be one, will exhaust the situation, giving us a full focused gathering. With more than two participants, there may be persons officially present in the situation who are officially excluded from the encounter and not themselves so engaged. These unengaged participants change the gathering into a partly-focused one' (Goffman, 1963 p.91).

When considering mobile phone use, partly-focused gatherings can be seen when one or more members in the group are using their mobile phone during the interaction.

Within face engagements mutual glances and eye to eye contact are key since, according to Goffman (1963), eye contact opens one up for face engagement. When a face engagement is opened up, eye contact must be carefully maintained, ensuring that each participant is able to monitor the others communication. In mobile phone interactions, a call invites interaction in the way that eye contact opens up engagements, except the conversation is the method for monitoring and maintaining the communication. Exclusive eye contact and face engagement between two co-local people can take place without the remote person being aware. This method can be employed by the phone user for managing the two interactions at once. For

example when a phone user performs dual front interaction when in a dyad (see section 5.3.1.3 and 5.3.1.4).

2.3.3 Civil inattention

The first rule which Goffman (1963) discusses in relation to face engagements in focused interaction is civil inattention. This is where people give each other enough visual notice to recognise that they are present in the surrounding environment. However the attention is withdrawn and no other recognition is given there after. According to Goffman, propriety and civil inattention go hand in hand as it is an essential method for maintaining face in public. To not perform civil inattention involves treating people as if they are not there at all and can be referred to as 'non-person' treatment and can be perceived as being inappropriate in certain social situations.

Goffman notes:

'Civil inattention is so delicate an adjustment that we may expect constant evasion of the rules regarding it.....It should be added, too, that the closer the onlookers are to the individual who interests them, the more obligation they will feel to ensure him civil inattention' (Goffman, 1963 p.85).

So then civil inattention is whereby a person notices the people within the same environment, through perhaps making eye contact but not to the point where full acknowledgement is made and attention given to their task. When considering mobile phone use in public, civil inattention is performed by both the phone user and people in the surrounding environment. Civil inattention may particularly be used by people in dyads (two individuals regarded as a pair), where interactions may be more complex, whereas non-person treatment may be given to 'single' phone users in public.

2.3.4 Impression management

According to Goffman (1959), a performer must act with expressive responsibility to ensure they are not conveying an impression which is inappropriate at the time of the interaction.

Further more Goffman (1959) describes 'inopportune intrusions' to explain how people may have to role change in certain social situations. He says:

'When an outsider accidentally enters a region in which a performance is being given, or when a member of the audience inadvertently enters the backstage, the intruder is likely to catch those present flagrante delicto. Through no one's intention, the persons present in the region may find that they have patently been witnessed in activity that is quite incompatible with the impression that they are, for wider social reasons, under obligation to maintain to the intruder' (Goffman, 1959 p.203).

Mobile phone users may find themselves in this situation when managing the different roles using their mobile phone - for example a business man over heard by colleagues talking to his young daughter. This idea will be discussed in section 2.6 below when Arnold (2003) especially highlights the difficulties of managing multiple roles via the mobile phone.

2.3.5 Self defence mechanisms

Self defence mechanisms are closely linked to civil inattention. According to Goffman (1963) when a 'With' (see section 2.3.9 for singles and withs) feels awkward and exposed often they try to occupy themselves by using 'self defence mechanisms'. For example by looking at a menu or eating their dinner. This particular idea becomes useful when considering mobile phone use in public and especially when observing public phone use and the reactions (or self-defence mechanisms) bystanders have to mobile phone conversations interrupting their interactions. Civil inattention almost acts as a self defence mechanism since people save face by being pre-occupied with say a menu or their own phone whilst also having acknowledged that the other person is using their phone (Goffman 1963).

2.3.6 Involvement shields

Goffman (1963) explains 'involvement shields' in unfocused interactions. In unfocused interactions no one person can be given the stage (see section 2.3.7) and there is no official centre of attention. Involvement shields in these interactions can be used to hide emotion or they can be used to 'hide' someone's discomfort in being alone in a public space. For example

someone reading a newspaper appears to be involved even if they are alone - they are engaged in the task of reading the paper. The paper is the shield. Goffman explains involvement:

'Involvement refers to the capacity of an individual to give, or withhold from giving, his concerted attention to some activity at hand - a solitary task, a conversation, a collaborative work effort. It implies a certain admitted closeness between the individual and the object of involvement, a certain overt engrossment on the part of the one who is involved' (Goffman, 1963 p.43).

The concept of involvement shields is still relevant to contemporary daily interactions. For example Fox (2001) explains how women who are on their own use their phones as a barrier which indicates to potential predators to stay away as they are in constant contact. As contact can be made almost immediately, it's as if the contacts are within the phone. Thus touching the phone gives sense of security and of being protected and sends a signal to others that they are not alone and vulnerable. The thesis will later examine how the mobile phone can be deployed as an involvement shield by people when in public. For example they appear to be 'involved' in their text messaging when in public.

2.3.7 Focused and unfocused interaction

Many of Goffman's concepts rely on the concepts of focused or unfocused interaction; therefore it is apt to provide a brief definition of them. Goffman (1963) explains:

'focused interaction, concerned with clusters of individuals who extend one another a special communication license and sustain a special type of mutual activity that can exclude others who are present in the situation' (Goffman, 1963 p.83).

In other words people openly cooperate to sustain a single focus of attention, for that self defined / negotiated group.

In explaining unfocused interaction Goffman (1963) says:

'Unfocused interaction, concerned with what can be communicated between persons merely by virtue of their presence together in the same social situation' (Goffman, 1963 p.83).

Unfocused interaction is therefore largely concerned with the management of co-presence.

The following concepts of main and side involvements, singles and withs, and boundaries are contexts for performance and are addressed in the sections below.

2.3.8 Main and side involvements

Associated with involvement shields Goffman describes 'main' and 'side' involvements:

'A main involvement is one that absorbs the major part of an individual's attention and interest, visibly forming the principle current determinant of his actions. A side involvement is an activity that an individual can carry on in an abstracted fashion without threatening or confusing simultaneous maintenance of a main involvement' (Goffman, 1963 p.43).

The main involvement is often the *dominant* involvement whilst the side involvement is often the *subordinate* one. Goffman explains further:

'What is defined as a dominating involvement at one time can be defined as subordinate at another. Thus on the job, the drinking of a cup of coffee may be a subordinate involvement; during official coffee breaks, it may be the dominating activity' (Goffman, 1963 p.45).

This idea can be applied to people's use of mobile phone technology when managing both their phone (remote) and face-to-face (co-local) communication. For example, the face-to-face or co-local communication could be seen to be the dominant involvement. Yet if someone is texting on their mobile phone as well as talking to a person face-to-face, the face-to-face talk could be seen as the main involvement and the text messaging as the subordinate involvement. Alternatively the mobile phone use could be the main involvement. The switching of focus from

main to side involvements could change from moment to moment. This idea will be examined in Chapter Six which explores observations of people's use and management of mobile phones in public spaces.

2.3.9 Social norms: singles and withs

Goffman (1963) also writes about social norms within the social landscapes of public spaces by discussing the concept of 'singles' and 'withs'. 'Singles' are people who are alone in public; and 'withs' are people who are with other people in public.

Goffman says:

'To be alone, to be a 'solitary' in the sense of being out of sight and sound of everyone, is not to be alone in another way, namely, as a 'single,' a party of one, a person not in a with, a person unaccompanied 'socially' by others in some public undertaking (itself often crowded), such as sidewalk traffic, shopping in stores and restaurant dining' (Goffman 1981 p.79).

Singles are said to be much more vulnerable to contact from others and according to Goffman may also be judged more harshly by bystanders than 'withs' for being socially alone in public places. In cases where people do feel vulnerable when alone in public, they make use of involvement shields. For example a 'single' may drink a cup of coffee or read a newspaper; anything to make themselves appear to be otherwise occupied. These kinds of acts legitimize their presence and can also act as involvement shields against intrusion from others.

Goffman's concepts of 'singles' and 'withs' will be applied to mobile phone use in public using data from the observational research. For instance 'singles' may use their phone more often in public than when they are 'withs'. Using the idea of 'singles' and 'withs' will help to understand how mobile phone interactions effect everyday communication (see Chapter Five).

2.3.10 Boundaries

Within communication boundaries there are participants and bystanders. Participants are people directly involved in the interaction, and bystanders are involved in the situation but are not necessarily involved in the direct interaction. Goffman says:

'In order for the engagement to maintain its boundaries and integrity...Both the participant and bystander will have to regulate their conduct appropriately' (Goffman, 1963 p. 155).

In boundary communication, bystanders perform a certain degree of civil inattention. But Goffman explains that this type of civil inattention is designed for encounters, not for individuals. Goffman says:

'Bystanders are obliged to refrain from exploiting the communication position in which they find themselves, and to give visible expression to the participants of the gathering that they are focusing their attention elsewhere – a courtesy of some complexity, since a too studied inattention to what one is in a position to overhear can easily spoil a show of inattention' (Goffman, 1963 p.156).

So bystanders may perform civil inattention or non-person treatment when a single user is on the phone. When in a dyad the 'with' not on the phone may also attempt to perform this.

Goffman presents an issue in moving from civil inattention to involvement. He says:

'The care that the bystander is obliged to exert for an accessible encounter extends past civil inattention to the question of how and when he can present himself for official participation...When he does enter he is expected to accept the current topic and tone, thus minimizing the disruption he causes' (Goffman, 1963 p.160).

Performers need to control boundaries to control who has access to the performance. So when a person is temporarily excluded from a conversation i.e. they take a phone call or answer a text

message they have to wait before they continue to join in the remainder of the conversation or new interaction (see section 5.4.1.6).

2.3.11 Summary

To briefly sum up each of Goffman's concepts:

- **Performance** is what Goffman considers people to be doing when they are interacting with others on a social level. To Goffman, people are always performing.
- Within performance people must act to ensure that they are conveying an impression that is appropriate at the time of the interaction. **Impression management** assists performance and also the management of face.
- **Face engagements** according to Goffman are present in most forms of communication. Within face engagements Goffman argues eye contact is important in monitoring others communication. Eye contact particularly becomes important for mobile phone interactions – especially when the phone user attempts to manage both the co-local and remote communication simultaneously.
- **Civil inattention** is important for maintaining face since a person must acknowledge another's presence but not to the point where full acknowledgement is made.
- **Singles** are people who are not in interaction with others in public. **Withs** are people who are in interaction with others in public.
- **Focused interaction** is where people are focusing their attention on an interaction where as unfocused interaction is largely concerned with the management of co-presence.
- **Involvement shields** are often used to hide someone's emotion or discomfort in being alone in a public place. Someone reading the paper is involved in the task of doing so and thus provides an excuse for being a 'single' in a public place.

- **Main and Side involvements** absorb an individual's attention. The main involvement is often the dominant involvement whilst the side involvement is often the subordinate one. Managing these involvements can change from moment to moment.
- **Self defence mechanisms** are closely linked to civil inattention and involvement shields and are used when a 'with' feels awkward. For example the reading of a menu or looking out of the window.
- Performers need to control **boundaries** to control who has access to the performance. Within boundaries there are participants (who are directly involved in the communication) and bystanders (who are involved in the situation but not necessarily in the direct interaction).

Several ideas from Goffman have been briefly examined and it is clear that Goffman's (1959, 1963) work still applies to everyday social practices and communication. Goffman sought universals in human interactions of contemporary modern life. Forty years have passed and these still seems to be relevant in light of the mobile phone.

2.4 Use of Goffman and related ideas in mobile phone literature

Within this study Goffman's (1959, 1963) work will be drawn upon. It is useful to explore how Goffman's work has been applied in other research in order to gain an understanding of how it is relevant to mobile phone interactions in various social contexts. Goffman's approach is applied in several studies including ones by Humphreys (2005), Persson (2001), Ling (1997) and Lasen (2002). Each study will briefly be addressed in this following section.

2.4.1 Humphrey's

Humphreys (2005) U.S study of people's use of mobile phone technology in public made some use of Goffman's ideas in order to gain a greater understanding about the new social landscape arising in the new wireless era. Specifically the study aims to find out how people negotiate interaction and technologies in a wireless era. Humphreys also tried to find out how simultaneous modes of communication compete for attention and how users make selections

among the modes of communication. People's everyday actions were observed over a period of one year in several different types of public locations and interviews were also conducted.

Humphreys (2005) aimed to examine the following issues:

- How the social norms of interaction in public spaces change and remain the same;
- How people negotiate their public and private sense of self in public spaces;
- How mobile phones become markers for social relations and reflect tacit pre-existing power relations (Humphreys 2005).

Humphreys used Goffman's (1959) concepts of 'singles' and 'withs' (see section 2.3.9) to explore and explain people's behaviour in public spaces. Goffman's (1963) concept of main and side involvements (see section 2.3.8) is also discussed by Humphreys. Using the mobile phone could be seen as either a minimal or main involvement depending on the users situational context in public; which in turn may define whether they could be perceived to be a 'with' or a 'single'. Humphreys specifically explains how people respond to their 'withs' receiving mobile phone calls. If a person did engage in new exclusive interaction, the former 'with' often showed some sort of anxiety or annoyance at becoming a 'single' (Humphreys 2005). New singles were also observed engaging in a number of activities including reading a menu, drinking a cup of coffee and looking away, in order to alleviate some of the unease they felt. Humphreys' observation is noted within the data analysis in section 5.3.1.1 and will be linked to the notion of civil inattention.

Humphreys also discusses 'dual front interaction'. This is where the phone user can potentially communicate verbally with the remote other whilst communicating non-verbally with the co-local. Humphreys says:

'When someone is physically present, one can communicate verbally as well as non-verbally through both aural and visual cues. This allows for potential communication to

occur between the caller and partner who are physically present without the person on the other end of the phone knowing of this communication' (Humphreys, 2005 p.819).

This kind of interaction will often occur because phone users are subject to expectations from both the remote contact and the co-local. Humphreys links this idea to Goffman's (1971) concept of staging (see section 2.3.1).

Humphreys observed several instances where people demonstrated their frustration with the phone call by rolling their eyes or signalling with their hands for the conversation to hurry up. According to Humphreys because the person on the phone is unaware of these signals they don't realise that the caller is engaged in any other activities besides their conversation (Humphreys 2005). Humphreys' concept of dual front interaction will be discussed in section 5.3.1.3).

Humphreys also describes 'three-way interactions' using Goffman's (1963) cross talk. This is where the 'single' can interact with their co-local and the person on the other end of the phone, although interaction is dependent upon the mobile phone user. Humphreys describes three-way talk:

'In the few instances where this was observed happening, the primary interactional focus was the cellphone conversation with the Single trying to listen to half of the conversation and chime in whenever they could' (Humphreys 2005, p.821).

According to Humphreys, Goffman's cross talk provides a helpful framework in understanding three way interactions and highlights that mobile phone crosstalk is not affected by factors that face-to-face cross talk is. For instance mobile cross talk does not have geographic or physical requirements so a person approaching a dyad does not have social cues to read from. Without the social or physical constraints, mobile phone calls permit interruptions to social interactions more easily (Humphreys 2005). Goffman's cross talk still applies to today's social interactions, except with wireless technology in use, people have to renegotiate tacit social norms - according to Humphreys new social contexts can call for new rules about social acceptability (Humphreys

2005). What is interesting to consider is whether an interruption of a call is cross talk. The concept of cross talk implies it is a momentary interruption - however a phone call can last for several minutes - raising the issue of when cross talk ends. Another issue relating to mobile phone interruptions and the concept of cross talk is that in face-to-face communication, the target of the cross talk is visible to the bystanders and 'withs' and they can access the nature of the talk. In mobile phone interruptions the nature of the talk is only partially available.

Humphreys concludes that Goffman's (1963) work on behaviour in public places is a basis for understanding current social norms. Mobile phone use does call for alternations to Goffman's existing theories however there is still evidence that people are using defence mechanisms when feeling vulnerable through being left out of a social interaction (Humphreys 2005).

2.4.2 Persson

Without any formal structured empirical research, Persson (2001) aimed to apply Goffman's concepts to some preliminary research conducted by eavesdropping on mobile phone calls in public places. It should be noted that this is an older study which focuses upon an issue concern at the time: public mobile phone talk.

Persson's (2001) paper examines people's general use of mobile phones using Goffman's concepts of impression management, involvement shields and civil inattention to help understand mobile telephone calls in public places and the intimacy amongst strangers that it creates. Specifically, he looks at impression management, (see section 2.3.4) and how the mobile phone is utilised to give off various impressions in different contexts. He also uses Goffman's (1963) work on intimacy amongst strangers to explain how people use the mobile phone to manage their presence in public spaces. It aims to understand why people, who normally keep their private lives to themselves, sometimes reveal the most intimate details about themselves to strangers around them when they are talking on their mobile phones (Persson 2001). As previously mentioned Persson's argument is purely theoretical and is not based on any substantial primary research. He admits to simply eavesdropping on people's mobile phone conversations whilst in the public domain.

Persson uses Goffman's (1959) concept of impression management to suggest that people using their phones in public perhaps want to 'give off' a certain impression that allows them to be presented to others in a certain way. However it is noted that as the use of mobile phones becomes more prolific the impression of power and exclusivity becomes weakened (Persson 2001). Within the UK the mobile phone has become so ubiquitous that the impression of power is no longer relevant. It is more important to look at how people manage their communication as a 'with'; dealing with both the co-local contacts (bystanders) and remote contacts at once and managing their respective roles. This is addressed further in Chapter Five where an analysis of the observations of mobile phone use in public is provided and looks at singles, and withs behaviour (see sections 5.2 and 5.4).

Persson (2001) also suggests that as an 'involvement shield' (Goffman 1963) the mobile phone seems to make people feel as if they are alone even in public spaces. In some ways it can be seen as a method to hide oneself from the public and prevent other people from approaching or making any social contact. Involvement shields can constitute boundaries between individual visibility and invisibility, accessibility and inaccessibility and these boundaries are constantly being renegotiated. Chapter Five will present some ideas about the mobile phone as an involvement shield and also as a boundary to communication (see section 5.4).

In summary, Persson (2001) suggests there are several factors that make intimacy amongst strangers possible. First, the mobile phone is an involvement shield against those in public and in many ways can be comparable to a book or newspaper in its use in public - it eradicates communication between the users and others. Secondly, the fact that the phone is the remote communication in itself is important because it makes the act of shielding even more impressive. Persson also argues the phone user has nothing to lose by sharing secrets with complete strangers as it is highly unlikely the phone user will ever come into contact with the bystanders again. Phone users also benefit from Goffman's 'civil inattention' – they appear not to be listening to the conversation anyway. This allows alienation to be maintained and the

mobile phone user to perceive the others as a mass and not as hearing individuals (Persson 2001). This concept is used to support this study's survey questions (see section 4.2.4).

Persson's application of Goffman's work would have benefited from detailed primary research. However Persson's arguments are applied and reviewed here against evidence in relation to the Study One questionnaire (see appendix 2) and the observational data (see Chapter Five).

2.4.3 Ling

Goffman is key to Ling's (1997, 2002) work. Ling discusses the appropriateness of behaviour when considering mobile phone use in public - specifically in restaurants. Data was collected from focus groups and through electronic discussion forums. 34 men and 16 women participated in the study of which 30 reported experiences with a mobile phone and 20 limited experiences. From the data, Ling examines the reason why restaurants are particularly sensitive to the use of mobile phones and provides a discussion of the management strategies available when 'threatening' situations arise (Ling 1997).

Ling details some criticisms of Goffman, such as:

- his lack of scientific rigour
- his methodology is undocumented
- his work is inaccessible.

Ling also criticises the fact the Goffman's analysis is focused on face-to-face interaction - there was little or no analysis of mediated interaction in his work.

Even so, Ling (1997) uses Goffman's (1963) notion of boundaries (see section 2.3.10) to help understand why people feel mobile phone use in some social settings is inappropriate. He also uses Goffman's (1963) concept of face management (see section 2.3.2) since without it our society would be considerably more complicated without the socialisation processes concerning face. Ling applies these two ideas to the context of restaurants and implicitly links them to the

concepts of etiquette and social norms since restaurants are a location where face management and boundary issues are present and recognisable.

One of the things which Ling claims is special about restaurants is the fact that a person's use within it is temporary and it has elements of both public and private space. Restaurateurs claim a territory for a temporary amount of time. Ling uses Goffman to explain this:

'Some [territories] are 'situational'; they are part of the fixed equipment in the setting (whether publicly or privately owned), but are made available to the populace in the form of claimed goods while-in-use. Temporary tenancy is perceived to be involved, measured in seconds, minutes or hours, informally exerted, raising constant questions as to when it terminates. Park benches and restaurant tables are examples' (Goffman 1971 p.29 in Ling 1997 p.7).

The restaurant setting allows people to be in close proximity but at the same time ignore each other in an attempt to gain privacy. What's more these barriers are open for all to see. In discussing face, Ling follows Goffman (1963) in arguing that face management helps people to adjust their presentations to their perceptions of the situation. As with Goffman Ling argues that without this common understanding, behaviour would be unpredictable and common intersubjective understandings would be impossible. A restaurant then can be seen as a dynamic stage where a person's face can be displayed. It is also a place where a complex set of social rules, etiquette and rituals take place and thus the development and maintenance of face in a restaurant, according to Ling, is a delicate process.

Goffman's notion of civil inattention is also used by Ling (1997). Ling suggests that people surrounding the person using their phone in the local setting use civil inattention to turn a blind eye towards the behaviour that represents a potential threat to face. People seem to display inattentive postures such as reading a menu or looking around the room or by suddenly becoming engrossed in a separate conversation in an attempt to ignore the disturbance and carry on. Ling says:

'As the mobile telephone becomes normalised we will likely develop a repertoire of suitable inattentive postures which we can assume' (Ling, 1997 p. 14).

This notion of civil inattention in relation to mobile use will be referred to in Chapter Five in the data analysis of the observations.

Ling's (1997) work was conducted ten years ago when the uptake of the mobile phone was not as prolific as it is today, however it does have some useful points relating to public use of the mobile phone. The paper is an examination of how technology has shifted social boundaries and how the technology has made demands on every day social life. For Ling the use of the mobile phone has forced people to re-evaluate taken for granted assumptions of everyday life. This particular thesis can draw upon Ling's research and application of Goffman in later analysis (see Chapters Five and Six).

2.4.4 Summary

Goffman's (1959, 1963) work has been applied within several research studies about the use of the mobile phone. Humphreys (2005) makes use of Goffman's cross talk, singles and withs, and involvement shields to develop a concept of 'three-way interactions' (see section 2.4.1). To Humphreys Goffman's (1963) work on behaviour in public places is a basis for examining newly established social norms. Persson (2001) uses Goffman's concept of impression management, involvement shields and civil inattention to help understand people's mobile phone use in public. According to Persson phone users particularly benefit from civil inattention because it allows a degree of privacy in public. Ling (1997) also uses the concept of civil inattention and highlights Goffman's notion of boundaries (see section 2.3.10) to understand why some people feel mobile phone use in public is inappropriate. Ling concludes that technology has shifted the boundaries of social interactions in every day life. Ling's studies are useful to build upon for this research.

2.5 Multiple roles and the mobile phone

The above section is about describing activities in terms of performance, but mobile phone use can also affect the management of roles. Roles are defined through performance, as well as

being defined by performance and are institutionally defined. Exploring the issue of public mobile phone use in terms of 'roles' rather than 'performance', most of the work suggests that mobile phone use can cause role conflict for the mobile phone user.

Arnold's (2003) largely theoretical paper argues that technologies perform in 'Janus faced ways'; ways which are ironic, perverse and paradoxical. Arnold discusses prominent philosophies of technology and theoretical approaches to technology in terms of their capacity to account for generalised examples of irony and paradox, stating:

'The conclusion reached is that the Janus faced metaphor and its philosophical context provides the researcher with the analytic advantages of foregrounding uncertainty, avoiding an essentialist or determinist role for technology, and allowing for the possibility of the presence of tension and contradiction in accounts of sociotechnical outcomes' (Arnold, 2003 p.231).

Arnold (2003) suggests that the performance of a mobile phone user can be seen in terms of different roles which can contradict each other; for example, mother, worker, sister, friend, consumer, producer. However it is important to note that the concepts of performance and roles are similar but are not the same. According to Arnold, the phone blurs the boundaries between the social and professional spheres.

'The janus-faced nature of the phone allows the complexity and ambiguity of our mediated social position to be maintained in the course of the analysis, and invites an examination of ontological fundamentals' (Arnold 2003, p.253).

Goffman's (1963) concept of impression management (see section 2.3.4) can be incorporated into this line of thought since one's impression must be carefully managed when using the phone in front of an audience of familiar bystanders. Arnold (2003) explains that the phone acts as a symbol that shows that the user is busy, is wanted, and wants to be wanted and is available. The performance also signifies that the user is needed and that the individual is at the centre of the important communication information network. In turn the user conveys that they are important:

'The phone on the table is not just a sign that the user is busy, is in the loop, is wanted, or may be wanted, but is also a sign that the user wants to be wanted, and wants to be available' (Arnold, 2003 p.248).

This idea may describe people's motives for using mobile phones in public. Although as Persson (2001) pointed out (section 2.4.2) as the phone becomes more prolific the power of impression is not as important. Either way Arnold's work is relevant when considering mobile phone use and different roles in social contexts. Despite a lack of empirical research, Arnold's (2003) theoretical arguments will be drawn up in later sections (see Chapters Five, Six and Nine).

Continuing with the idea of multiple roles, Harper suggests that the mobile phone can become so important that it affects people's identity. A mobile phone's function and irreplaceable role in people's lives means that it becomes a key tool which even appears to affect their sense of self and identity (Harper, 2003).

Harper uses Wellman (2001) to highlight the fact that mobile phone users are constantly switching networks:

'People are contacting each other in ignorance of where they are operating. And because of the mobile phone people are frequently shifting from one social network to the other at the home or the office, people are contacting each other in ignorance as to what groups they are currently involved with. Rather than being embedded in one network, person to person interactors are constantly switching between networks' (Harper, 2003 p.6).

But the showing of different faces according to Palen et al (2001) can cause discrepancies:

'.... Faces are publicly assumed, which then gives rise to the feeling that the new face and perhaps even the old face are false' (Palen et al, 2001 p.9).

Therefore, people find themselves having to manage role conflicts and discrepant strategies of self-presentation at the same time. Similar points are made by other authors. For example Ling (1997) argues:

'While the face-to-face restaurant talk may be, for example, cosy, intimate and integrative, the talk on the mobile phone may be of power relations, fast deals and office politics. The stage management can become quite complex. Like a cubist painting, the speaker on the mobile phone is seen from two perspectives' (Ling, 1997 p.11).

Geser (2004) explains that the different roles can cause confusion but more often than not people can simultaneously manage two areas of their life at once. However switching roles and redirecting attention very quickly at any moment can also cause psychological stress:

'....calls can hit receivers in a much broader range of different mental states, social circumstances and environmental conditions (for instance while being exposed to eavesdropping in a cafeteria or while driving a car)' (Geser, 2004 p.22).

Similarly Palen Salzman and Youngs (2001) highlight the conflict in managing face that a mobile phone call can cause:

'When mobile phone users are on the phone, they are simultaneously in two spaces: the space they physically occupy, and the virtual space of the conversation (the conversational space). When a phone call comes in (or perhaps more pretentiously, when a call is placed out), the user decides, consciously or otherwise, what face takes precedence: the face that is consonant with one's physical environment, or that of the conversational space? The greater the conflict between the behavioural requirements of the two spaces, the more conscious, explicit, and difficult this decision might be' (Palen, Salzman & Youngs, 2001 p.9).

Geser (2004) suggests some implications that mobile phones have on face-to-face interactions. The fact that calls can be taken anywhere, at the most unpredictable times means that they

cannot be anticipated into the local discourse. Geser says that it is also an inherent norm to answer a phone when it's ringing; therefore local interactions are often disrupted even during important moments. However today, this perspective has changed - people are not always compelled to answer their phones - especially since some phones now have a silence button.

Geser using Plants (2001) research highlights the various ways in which people manage the disruption of social interactions:

- *'Flight – the most drastic response is leaving the place of colloal interaction for a corner or another room where the phone talk cannot be over heard.*
- *Suspension – while remaining in the same physical location, the recipient suspends current activities or interactions for an undefined time; this leaves bystanders helplessly waiting, and evaporates ongoing discussions, so that the thread of talk can often not be easily taken up again when colloal interaction is resumed.*
- *Persistence – keeping current activities ongoing. This only possible when local activities do not require much involvement certainly not when they consist of verbal communication'* (Plant 2000, p.16 in Geser, 2004, p.22).

This demonstrates the fact that there are several ways in which people manage their phone interactions in public. Plant will be used in section 4.2.4 for the Study One survey questions.

2.5.1 Summary

In summary the mobile phone forces people into different roles regardless of their location and this can have an effect on the phone user and also on the companions of the phone user. It is important to note that roles and performance are similar, but they do differ since roles are institutionally defined. To Arnold, a mobile phone performance can be seen in terms of different roles which can contradict each other. The mobile phone blurs the boundaries between the social and professional spheres. Whilst Harper suggests that the mobile phone has become so irreplaceable in people's lives that it even appears to affect their sense of self and identity. Phone users have to manage role conflicts and discrepancies of self presentation at the same time.

Geser (2004) suggests this can cause confusion but usually people are able to manage two areas of this life at once. Geser (2004) also suggests it is an inherent norm to answer a ringing phone people are forced to switch roles regardless of their physical location and sometimes in doing so they are forced to manage the impression they are giving off to individuals within ear shot. However Geser uses Plant (2001) to explain that there are several ways in which people can manage the disruption of social interactions.

Goffmans' (1959) notion of impression management seems particularly apt for considering the mobile phone affecting role changes. The qualitative observational data (presented in Chapter Five) will draw upon some of these concepts and will also be used in Chapter Four.

2.6 Mobile phones, norms, annoyance and inappropriate use

A key focus of early mobile phone studies was the annoyance of the device when the use of the mobile phone in public spaces was not commonly observed. Katz (2004) discusses the possibilities behind why people don't fully condone other's use of the mobile phone in public. Katz suggests that the disturbances people experience could be normative and inherent in the way in which we operate as humans. The irritation and displeasure that results in public mobile phone use could be comparable to ethics, politics or fashion but if it is, all of these can change so quickly so disturbance may not necessarily stay as the technology develops socially. A key issue here is the changing nature of norms and this is particularly relevant to Goffman whose concepts are built upon cultural specific norms.

Katz continues to suggest that it is inherently pleasurable to contact others using mobile phones and that humans are hard wired to seek social contact:

...the pleasure of our communication activities – it seems very much the case that we are hardwired to seek social contact. Left to our own devices... we will be inclined to find others with whom we can communicate, that is we will seek Perpetual Contact (Katz, 2004 p.25).

Most people seek perpetual contact and it could be characterised as a human trait. Katz is suggesting that people's motivations for using the mobile phone in public may be greater than the annoyance they possibly create for others.

Katz (2004) describes 'in group' versus 'out group' communication choreography. He suggests that people sometimes only like other people who are part of the same group and feel compelled to be competitive towards other groups. This idea may be a reason why people become annoyed by other people's mobile phone use in public. Katz suggests that the territoriality issue should be considered and that people are sensitive about their immediate space.

A further violation could be that the non-mobile users are engaged in acts of unreciprocated communication. People don't mind being subjected to a two-way conversation where they can hear both sides of the communication, but find it more annoying when they can't hear the other end of conversation.

Katz (2004) summarises that in time after a period of adjustment, mobile phone use in public will no longer be considered as disturbing, and humans will normalise the mobile phone use (also see Vincent 2005 who suggests this point). It could be argued that this 'normalization' has already started to take place and this point will be discussed in later chapters (see Chapters Six and Nine).

In continuing with the idea of inappropriate use, Ling (1997) discusses how the use of the mobile phone has forced people to re-evaluate taken-for-granted assumptions of everyday life. Using focus group data, Ling (1997) highlights that the respondents were quick to point out the inappropriate use of mobile telephones; suggesting that the problems are based at a social level and not just an individual level. People particularly thought that using mobile phones in theatres, meetings, at various social functions, and on public transport was inappropriate. Chapter Six provides a discussion about the development of existing social norms and about where it is and is not appropriate to use mobile phones.

As mentioned in section 2.4.3 Ling (1997) argues that according to the participants; restaurants are a special social situation. Participants felt irritated by others mobile phone use and Ling partly assigns this to the dynamics of the social space: restaurants can be intimate environments where people are positioned in close proximity.

Ling continues by highlighting the various irritating characteristics of mobile phone use. Beginning with its ringing, respondents noted the abrupt sound a mobile phone can make. The sound is by nature intrusive within most environments. The second problem is caused by 'loud talk'; people talk louder on their phones than they usually do. The noise violates territories and makes it difficult to maintain face. Whilst some participants noted coerced eavesdropping is a problem. The key issue here is the extent to which the norms for such behaviour are negotiated over time and across cultures. Katz (2004) notes: that as mobile phone use becomes prolific the annoyance people feel towards mobile use may be reduced. Ling's article was written when mobile phone use was infrequent and before mobile phones became ubiquitous: perhaps over the last ten years the tolerance of mobile phone use in public has changed.

Love and Perry's (2004) study examined how people feel about overhearing mobile conversations. They discuss the results of a study investigating the behaviour and views of bystanders in response to a proximal mobile phone conversation by a third party. Love and Perry (2004) suggest that public use of the mobile phone is a topic of technological, social and organisational relevance, especially as mobile phone companies were issuing etiquette guide books at the time - encouraging sensible and responsible mobile phone use in public. They therefore set up a study to investigate the reactions of bystanders to a third party conversation.

Within the study people were asked to sit when waiting to take part in an experiment however they didn't realise that the investigation was already taking place. A second person was positioned in the seating area and then took a mobile phone call. The call was either 'private' i.e. discussing bank statements and personal details; or 'social' i.e. meeting a friend for a drink. Throughout the phone call the participant was observed through a two-way mirror and recorded

on video tape for analysis afterwards. The participant was then informed of the true nature of the experiment when the phone conversation had ended. The participants were then interviewed about their attitudes to the mobile phone call and similar situations they may have previously experienced.

Love and Perry (2004) concluded that there was a change in orientation by the participants towards the phone user. The emphasis appeared to be on displaying non-attentiveness and this was displayed by the participants turning their bodies away from the phone user. Some participants even adopted 'closed' body language and most choose to focus on a particular spot in front of them so as to not look as though they were eavesdropping.

Most of the participants said they felt embarrassed once the mobile phone conversation had started; some felt they should not be listening to the conversation and others felt they were embarrassed for the phone user who had to discuss private matters in front of a stranger. This idea will be discussed in Chapter Five (see section 6.5.2). Most of the participants also said that they felt that the person using the mobile phone showed no consideration for those around them and using the phone involved a certain amount of rudeness.

Love and Perry (2004) were surprised to find that most of the participants who appeared to be disinterested in the phone interaction could actually recall most of the conversation. They concluded by suggesting that there is expected caller behaviour and acceptable bystander behaviour. Callers are expected to assess the situation and moderate the length of their call, the volume of their voice, and the content of the conversation. Callers should make an effort to become as 'apart' from the 'by-standing' as possible. Callers are also expected to appear contrite about their call, if not apologising directly, at least acting with some gratitude to the 'bystanders' for putting up with the conversation. Bystanders on the other hand should glance occasionally at the caller to show they are aware of the on going call and are expected to be inattentive to the content of the call. The social etiquette described here is similar to Goffman's (1963) notion of civil inattention (see section 2.3.3).

Love and Perry admitted that this experiment does have its flaws, especially as it is in an artificial setting but it does provide some interesting data and perhaps demonstrate that there are social norms which are enacted when people use their phones in public. Love and Perry's experiment directly links to Goffman's work. The bystanders in the experiment feel they have to perform civil inattention when a phone user performs a phone conversation. The non-attentiveness and closed body language are symbolic of this. These actions show that the caller is not eavesdropping however bystanders must also glance at the phone user occasionally to ensure 'non person' attention is not performed (see section 2.3.3).

2.6.1 Summary

Katz (2004) suggests people's motivations for using the phone may be greater than the annoyance they create for others since humans are hard wired to seek social contact. Most people seek perpetual contact and it could be seen as a human trait. Territoriality could be another reason why people become annoyed by public phone use - they are sensitive about their immediate space. Katz however highlights that after a period of adjustment, mobile phone use will no longer be considered as disturbing and humans will normalise to mobile phone use. Ling (1997) provided a list of irritating characteristics of the mobile phone: it's ringing; loud talk; and eavesdropping are named as problems with public mobile phone use.

The noise especially violates territories and makes it difficult to maintain face. What's more, the problems of inappropriate use are based at a social level as well as an individual level. However Ling highlights restaurants as a particular social setting where people find phone use annoying. This could be because of the dynamics of a restaurants social setting - people are position in close proximity and the fact that restaurants settings hold a complex set of norms and social etiquette. Love and Perry's (2004) study on the other hand showed that there is an emphasis on displaying non-attentiveness by co-present people when a mobile phone user is within ear shot. Participants particularly felt embarrassed by over-hearing another person's phone conversation, and there are a set of rules - including expected caller behaviour - for people using their mobile phone within ear shot of others.

Goffman's (1959, 1963) concepts of self presentation help us to understand context in the management of interaction however there is also a need to address perceived norms, and attitudes. The survey within the Study One sought people's attitudes and opinions about mobile use and will draw upon the literature within this section.

2.7 Conclusion

The aim of this study is to explore the following issues:

- How mobile phone users manage phone use in public in context interactions.
- User's attitudes to public phone use.

A key issue concerning the management of public mobile phone use is that the mobile phone can force people to be in two places at once: the physical space (in a co-local environment) and the virtual space of the conversation (in remote contact). A phone call forces people to manage both their co-local and remote interactions simultaneously. As a consequence, the phone necessitates multiple activities and also multiple faces. As the boundaries blur between the physical environment and the social sense of self (Humphreys 2005) there will be a need to renegotiate the social and behavioural norms as new technology is adopted (Palen et al 2001).

To address the issue of managing the remote and co-local interaction simultaneously some key concepts from Goffman (1959, 1963) are useful and can be drawn upon:

- **Performance** is what Goffman considers people to be doing when they are interacting with others on a social level. To Goffman, people who are interacting are always performing.
- **Impression management** assists performance and also the management of face: People must act to ensure that they are conveying an impression that is appropriate at the time of the interaction.
- **Face engagements** are present in most forms of communication. Within face engagements Goffman argues that eye contact is important for monitoring others

communication. When considering the management of both the remote and co-local at once, eye contact does become important for mobile phone users who are performing 'dual front interaction'.

- **Civil inattention** is important for maintaining face since a person must acknowledge another's presence but not to the point where full acknowledgement is made.
- **Focused interaction** is where people are focusing their attention on an interaction where as **unfocused interaction** is largely concerned with the management of co-presence.

Several mechanisms described by Goffman (1959, 1963) are used in the management of performance in public and are also useful to consider:

- **Involvement shields** can be used to hide someone's emotion or discomfort in being alone in a public place. Someone reading the paper is involved in the task of doing so and thus provides an excuse for being a 'single' in a public place.
- **Main and Side involvements:** the main involvement is often the dominant involvement whilst the side involvement is often the subordinate one. Managing these involvements can change from moment to moment.
- **Self defence mechanisms** are closely linked to civil inattention and involvement shields and are used when a 'with' feels awkward. For example the reading of a menu or looking out of the window.
- **Boundaries** are used and controlled by performers in order to control who has access to the performance. Within boundaries there are participants (who are directly involved in the communication) and bystanders (who are involved in the situation but not necessarily in the direct interaction).

Goffman's (1963, 1959) concepts are applicable to everyday social practices and communication today and have been applied within several research studies about the use of the mobile phone:

- Humphreys (2005) makes use of Goffman's, singles and withs, and involvement shields to develop 'dual front interactions' and 'three-way talk.'
- Persson (2001) uses Goffman's concept of impression management, involvement shields and civil inattention to help understand people's mobile phone use in public.
- Ling (1997) also uses the concept of civil inattention and notion of boundaries.

These studies are useful to build upon since they show that researchers value Goffman's work when studying mobile communications. Goffman's (1959 and 1963) works can be updated to consider the new social interactional contexts in which computer mediated communication presents.

Another issue is that mobile phone interactions in public force people into different roles regardless of their location. The management of the role change can affect the phone user, and also the co-local others (or in Goffman's case bystanders). Phone users are forced to switch roles regardless of their physical location and sometimes in doing so they are forced to manage the impression they are giving off to individuals within ear shot (Geser 2004). Similar points about role switching are made by several authors: Arnold (2003) suggests that the phone blurs the boundaries between the social and professional spheres whilst Harper (2003) suggests that people are constantly switching between networks and Ling (1997) suggests that the phone user can be seen from two perspectives. It is important to highlight that roles and performance, although similar, do differ since roles are institutionally defined. This concept will be drawn upon in later chapters.

Gaining an insight of people's opinions of public mobile phone use is relevant to this study. Within the literature inappropriate use of the mobile phone and the annoyance people feel is

highlighted as an issue. People's motivations for using the phone may be greater than the annoyance they create for others since humans are hard wired to seek social contact. However after a period of adjustment, mobile phone use will no longer be considered as disturbing and humans will normalise to mobile phone use (Katz 2004). Ling (1997) provided a list of irritating characteristics of the mobile phone, whilst Love and Perry's (2004) study showed that there is an emphasis on displaying non-attentiveness by co-present people when a mobile phone user is within ear shot. These studies highlight that public mobile phone use impacts upon bystanders and also that opinions surrounding this issue are important to gain a comprehensive picture of the device's effects upon interaction.

This chapter has presented literature which shows that a key issue when considering mobile phone use in public is how people manage their communication and interactions between the co-local and remote contacts. In order to address this topic, this study proposes that Goffman's (1959, 1963) concepts of behaviours in public can be applied and updated to consider the new communicative contexts that the mobile phone brings to everyday interaction.

Study One consists of a set of observations (Chapter Five) which focus upon the patterns of mobile phone use in public and data from a survey (Chapter Six) which gained people's opinions about the mobile phone's use in public. Both methods aim to explore how people manage their co-local and remote interactions and present people's opinions of public mobile phone use.

The following chapter will provide a review of the literature applicable to Study Two: private mobile phone use.

3 Literature review for mobile phone use in private

'Research into user behaviours that indicates that something about the role of the mobile phone...results in users finding that mobiles play an irreplaceable role in their daily lives: not in the sense of bringing charisma to their existence, but in the sense that the phones become key tools in their lives, one of such importance that mobile phones even appear to affect who they are' (Harper 2004 p.7).

3.1 Introduction

The following chapter will review literature concerned with mobile phone use in the private sphere.

Whilst Study One relates to interaction and attitudes towards mobile phone use in public, Study Two considers the use of mobile phones for the management of relationships within the private sphere.

There are two main issues to consider within this study:

- The management of personal relationships.
- The emotional attachment to the device and what it offers people in terms of private communication.

Study Two relates to the use of the mobile phone in individual personal 'affective' relationships and a topic within this study considers how people monitor each others personal communication using the mobile phone. Emotion and the mobile phone relates to the emotion that communication through the device can evoke, and also the emotional attachment that people can feel towards the device. The literature in section 3.3 shows that mobile phone interactions are intrinsically bound to emotion.

Whilst the first study focuses mainly upon calling, this study focuses upon text messaging, since short message service (SMS) is a private form of communication in public. SMS also acts as a record of interaction, and this has different implications for the management of the communication. Section 3.2 will detail several studies concerning text messaging and SMS use (Rettie 2006, Grinter and Eldridge 2003, Reid and Reid 2004 and Taylor and Harper 2003).

A mobile device affords constant connectivity and this is closely linked to managing relationships. The constant connectivity people gain from a mobile phone can be associated with the emotion they feel towards the device and the communication it creates; for example people may feel secure or happy to be in communication with contacts or be excited at the prospect of communication from a contact. Constant connectivity is a factor effecting private communication and the literature available about this topic is described in section 3.4. Goffman's (1959, 1963) key concepts are applicable to private mobile phone use: the management of face and impression management are especially relevant.

3.2 Text messaging

Study Two addresses the use of text messaging within the private sphere and how SMS is used when managing relationships. The following section will look at the most relevant work on SMS use in interaction (Rettie 2006, Grinter and Eldridge 2003, Reid and Reid 2004 and Taylor and Harper 2003).

Rettie's (2006) Vodafone Receiver non-academic publication is commercially orientated and lacks theoretical and methodological detail. However Rettie's article is useful because it explores how the technical characteristics of text messages promote connectedness, and also how this has an effect on relationships. Rettie collected 300 text messages and conducted 32 interviews in the UK. The research suggests that text messages are useful in creating connectedness because they are so un-intrusive.

Rettie proposes that there are several factors which contribute to the 'low-key intermittent contact':

- the financial cost is low
- for frequent texters sending a text involves minimal effort
- sending a text does not usually disrupt the activities of the sender
- text messaging etiquette is also minimal in comparison to face to face communication
- receiving a text message imposes few obligations on the receiver (Rettie, 2006).

These factors are highlighted by the interviewees in Chapter Seven (see section 7.5).

Many of the respondents within Rettie's research thought that men were more romantic via text messages than they were during face to face contact. The respondents thought that this was associated with limiting embarrassment. It was less embarrassing to send a text message than it was to say something in person. This finding is replicated in Chapter Seven which shows that several participants believe it is easier to send an SMS to convey a message than it is to communicate the message face to face see section 7.5.

Rettie further suggests that 'thinking of you' text messages have also created new communication rituals. 'Good luck' and 'good night' text messages show that one person is thinking about the other. Text messages, according to Rettie are an important source of emotional support within relationships. Some people remain in constant communication throughout the day creating a feeling of connectedness (Yates and Lockley 2007). Although constant connectedness is mostly seen as a positive thing by Rettie's respondents, some people within Rettie's research highlighted some disadvantages of this:

'Some respondents said that when they were actually together they had little to talk about, having already shared the details of their lives. In some cases, the perpetual contact of 'connected presence' was experienced as control' (Rettie, 2006 p.5).

These issues are echoed in Holflich's work. Holflich (2006) suggests that with the mobile phone's instant communication, moods are passed on straight away without delay. This means that people are able to share their current state of being whilst in constant connectivity. Although in agreement with Rettie (2006) disadvantage of this would be that at the end of a day people would have nothing left to talk to each other about. Harper (2004) also suggests this.

Overall within Rettie's (2006) work most of the respondents were enthusiastic about text messaging. The research concludes that text messages are a near synchronous media which combine connectedness without demanding continuous attention. The ideas within Rettie's research will be considered within the discussion (see sections 9.1.7 and 9.5.4).

Another study concerning text messaging has been conducted by Grinter and Eldridge (2003). This is a small scale study which concerns everyday text messaging and it specifically looks at the kinds of text messages ten teenagers have sent during one month. Grinter and Eldridge's article is descriptive and details some of the analysis of their findings. They use a pre-study questionnaire, a logging study, and some discussion groups within their methodology and use a set of statistics to justify their research.

Grinter and Eldridge fundamentally note the difference in boys and girls text messaging use. Girls in particular were found to send more texts than boys, and girls also send longer text messages (also see Yates and Lockley 2007 who particularly note the gender differences in text messaging and language).

Grinter and Eldridge (2003) note that single text messages (known to them as 'one liner's') tend to be reminders. This is because texts are more frequently and easily accessible than for example,

email. Examples of single messages are birthday messages jokes or picture texts. Grinter and Eldridge believe that a number of single text messages request responses: via a question either indirectly or directly. Another use for texting is to plan future exchanges or coordinate future face to face communication. Language use in text messages is shortened and abbreviated. This leads Grinter and Eldridge to question whether everyday written language will be influenced by text 'talk'.

Grinter and Eldridge's (2003) research represents a small scale study which presents some findings about teenage text message use. The results cannot be used to make general assumptions about UK use. However the study provides some basic information about text message use in young people.

Another study concerning text messaging has been conducted by Reid and Reid (2004). Reid and Reid (2004) research the insights into the social and psychological effects of SMS text messaging. They conducted an online questionnaire and gained 1071 responses from participants aged between twelve and sixty-seven, gaining a mean age of 23.8 years.

Reid and Reid's (2004) compare their research on mobile phone text messaging to McKenna et al's (2002) work on internet chat rooms. McKenna et al base their assumptions on internet and not mobile phone technology. Although Reid and Reid distinguish between the two entities, they do not fully accept there may be a separate set of norms and values, and methods of behaviour for online interactions and text messaging.

Reid and Reid embrace McKenna et al's (2002) idea that the lonely and socially anxious are better able to express themselves and develop close friendships on the Internet than in the real world. This idea is carried throughout the study to the conclusion. Reid and Reid (2004) justify the argument that mobile phones and the internet are similar by saying that people use them to build and maintain social relationships rather than just for practically co-ordinating arrangements (as Grinter and

Eldridge 2003 imply). The data within this study suggests that people use mobile phones to maintain relationships and also to practically coordinate relationships (see section 7.3).

Reid and Reid (2004) provide Thurlow's (2003) undergraduate study as an example that text messages are mainly used for building social relationships. However Thurlow's study is specifically targeted at young people and other age groups are neglected. Reid and Reid conclude from this study that text messages provide an opportunity for intimate personal contact whilst at the same time offer the detachment necessary to manage self presentation and involvement (see section 7.9.3).

In the results Reid and Reid (2004) continue to incorporate McKenna et al's (2002) theory and say that 'texters' are significantly lonelier and more socially anxious than 'talkers'. Reid and Reid's questionnaire reports that texters feel they develop deeper relationships with the person they have been texting most. As a result, texters were also more likely to claim that texting had affected their relationships with friends and family. These respondents say they have more social life than talkers, or at least that they feel like they have.

Participants within Plant's (2001) worldwide non-academic project for Motorola highlighted the positive aspects of the mobile phone as a means of cementing, sustaining, and managing relationships. According to Plant, texting in particular is popular in cultures which tend to be reserved. Intentions can be declared, invitations offered and ice can be broken without the risk of embarrassment. Plant says

'For some people, the effortless contacts and fleeting noncommittal messages made possible by the mobile are ways of avoiding more immediate and forthcoming kinds of interaction'
(Plant, 2001 p.57).

Plant's viewpoint supports Reid and Reid's (2004) research.

Reid and Reid (2004) also explain that 'texters' have a close knit group of 'text mates' or text circles who they keep in contact with. 'Texters' were also more likely to text a particular group as opposed to many different groups. According to Reid and Reid (2004) these findings reinforce the idea that texters share interconnections within a close group of friends in perpetual text contact with one another. On the whole it is reported that texting offers 'texters' a special kind of communicative relationship for which calls are no substitute (see section 7.9.4).

Reid and Reid (2004) also say that the lonelier and socially anxious a person is, the more likely they are to be a 'texter' and to locate their real self through text. Although no direct research evidence supports this statement. According to Reid and Reid texting may offer 'texters' more control over their interactions with others by affording them visual anonymity and asynchronous communication. As such, the mobile phone may become more a matter of identity than a simple communication tool.

According to Reid and Reid (2004) texting is more likely to result in a feeling of perpetual contact than voice calls. A text can often be received at any time and at any place and people can reply covertly and discretely and do so whilst multi-tasking (see section 7.9.4).

The idea that texters develop a deeper relationship with the person they have been texting the most, and the fact that texting offers a special kind of relationship, will be used within Chapter Seven.

A text message study which is frequently referred to within mobile phone literature is Taylor and Harper's (2003) work. Taylor and Harper carried out an observational study which monitored young people's use of mobile phone texting. Specifically this study reveals that text messaging acts as a form of gift exchange between young people. Taylor and Harper show that mobile phones provide a medium through which young people can sustain and invigorate their social networks. Their research consists of a set of observations which were conducted over a ten week period within an

English sixth form college. Six students also participated in group interviews twice per week for six weeks.

Taylor and Harper (2003) recognise that their approach is just one type of perspective on the subject matter and their aim is simply to carry out an in-depth analysis of their own perspective. They do not reject any other view points; they are simply concentrating on the commonalities between mobile phone exchange and gift giving. Taylor and Harper (2003) believe that because text messages can be referred to at a later date, they can help teenagers arrange their thoughts and memories. Text messages can also be used to recall past feelings and thoughts and the sending and receiving of text messages has a ritual nature. Social bonds can become stronger as exchanges take place on a daily basis. The text message comes to mean more than merely a few words and becomes an offering of the commitment to the relationship (Taylor and Harper 2003) (see section 7.5).

The concept of gifting is discussed by Taylor and Harper (2003). They say:

'The exchange of gifts is a common part of everyday life. Most of us take it for granted that the exchanged of the physical is designed to signify feelings such as thanks, caring, love and trust, and is, in turn, meant to result in pleasure or well-being for the recipient. The gift, as Berking puts it, 'makes feelings concrete'. After all, it somehow embodies something of ourselves; the material offering makes tangible something of us as a giver and our relationship with the recipient' (Taylor and Harper, 2003 p.272).

According to Taylor and Harper (2003) whilst receiving no text messages in a day implies that the phone user has no friends and is not part of the social network, failure to reply to a text message can lead to the break down in mutual exchange. Respondents explained that people can become frustrated by others who do not reply. Whilst another of the participants suggested that there is a difference between public and private messages i.e. ones that people don't mind sharing, and others that are meaningful and have personal and emotional value. Some of the participants even

suggested that there should be a way to lock away messages where there is a password on the messaging inbox or folder.

Taylor and Harper (2003) conclude that people shape how technology is used. The mobile phone changes practical purposes to meet everyday social obligations. Phones have provided young people with new ways to perform old rituals. Taylor and Harper's (2003) work is especially relevant to sections 7.5 and 7.9.3. Some of their conclusions will be linked to the data analysis and discussion (see section 9.5.2, 9.18, and 9.22).

In support of Taylor and Harper's concept of gift giving Haddon (2001) also highlights the importance of 'gifting calls'. Haddon says:

'Studies of mobile telephony use by adolescents similarly indicate that certain aspects of the consumption only make sense when we appreciate non-domestic social relationships. Then we see the importance of 'gifting' calls which serve to cement relationships with peers, the way in which the amount of number stored in the phone's memory has itself a social currency' (Haddon 2001, p.8).

So sending and receiving text messages can strengthen the bond within relationships through reciprocity. Although Harper also highlights it is the social action, not the content of the text that has an impact on communication:

'It is not the saying of good night or the receiving of text messages that is special in and of itself; it is rather the doing of the entire social action that gives the participants a sense of something greater than themselves' (Harper 2003 p. 21).

This statement supports Taylor and Harper's (2003) concept - that the social action of sending and receiving text messages re-enforces relationships.

Harper (2003) also points out that mutual dependency gained through sending and receiving text messages is responsible for binding people together. Harper says:

'These patterns of exchange, mediated through phone use (but presumably through other technologies and devices) are dependent upon trust and reciprocity. GSM devices provide a means of both demonstrating and testing out the trust that exists in relationships. This is born out through meeting obligations to reciprocate. The mutual dependence that derives from obligations, such as replying to text messages, binds people together, establishing and reinforcing the moral order of friendship and social intimacy' (Harper, 2003 p.23).

Harper's argument supports Reid and Reid's (2004) statement: texters feel they develop deeper relationships with the person they have been texting most.

Sending and receiving text messages enhances relationships but according to Harper people do not text each other because they are thinking about how to keep the balance in the equation of giving and receiving, they do these things without thinking.

Furthermore to Harper (2003) the nature of the text messages means that people can store the text information, and the information can be kept as evidence. Texts can be used as a part of an archive of information and the information within a text is 'immortal'.

3.2.1 Summary

Rettie (2006) explores how the technical characteristics of text messages promote connectedness. Several factors which contribute to the 'low key intermittent contact' of a text message are listed but mainly unobtrusiveness is attributed to their success. Text messages, according to Rettie are an important source of emotional support within relationships. Holfich (2006) however points out that the phones instant communication means that moods can be passed on straight away. Grinter and Eldridge's (2003) small scale study fundamentally notes the difference between boys and girls use of text messaging. They suggest that text messages are used as reminders or to plan future

exchanges or co-ordinate future face-to-face communication. Reid and Reid's (2004) study on the other hand argues that people use text messages to build and maintain social relationships rather than just for practically coordinating arrangements. They suggest text messages provide an opportunity for intimate personal contact whilst at the same time offer the detachment necessary to manage self presentation and involvement. In linking the sending and receiving of text messages to gift giving, Taylor and Harper (2003) suggest that mobile phones have provided young people with new ways to perform old rituals.

The section has shown previous literature based on small scale studies indicates that the act of text messaging is important within relationships. The literature about text messaging will be employed in Chapters Seven and Eight. Particularly relevant, are the points about text messages re-enforcing relationships and also text messages used as gifts. It will be shown that themes within the literature are reflected in the results from this research study.

3.3 Emotion and the mobile phone

There is a small amount academic literature available about the subject of emotion and the mobile phone. Vincent (2004, 2005, and 2006) and Lasen (2004, 2005) are key writers on emotion and the mobile phone and have produced several commercially orientated articles on the subject. The following section will look at Vincent's (2003, 2004, 2005) work as well as Lasen's (2004) research. Plant (2001) and Harper's (2003, 2004) viewpoints (already examined in section 3.2) on the subject of emotional relations to and via the mobile phone, will also be considered.

Vincent's (2005) work is based upon three research studies. Conducted between 2002 and 2004, the studies included specially commissioned qualitative research; questionnaires; 24 hour communication diaries; one to one interviews, focus groups and workshops. Vincent (2005) highlights the fact that there is an extraordinary relationship between people and their mobiles. It is an emotional relationship to the object and all that it engenders. Vincent argues that the emotional attachment to phones exists because of the omnipresence of mobile phones in society. The synergy

between people's behaviours and the capabilities of their phones enhances people's attachment to the device (Vincent, 2005).

Vincent's research explains how Vincent and Harper (2003) and Vincent and Haddon (2004) found that people use their mobile phones more for connectivity with their friends and family than for business use. People call others that they know. They do not make new friends via their mobile phones. Vincent says:

'Each mobile user in this choreography has their own set of communicants whose presence is felt and is focussed through their attachment in some way to the mobile itself' (Vincent, 2005 p.97).

This viewpoint extends upon Grinter and Eldridge's (2003) point: that the mobile phone is used for practically co-ordinating arrangements but contradicts Reid and Reid's (2004) research which suggests that people build and maintain social relationships using the phone (see section 3.2).

For Vincent, it is the emotional content of the mobile communications which is the driver behind the relationship people have with their phones. Vincent explains that if you ask people to talk about their phones they use emotional terminology to describe their views. She uses her collaborative work with Harper (2003) to explain that panic; strangeness; irrational behaviour; thrill and anxiety are all recorded expressions people associated with their phones. To Vincent is it not necessarily the attachment to the device that people have, but more the contact it enables and the information stored on it that is important (Vincent 2005) (see section 7.2).

In exploring how people are attached to their phones Vincent also points out that fundamentally it is the need for social connectivity that creates the need for emotional content. Vincent uses Gergen's (2002) concept of '*absent presence*' (see section 3.4) to explain constant connectivity. The idea that the mobile phone can at any point provide contact with others makes people feel as though others are with them and provides people with a sense of connectivity.

What's more it is not just about how people talk about their phones but how embedded they have become in society; people cannot imagine a life without one (see section 7.2.1). The mobile phone enables emotional and spontaneous behaviours which make people think about their lives in terms of what the mobile phone can offer them. Further still Vincent suggests that people value their phones so much that they go out without their phones for fear of losing it. This of course is paradoxical given its importance in the role of absent presence (Vincent 2005) (see section 3.4 for Arnold's concept of connectivity and for Gergen's concept of absent presence).

When explaining the relationship with the mobile phone, Vincent (2005) suggests that it is difficult to define the relationship between the technology and the human behaviour. She says:

'The emotional dependence on the device suggests that there is some form of synthesis between the user and their mobile such that neither can function without the other.....it is difficult to define: is it the human behaviour that is manifesting in the design and use of the technology or is it the reverse occurring?' (Vincent, 2005 p.101).

Vincent suggests that the answer to this question is that the technology and human behaviour are both impacting on one another. The emotional attachment to the device is dependent on the individual and is as relevant as the connectivity which it affords. These elements, as well as the idea of the mobile phone's omnipresence are according to Vincent, fundamental in explaining people's relationships with their phone (see section 7.2 for interview data about attachment to the mobile phone).

In concluding Vincent (2005) suggests that even just by considering how dependent people are on their phones shows the evidence that there is an emotional relationship with the technology. Communications received, messages stored, and ring tones used are all highly personal and individual attributes to an individual's phone, making it a unique device that is highly personal to the user. The mobile phone has not replaced what people do but rather it has made life easier for

them. People have become dependent on what mobile phones do, and this has made them dependent on the device (see section 7.2.1). What's more people care about the content of their phones and this deepens the emotional ties to the device. The emotional attachment people feel isn't just for the device it's self, it's for the content of the phone and the connectivity it provides through absent presence and the virtual network (Vincent 2005). Vincent's work will be valuable when considering the data analysis for Study Two. The concept of an emotional attachment is considered throughout Chapters Seven and Eight.

Continuing from Vincent's work, Lasen (2004) has also written an article for Vodafone's Receiver magazine concerning emotion and the mobile phone. Lasen claims that nowadays people are moved and acted upon by their mobile phones. Mobile phones have become affective technologies. Lasen says they are '*objects which mediate the expression, display experience and communication of feelings and emotion.*' (Lasen, 2004, p.1). Lasen (2004) believes that user's enjoy an affective relationship with their phones and feel attached to them. The emotional attachment is often enacted in the personalisation of handheld devices and services. Mobile phones are an extension of the owner's presence and link people into a virtual network. Because of this, mobile phones become an important element in building and maintaining groups and communities (see section 7.2).

Lasen points to Vincent's (Lasen provides no date for this work) notion that people are more attached to their mobile phone devices than any other forms of technology and then highlights some of the associated emotions people feel towards their phones. For instance Lasen points out that the mobile phone can be linked to anxiety. Phones reduce the stress of a 'tight' situation; deadline/meeting arrangement, and allow for more flexibility of these. But at the same time mobile phones can induce a feeling of anxiety when users are not connected.

Mobile phones in addition contribute to modifying the ways of expressing emotions. They also present opportunities where emotions can arise - for instance receiving a text message, picture message and video messaging can arouse excitement (see section 7.8.1).

Lasen (2004) highlights the fact that the mobile phone influences the renegotiation of social norms about the public display of emotions and the management of potentially embarrassing situations. The mobile phone allows people to choose to display emotions in public. Text messaging especially assists saving face, allowing more time to think about what is going to be said (Lasen 2004).

According to Lasen (2004) mobile phones are a promise of perpetual contact and permanent accessibility and in turn are assurance of connections. Most importantly Lasen points out that people are also attached to the content of their phones: numbers; SMS; pictures and videos. Therefore the value of the device is increased by the emotional attachment to the object and to the information it contains (Lasen, 2004) (see section 7.2).

As a result Lasen (2004) suggests that people feel anger, sadness, annoyance and distress at the loss of their phone. Not being able to make a call when one wishes has become unbearable. Lasen says:

'The possibility of being in contact is so strong that the loss of this capacity produces strong feelings - such as panic when users lose or forget their phone, or anger against the operator when the network fails' (Lasen, 2004 p.6).

Lasen's discussion is useful when considering Study Two as it highlights the fact that people are not only attached to the device and its function, but also the fact that people are attached to the phone's content. Lasen's (2004) ideas are used throughout Chapters Seven and Eight.

Rather than mentioning the emotional attachment to the device Plant (2001) briefly covers the topic of emotion in her world wide mobile phone study conducted on behalf of Motorola. Plant (2001) explains that people say that they find it much easier to lie about their feelings and intentions when

using their mobile phones. More commonly people can lie about their whereabouts or social arrangements. Several of the participants within Plant's research mentioned the part that the mobile phone can play and contribute in having affairs. Plant says:

'Many contributors confessed to checking their partners' mobiles for suspicious messages and calls which were described in the UK as 'dodgy' or 'iffy'. Mobiles can certainly cause problems for philanderers. "I'd like to turn off my mobile when I'm in bed with someone" said one business man, many miles from home, "but my wife suspects I'm being unfaithful if she can't reach me"' (Plant 2001, p.55).

Plant continues by explaining that the phone can also be used to check up on people and explains how one of the participant's partners used the mobile phone to specifically check up on her (see section 7.6).

Harper (2004) reports on research about users attitudes towards the use of GSM devices and discusses the implications these have for the future evolution of hand held devices. Harper mentions the emotional attachment to the content of the mobile phone:

'Many commentators argue that the relationship between the user and the device itself has become much more emotional than was hitherto the case with computer technologies. It is argued that this is a function of the social connectivity that mobile phones afford and thus reflects a relationship with the content more so than the device itself' (Harper, 2004 p.6).

The participants in Harper's research did not associate their mobile phone with the terminology 'emotion'. They did however use certain words to associate and explain their mobile phone usage.

The following terminology is described in Harper's research:

- *'Strangeness – term used to describe people without a phone.*

- *Panic – term used to describe the feelings that absence from the device created – but particularly for the loss of connectivity – rather than loss of the actual device.*
- *Irrationality – One of the negative consequences of ownership and the fact that people recognise the fact they can't always control the mobile related behaviour.*
- *Thrill – from the ability to transcend the border of public and private behaviours: receiving intimate texts in public places is one such activity.*
- *Anxiety – of the etiquette about mobile use – how many times should someone be in touch; why has someone not been in touch?’ (Harper 2004, p.9).*

Harper (2004) concludes that people are using their mobiles to set up social arrangements; mobile use helps to avoid making set appointment times; and people are also making and breaking relationships via their mobile phones. Overall emotion exceeds information. Harper's evidence also suggests that the capacity to be 'in touch' any time any place, irrespective of the danger and irrational behaviours, results in a key added value for the mobile user.

3.3.1 Summary

This section shows that prior studies have found that the mobile phone is a highly affective device. Vincent (2005) highlights an extraordinary relationship between people and their mobile phone. The emotional attachment to the mobile phone exists towards the content of the device and also towards the connectivity it provides. According to Vincent, people cannot imagine their lives without a phone. The mobile phone enables spontaneous behaviours which make people think about their lives in terms of what the mobile phone can offer them. Vincent (2005) says even just by considering how dependent people are on their phones shows the evidence that there is an emotional relationship with the technology. Lasen (2004) also suggests that people feel attached to their phones and to the mobile phones content. Mobile phones are 'affective technologies', are an extension of the owner's presence, and link people to a virtual network. Whats more, Lasen suggests

that mobile phones are a promise of perpetual contact and permanent accessibility and in turn are reassurance of connections. In agreement with Vincent and Lasen, Harper (2004) says that people have an emotional attachment - more so with the content than the device itself. Harper explains that various emotional terminology is used when describing the mobile phone and its usage. To Harper overall, emotion exceeds information.

This section shows that there is a clear agreement that the mobile phone links to attachment and also emotion. The attachment and emotional ties people feel they have towards their phone is for the phone's content and the connectivity it affords than for the device itself (see section 7.2).

3.4 Constant connectivity

Connectivity is a theme which appears throughout several researchers work. Using the work of Hoflich (2006), Geser (2004) and Arnold (2003) the following section will show how connectivity is used to explain why people are attached to their mobile phones, and that connectivity is an inherent part of the device itself. The feeling of being constantly connected is intrinsically linked to private communication and the management of relationships since people have the ability to be permanently in perpetual communication any time anywhere.

Hoflich (2006) considers the mobile phone as possibly *the* technological communication medium for relationships. Hoflich highlights the spectrum of relationships as being from friendships to temporary liaisons and from partnership to marriage. Hoflich says:

'Especially where close relationships are concerned, the mobile phone is a medium for relationships from beginning to end – from the first point of contact with the exchange of telephone numbers and the spelling of the first text message, through to breaking up by mobile phone and especially by text' (Hoflich, 2006 p. 2).

This concept is relevant to the interview data which provides a brief discussion about using mobile phones to end relationships (see section 7.7).

Hoflich (2006) also discusses 'reachability syndrome'. People want to be able to reach others at all times, but they don't necessarily want to be contacted all of the time. Mobile phone users must find a balance between contacting others and being contacted. One of the positive sides of this constant communication is that there is an element of constant reassurance. Hoflich believes that the constant communication and thus reassurance in 'I love you' texts and also 'how are you' texts leads to people feeling closer to one another (see section 8.3).

To Hoflich, the feelings of constantly being in touch create security. People don't feel lonely because they can access virtual contacts at the touch of a button. Although on the other hand, with no contact they could feel lonely (also see Vincent 2005).

Further extending the idea of psychological security Geser (2004) explains how the phone can help to make people feel connected to their loved ones even when they are physically far apart:

'Given their capacity to retain primary social relationships over distance, the use of cell phones can well go along with regressive psychological tendencies: e.g. with the need to cushion the traumatic experiences in foreign environments by remaining tightly connected to the loved ones at home; Thus, the mobile can function as a 'pacifier for adults' which reduces feelings of loneliness and unprotected-ness at any place and time' (Geser, 2004 p.12).

The potential for communicating at any time gives people a sense of connectedness and a sense of security through their virtual network of contacts.

Geser (2004) continues to explain that constant connectivity can lead to grooming talks which assert reassurance in relationships. Geser says:

'Given the ubiquitous availability of the cell phones for sending and receiving calls, it can be expected that its impact will make phone conversation more similar to off-line face to face

communication, where highly expressive gestures and 'grooming talks' are very common; communication not primarily aiming at conveying specific information or inducing recipients to specific actions, but just for the purposes of expressing affection and confirming that the relationships exists and will continue in the future' (Geser, 2004 p.8).

Geser is implying that people eventually start using their phones for the sake of it rather than for a specific purpose.

Haddon (2000) emphasises that mobiles are increasingly used for phatic calls:

'The mobile clearly enables additional communication that we might not have made before (as does email) for example, phatic calls where the point is not so much the message but the gesture of getting in touch' (Haddon, 2000 p.5).

This particular statement is relevant to section 3.2 (text messaging) which highlights that there is a close link between the social process of text messages and constant connectivity.

In developing this idea, Geser (2004) quotes Cox and Leonard (1990) who suggest that people feel a sense of connectedness when they have been contacted and disappointment when they have not:

'Many ring just for contact which suggests that phone calls are a powerful reminder of connectedness. This was reflected in the disappointment people express when they have no messages on their answering machines, as this means no one wanted to talk to them, or wanted to be called back' (Cox/Leonard 1990 in Geser, 2004 p.8).

Geser (2004) predicts that in the future, due to the external availability of communication partners to give advice and as sources of opinion, individuals may unlearn to rely on their own judgement and reflection – thus creating a dependency on others for judgement even if they are thousands of miles away (the interview data supports this view and implies that as the mobile phone becomes more integrated into people's every day lives, the more dependent people come to be of the device,

see section 7.2). Geser is suggesting the constant connectivity will cause people to become dependent on the communication. Thus an attachment to the phone could deepen.

In continuing with the concept of connectivity, Arnold (2003) points out that the mediated actions and phone related performances can be ironically contrary and co-dependent. On the one hand, the mobile phone allows geographical freedom; a person can use their phone anywhere with no fixed address. Users are provided with a high degree of independence, mobility and flexibility. The phone liberates people without isolating them. Arnold says:

'The user can improvise social arrangements and work arrangements, responding and initiating flexibility and rapidly, with a minimum of forward planning or inflexible coordination' (Arnold, 2003 p.243).

Arnold is implying that the mobile phone constant connectivity enhances people's communication both in social and professional spheres and these are seen as positive characteristics.

On the other hand this useful and advantageous technology also has negative connotations. The phone can be seen as a hindrance rather than as liberating. Arnold explains:

'a degree of independence is facilitated only when the user is co-dependent, and the connection between self and the Other must be maintained at all times, in all places, in synchronous time' (Arnold, 2003 p. 244).

This idea links closely to Hoflich's (2006) work mentioned in section 3.2 and Geser's (2004). The mobile phone facilitates independent and sporadic social arrangements but ironically this can only be the case if there are others available within the virtual network with whom the user can communicate with and coordinate.

According to Arnold (2003), even when the phone isn't turned on, it can be carried at all times and in practise communication can be made at any time. This creates the idea of connectedness. Phone

users are both close and yet distant meaning they can feel isolated and yet reassured. The connection between physical proximity and social proximity is broken. The phone abolishes distance by abolishing nearness as people are able to ignore those who are close by in physical spaces and connect to another who is in their virtual world (Arnold 2003).

Constant connectivity can also be linked to the concept of 'absent presence' (Gergen 2002) and is used by Vincent (2005) to explain emotion and the mobile phone (see section 3.3). Although a person is present (in the co-local environment) they are temporarily absent whilst engaging with the communicative media i.e. the phone (and remote contact).

Gergen says:

"One is physically present but is absorbed by a technologically mediated world of elsewhere. Typically it is a world of relationships, both active and vicarious, within which domains of meaning are being created or sustained. Increasingly, these domains of alterior meaning insinuate themselves into the world of full presence - the world in which one is otherwise absorbed and constituted by the immediacy of concrete, face-to-face relationships" (Gergen 2002 p.227).

Since the mobile phone allows for constant connectivity people may find themselves engaging with 'absent presence' - possibly without being aware of the impact on others. The concept of 'absent presence' may also be useful for considering the implications of public mobile phone use in Study One.

3.4.1 Summary

Constant connectivity is shown to be tightly linked to emotion and the mobile phone. Hoflich (2006) stresses that constant connectivity leads to a sense of constant reassurance and security, and this in turn allows people to feel closer. Geser (2004) suggests that the potential for any time communication gives people a sense of connectedness and security. Whilst people feel a sense of

connectedness when they have been contacted, they can feel disappointment when they have not. Arnold (2003) shows that the constant connectivity enhances people's communication. Although sometimes the constant communication can become a hindrance, since communication must be maintained at all times and in all places. According to Arnold the idea of connectedness is created because in practise, communication can be made at any time. By just having access to contacts, people feel connected to them – even if they cannot get in touch with them. Whilst constant connectivity can be seen as a positive thing: people can always be in touch; it also has negative connotations: people become co-dependent. (Geser 2004) The concept of connectivity will be drawn upon in Chapters Seven and Eight.

3.5 Sharing the mobile

Several of the questions within the survey are inspired by Weilenmann and Larsson's (2001) and Taylor and Harper's (2003) studies which look at teenagers use of mobile phones and specifically at sharing the devices. The following section will show that sharing mobile phones is common in younger phone users.

Weilenmann and Larsson's (2001) research is based upon observational fieldwork which has been conducted within public spaces. It focuses upon the local interaction of mobile phones. Specifically, they examine how mobile phones are shared between teenagers. Weilenmann and Larsson's findings show that mobile phones are not just treated as a personal device and the communication via mobile phones is not just seen as private, especially by teenagers. They have observed many instances where groups of teenagers are sharing conversations with the 'telepresent' as well as actually directly sharing the device for both text messaging and calling.

Weilenmann and Larsson (2001) describe several different levels of sharing. Minimal sharing is when there is no physical form of sharing of the phones however the users may read text messages aloud or by showing the text message to others. Both strategies let friends share the personal communication. Taking turns involves the users actually physically sharing the device; and is a lot

more hands on than minimal sharing. Often two people will take turns to speak to the person on the other person on the other end of the phone. Borrowing and lending of phones also occurs during interactions, and it is suggested that mobiles almost appear to be collaborative resources rather than just a personal phone. The extensive sharing of phones raises the question about the device as a personal and private object.

Taylor and Harper (2003) also believe that teenagers are often sharing the content of their phones and the phones themselves. In their study with an English sixth form college (as mentioned in section 3.2) they observed that often the teenagers would leave the devices on the table for others within the social network to use. This according to Taylor and Harper *'enforces friendships and provides them with a mechanism for sharing their emotional experiences, and has also become part of teenagers every day usage patterns'* (Taylor and Harper, 2003 p. 279). At the same time the teenagers are conforming to the same form of mutual dependence. Sharing their devices with others shows that they are open to giving and receiving and this in turn also demonstrates trust (Taylor and Harper, 2003).

3.5.1 Summary

Weilenmann and Larson (2001) note that the mobile phone is not seen as a private device by teenagers. They observed people sharing mobile phone conversations and actually sharing the device for texting and calling. They describe several levels of sharing and suggest that the extensive sharing of phones raises the question about the device as a personal and private object. In a similar study, Taylor and Harper (2003) show that teenagers often share the phone content and the device itself. By sharing their own device, a form of trust as built between friends and peers.

The observations shows that phone sharing can exist in public phone use (see section 5.3.1.6).

3.6 Conclusion

This chapter presents several key themes to be considered within this study: emotion and the mobile phone; constant connectivity; sharing the mobile.

The ritual of sending and receiving text messages can be likened to the act of giving gifts: mobile phones are providing young people with new ways to perform old rituals (Taylor and Harper 2003). However the main contributing factor as to why text messages are so successful is the fact that they are so unobtrusive. They are also an important source of emotional support within relationships (Rettie 2006). Text messages provide an opportunity for intimate personal contact whilst at the same time offering the detachment necessary to manage self presentation and involvement (Reid and Reid 2004).

There is an extraordinary relationship between people and their mobile phone (Vincent 2005). People are attached to their mobile phones but more specifically they are attached to the devices content (Vincent 2005, Lasen, 2004, Harper 2004) and also to the connectivity the device provides (Vincent 2005, Lasen 2004). By considering how dependent people are to their phones shows some evidence that there is an emotional relationship with the technology (Vincent 2005). Mobile phones are affective technologies: they are an extension of the owner's presence, and link people to a virtual network. The promise of perpetual contact and permanent accessibility that a phone offers, in turn provides a reassurance of connections (Lasen 2004).

The constant connectivity that a phone provides the user, leads people to feel a sense of constant reassurance and security, and this in turn allows people to feel closer (Hoflich 2006). The potential for any time communication gives people a sense of connectedness (Geser 2004). Constant connectivity enhances people's communication, although sometimes it can become a hindrance since the communication must be maintained at all times and in all places (Arnold 2003). Even if people cannot get in touch with others, just having access to the contacts, makes people feel connected to them. Although constant connectivity can be seen as a positive thing: people can always get in touch; it also has negative connotations; people can become co-dependent (Geser 2004).

Sharing the mobile phone has been observed in teenage users. They share mobile phone conversations, and the actual device for texting and calling. The sharing of the devices raises the question about the device as a personal and private object, especially as teenagers have been observed sharing the content of the device itself. By sharing the device, a form of trust is built between friends and peers, (Taylor and Harper 2003) especially if there is an emotional attachment to the device and more specifically to the device content.

The literature within this chapter shows that the mobile phone is intrinsically linked to emotion, attachment, and constant connectivity and these concepts will be drawn upon throughout Study Two.

The following chapter presents information about the methodological approaches that Study One and Study Two have adopted.

4 Methods

'Use of the mobile phone is an immensely significant social and cultural phenomenon. However, market hype, and utopian dreams greatly exaggerate its importance. The fundamental issue for sociology is the process of change. Bound up with contemporary issues of change, the mobile phone is a prime object for sociological attention both at macro and micro levels of analysis' (McGuigan, 2005 p. 45).

4.1 Introduction

This chapter reports on the methods used in both Studies One and Two. As a sociological study, and taking account of the quote above, the research design for the first study involved two types of primary data collection: an online questionnaire; and observations supported by photographs. Using these two methods allows the data to be triangulated. Cohen and Manion define triangulation as an *'attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint'* (Cohen and Manion 1986, p.254). The results from the questionnaire will provide quantitative patterns of data on people's attitudes, whilst the observations will reveal what people actually do when managing their remote and co-local relationships during interactions in public spaces and provide some qualitative results.

To collect data for the second study, a questionnaire and semi-structured interviews were employed. The questionnaire, allowed for quantitative patterns of data to be gathered whilst the interviews allow for further development on the questionnaire, in order to gain more in-depth data about how people manage their relationships using their mobile phones.

There are overlaps within the data, even though the data is divided into two studies. For instance, the topic of emotion and the mobile phone is addressed within both surveys. This is because Study Two had not been established at the time Study One was being developed. The opportunity to design a survey for Virgin Mobile became prevalent half way through this project and prompted the development of a second study. Literature and sociological theory

from Chapter's Two and Three will help to explain the research design for both Studies. In places, the literature from both chapters is applicable to the methods in both studies and research design. The research design has been developed from a sociological perspective and this also impacts upon the approach taken towards the analysis.

The following chapter will address each of the methods used within each of the studies. Both studies have used survey research; however the way in which each questionnaire was managed has differed, and is therefore discussed separately. This chapter will provide a discussion which includes the practicalities, ethical considerations and processes of data collection for the surveys, observations, and photographs, and interviews.

Study One	Start	End	Data Collected
Mobile phone use in Public	September 2005	January 2006	Pilot Survey
	March 2006	October 2006	Survey
	May 2006	July 2006	Observations
Study Two	Start	End	Data Collected
Mobile phone use in Private	July 2006	September 2006	Survey
	July 2006	September 2006	Pilot Interviews / Focus Groups
	September 2006	December 2006	Interviews

Table 4.1 Time line for data collection for Study One and Two

4.2 Online questionnaire – mobile phone use in public

This study (Study One) considers people's management of the mobile phone in public places.

The aim of this study is to explore the two following issues: How mobile phone users manage phone use in public in context interactions; and user's attitudes to public phone use. In order to gain user's attitudes to public phone use a survey has been devised, whilst observations have been carried out to validate what people actually do in relation to managing their mobile phone use in public. The following section will describe the processes involved in developing the online survey for Study One.

4.2.1 Processes and practicalities

Originally the idea for the questionnaire distribution was to send five thousand copies to a mail distribution list. The total estimate cost for this process would have been around three thousand pounds. Considering the probable response rate on a standard postal survey would be lower without incentives and reminders (Edwards et al 2007), this process would not have been cost effective. The method of administration was therefore reconsidered. The method of using a questionnaire was still viable but there needed to be a more effective way to gain a reasonable response rate with a varied sample. A non-random purposive sample gained from 'on the street' interviews was therefore proposed (Kemper et al 2003). Permission to carry out the research inside a large in-door shopping centre (Meadowhall in Sheffield) was requested. This was not forthcoming. Permission to question people on the street within Sheffield City Centre was also not granted. Cobanoglu et al (2001) found that online surveys gained the second highest response rate in their University based study therefore using an online tool was deemed to be the most efficient and effective way to gather the data for the final questionnaire. Shannon et al (2001) in particular cite cost as one of the most positive aspects to online survey tools. However to ensure that a quality survey was distributed a pilot survey was engineered.

4.2.2 Pilot questionnaire

A draft of the pilot questionnaire was firstly given to twenty first-year University students to critique. Overall no major potential problems with the pilot questionnaire questions were identified by this group. It was therefore presumed that the pilot questionnaire was ready for wider distribution. The pilot questionnaire was distributed by post to 400 people across the UK between the ages of sixteen to sixty-five plus and gained a response rate of 50% with 203 respondents. This response rate was considerably higher than expected and may have been due to the prepaid envelopes supplied for each survey response.

The questionnaire design consisted mainly of closed fixed choice questions. The questions focused on how people think they manage both 'co-local' and 'remote' communication during their day to day communication in public spaces; when alone, when with one other person, and also when with groups of people. The survey also questioned people's attitudes and opinions of

their own use of mobile phones in public and private spaces as well as addressing other people's use of mobile phones in public spaces. Overall, it aimed to find out people's patterns of public mobile phone use during interpersonal interactions, and people's opinions of their own and other's public mobile phone use. The survey design was informed by literature in Chapter Two and will be discussed below. A copy of the pilot questionnaire is in Appendix One.

4.2.3 Problems with the pilot questionnaire

After distributing the pilot questionnaire, it then became apparent that there were a range of issues with the questions. These issues and potential future problems were highlighted by people who on completing the questionnaires, left comments by the questions, and also made comments about the questions. The general consensus was that the options for the answers to the questions were too rigid, and that when it came to the mobile phones, things were not quite so 'black and white'. Several participants reported that they would have liked some 'in between' answers to choose from and others said they wanted 'sometimes' options instead of just 'yes' or 'no' options. The questionnaire was redrafted in the light of this feedback.

First, it was necessary to alter the question about the participant's age (see Appendix One). The ages were grouped into categories. Therefore there were responses within the sixteen to twenty-four age ranges, but no way of differentiating between for example the sixteen year olds usage patterns and the twenty-four year olds patterns. (The results within Chapter Six suggest that there are variations in usage patterns between the sixteen to eighteen year old group and the twenty-two to twenty-four year old age groups - see section 6.2.1). The question was altered to 'please indicate your age'. This phrasing made it easier to specifically categorise people's age and to investigate whether there are any distinct patterns in usage according to age. The mean age of the sample could also be gained giving a clearer idea about the sample's demographics.

Some of the question numbers in the survey required the phrase 'on average' so that the participants didn't tick their reply and then write 'it depends' next to their answer. Many of the participants had written comments next to their answers because they didn't want to write 'yes' or 'no'. They were implying that not every mobile phone interaction is the same, and they would

answer their phone or make calls depending on who they were with, or what situation they were in. Using the term 'on average' allowed the participants to think about what they usually do, rather than feel confused at the prospect of answering a definite 'yes' or 'no'.

The responses for question twenty-five also had to be altered. 'Yes' 'No' or 'don't know' answers were changed to 'Always' 'Sometimes' or 'Never'. This also prevented participants from writing 'it depends' next to their answers (see Appendices One and Two).

Although there was no intention, questions thirty and thirty-one appear to be linked within the questionnaire (see Appendix One). Many people had perceived that if they answered 'no' to question thirty then they would not need to answer question thirty-one, which ultimately expands on and is dependent on question thirty. There were more than several instances where people had not given an answer to question thirty-one and consequentially the data is missing. The final questionnaire addresses this issue by re-phrasing the questions. A copy of the pilot questionnaire and final questionnaire is in Appendices One and Two for comparison.

4.2.4 Explanation of the questionnaire

The final questionnaire was split into six sections and consisted of thirty-eight questions. It included a section for non-mobile users with fourteen questions. This was to ensure that presumptions were not made about the penetration rates of mobile phone ownership and use. Even if a person does not own a phone, they still have attitudes towards phone use in public and they were invited to answer the questionnaire which is tailored towards non mobile phone users (see Appendix Two - the non mobile phone questionnaire gained seven respondents in total and thus will be not analysed).

The final questionnaire consists of questions relating to demographics and topic questions. Sections one and two of the final questionnaire relate to demographics and provide a comparative analysis of the topic questions which are listed within sections three to six.

It is useful to show how the existing literature about mobile phone use relates to the survey questions: the table below provides this detail.

Section / topic of questionnaire	Question numbers	General Topic	Related Existing Literature Topic
1. Country of Residence	1	UK resident	N.A - Demographic Data
2. Initial Information	2-4	Demographics	N.A - Demographic Data
3. General Information	5-7	Phone provider / expenditure	N.A - Demographic Data
4. General Phone Use	8-11	SMS send / receive Calls make/ receive	N.A - Demographic Data
5. Patterns of Mobile Phone Use in Public	12-13	Calls in public	Weilenmann and Larson (2001) Humphreys (2005)
	14-15	Calls in groups in public	Weilenmann and Larson (2001) Taylor and Harper(2003) Goffman (1959, 1963) Arnold (2003) Humphreys (2005)
	16-17	Calls with one other in public	Ling (1997) Goffman (1959, 1963) Arnold (2003) Humphreys (2005)
	18-19	Split conversation and phone use	Taylor and Harper (2003) Goffman (1959, 1963) Palen et al (2001)
	20-22	Over heard phone conversations / embarrassed	Ling (1997) Goffman (1959, 1963) Persson (2001) Harper (2003)
6. Public Mobile Phone Use and Opinion	23-26	Acceptable / annoyed / etiquette	Ling (1997) Lasen (2002) Love and Perry (2004) Katz (2004)

	27-33	Circumstances of phone use	Weilenmann and Larson (2001) Love and Perry (2004) Humphreys (2005)
	34-35	Emotions	Lasen (2004) Harper (2004) Vincent (2005)
	36-38	Connectivity	Arnold (2003) Geser (2004) Holfich (2006)
7. Non Mobile Phone Users	39-52	All of the above topics modified for non users	All of the above literature modified for non-users

Table 4.2 Existing literature and the questionnaire design

Within the final questionnaire section four queries peoples average daily mobile phone use. This provides an insight as to whether the person is a heavy phone user or not, and allows for comparisons in the results from the subsequent sections of the questionnaire (see Appendix Two and section 6.1).

In section five the respondents are asked questions about the patterns of their own mobile phone use in public. It focuses on people's perception of etiquette and of their own mobile phone use, when in the presence of others. Questions twelve and thirteen address how often people use their phone to make and receive calls in public. These, like the demographics section, gage both heavy and light phone users, in relation to the use of their phone in public. The management between answering and making calls differs since one type of call is a voluntary action and the other is involuntary: and each has different consequences for the surrounding interactions. Goffman's (1963) is face management is applicable here since an involuntary interaction i.e. incoming phone call requires a different set of rules for managing face.

Questions fourteen to twenty-one of section five distinguish between making and receiving calls in public, since the distinction again has implications for the management of face (Goffman 1963). These questions establish whether people initiate phone calls when in the company of

others or whether they are prone to answering their calls in front of others. The management of the two types of interaction differs since one is purposeful and the other is obligatory. These questions also distinguish between group situations and when a person is in a dyad, since again the management of face (Goffman 1963) differs according to the communicative context.

The distinctions also allow for comparisons between the two sets of circumstances. For instance a respondent may answer their phone in group situations, but may not do so when with one other person in a dyad. Alternatively they may make phone calls when in a dyad but may not do so when in a group. Such questions provide data to allow discussion of Goffman's (1959) stage performance, Goffman's (1963) face management and also Humphreys (2005) work on sharing mobile phone calls with 'co-locally present' and 'remotely present' people.

Questions eighteen and nineteen query whether or not people split their conversations between people on the phone and people who are in their company. These questions consider Humphreys concept of three-way talk (see section 2.4.1) and will establish whether people are aware of the particular patterns of mobile phone use.

Questions twenty to twenty-two are associated with overhearing mobile phone conversations. These questions are informed by Goffman's (1959, 1963) concepts of public interactions and performances (see section 2.3.1). These questions also explore the etiquette of mobile phone use in public in relation to talking on the phone (Ling 1997) and whether or not people find talking on the phone in public embarrassing (Love and Perry 2004) (see Appendix Two).

Section six questions the participant's opinions on mobile phone use in public. Questions twenty-four and twenty-five address whether people get annoyed by other people's phone use, and if so what they find annoying about it (Ling 1997, Katz 2004). Question twenty-six addresses whether people actually think phone etiquette should exist (Ling 1997). Questions twenty-seven to thirty-one then place people in scenarios whereby they have to decide how they would act or react to using their mobile phone in various public places (see Appendix Two).

Question thirty-four queries whether people think they feel any emotions when their phone rings and helps to understand whether people recognise that their mobile phone evokes emotion. At the time of developing the questionnaire it was unclear if a second tranche of data would be collected for a second study- therefore data relevant to the issue of emotion and the mobile phone was collected. These questions can be related to study two and are associated with literature about emotion and the mobile phone (Vincent et al, 2005, Lasen 2004 - see section 3.3).

Question thirty-seven concerns connectivity which is also a topic within study two. Finding out if people turn their phone off at night relates to how important people believe it is to be and stay connected; especially as at night it's not as likely that they will be contacted! Similarly question thirty six links to connectivity. For the people who do check their phones for messages and calls even though the ring tone is on, it perhaps reveals something about their phone being at the forefront of their attention. It also explores the idea of constant connectivity (see section 3.4).

4.2.5 The questionnaire sample

The sample is described as an opportunistic sample. This method of obtaining data has both advantages and disadvantages. Given the fact that cost was an issue at this point in the research, gaining a nationally representative sample was going to be difficult. As an alternative method to posting out questionnaires across the UK, the questionnaire was set up online and was advertised to thirty-six thousand students at Sheffield Hallam University. Targeting the Sheffield Hallam University students obviously means that the sample predominantly consists of younger participants however these are also a key mobile phone user group.

The questionnaire was placed onto a website (www.surveymonkey.com) which generated a link that people could use to access the questionnaire. The link was posted on the 'all students' bulletin on the student's intranet which requested participants for the research. The participants could simply 'click' onto the link which transported them to the online questionnaire.

The participants cannot be identified beforehand so it is impossible to know the samples overall background compared to the population as a whole, other than to presume that as predominantly

students Couper (2000) highlights the difficulties of sampling when considering web based surveys. The majority of the participants were students in Sheffield however a good proportion of these will originate from different areas of the UK.

4.2.6 Advantages and disadvantages of the online questionnaire

The pilot questionnaire for study one took approximately three months to gain two hundred responses via the post. Whilst in just under two months the online questionnaire gained eight hundred responses. So it is clear that one advantage of the online survey is that it is a more efficient method for obtaining data than postal questionnaires.

Of the eight hundred responses, six hundred and ninety-one people actually completed the entire questionnaire. So although eight hundred people accessed the first page, some people did not complete all of the questions. This highlights a potential disadvantage with the method. This questionnaire in hindsight was perhaps too lengthy and may have gained more responses had there been fewer questions. Another problem is that there was no way of regulating or ensuring that a participant answered all of the questions and did not abandon the survey half way through. Had the survey been distributed 'in house' and an interviewer present when each participant responded to the questions, each survey may have been fully completed.

The response rate is difficult to gauge precisely using an online questionnaire. Even though thirty-six thousand people have access to the Sheffield Hallam University Student Intranet - they didn't all necessarily read the email or see the link. Presuming all of the people who had access to the link were aware of the email requesting for participation then the response rate does dramatically drop, and the method almost appears to have failed to recruit respondents. This highlights another disadvantage; the link to the survey can be easily ignored and the request for participation easily deleted.

On the other hand, the survey software stores the data electronically allowing it to be easily transferred to data analysis software packages. The data are not manually input into the system thus eliminating human error and also saving time. Wright (2005) also highlights this as an advantage of using online surveys.

The main disadvantage in conducting this type of questionnaire online is the sample. It may not be representative of the UK population due to the nature of the distribution (Wright 2005) The sample's data may be skewed by only targeting student internet users. Although the advantages of conducting an online questionnaire seem to outweigh the disadvantages. When the pilot questionnaire was conducted as a paper based survey, several participants requested that it was emailed to them directly. It became evident that the online survey for some people is a more convenient method which is more easily accessible.

A copy of the pilot questionnaire can be found in Appendix One, and a copy of the questionnaire can be found in Appendix Two. The results for this survey are discussed further in Chapter Six.

4.3 Observations for mobile phone use in public

Twenty-one observations were conducted in a previous post graduate study and acted as pilot observations for this study. Within this study eighteen one hour long observations were conducted over a five month period. Goffman's (1959, 1963) work particularly informed the decision to use observation as a method for collecting data, since much of his research is based upon primary observation. Goffman established many of his concepts about the management of the self in public, from observing the behaviour of people in natural social settings.

Deacon et al (1999) use this justification in support of using observations as a research method:

'The advantage of direct observation is that it gives us an opportunity to produce independent assessment of these claims informed by the rigour and discipline the researcher brings to the observation process' (Deacon et al, 1999 p.258).

Several social scientists have observed people's mobile phone behaviour in public (Ling (1997, 1998, 2000), Lasen (2003), Humphreys, (2005) Plant (2001), and Weilenmann and Larrson (2001). The approach taken by these authors has been used to inform observations in this study.

Humphreys (2005) study directly influenced the methodology within this research. Humphreys' used three methodological forms of data collection: observations; interviews; and photographs,

in a year long field study of mobile phones in public places. Three methods were used to increase validity of the research findings and also to triangulate the data. Humphreys (2005) took notes in the field and acknowledged that as the only researcher on the project, reliability is a potential weakness of the study. Although given the amount and variety of the observations, reliability is increased. Humphreys began by using a descriptive method for data collection and then after allowing patterns in the data to emerge, began to focus on specific elements within the environments (Humphreys, 2005).

Humphreys' description of her field work lacks specific replicable detail however the concept of the study is useful when considering this research project. Humphreys' observational work parallels this research and will be a useful reference in further chapters.

The aim of the observations was to gain insight into how people manage both their remotely present and co-locally present connections in public spaces; or in other words how people conduct themselves through their non verbal communication whilst using a mobile phone in the company of other people. The observations also aimed to reveal the actual social practices involving people and their technology. This is an area of study which has only briefly been researched in the UK but is a major dynamic of mobile phone use in public.

Several public locations were chosen to conduct the observations of naturally occurring behaviour including: cafés; bars; shopping centres; public houses; public transport locations; open air locations. These different locations have allowed for a diverse sample. However it must be highlighted that although comparisons can be made within this piece of research, the comparable results will not on the whole allow for generalisations to be made about patterns of public use everywhere in the United Kingdom.

The table below shows a list of the times and locations of the observations.

Location	Time	Date
Shopping centre	10.30 - 11.30	06/05/06 (Sat)
Shopping centre	14.00 - 15.00	11/05/06 (Thurs)
Shopping centre	19.30 - 20.30	18/05/06 (Thurs)
Bar	14.00 - 15.00	19/05/06 (Fri)
Bar	18.10 - 19.10	27/05/06 (Thurs)
Bar	22.30 - 11.30	02/06/06 (Sat)
Café	10.20 - 11.20	06/06/06 (Tue)
Café	13.15 - 14.15	14/06/06 (Wed)
Café	15.00 - 16.00	23/06/06 (Fri)
Train Station	08.00 - 09.00	12/07/06 (Wed)
Train Station	11.00 - 12.00	21/07/06 (Fri)
Train Station	15.00 - 16.00	24/07/06 (Mon)
Public House	16.00 - 17.00	08/08/06 (Tue)
Public House	19.15 - 20.15	19/08/06 (Sat)
Public House	21.00 - 22.00	29/09/06 (Tue)
Outdoor Open	11.00 - 12.10	19/09/06 (Tue)
Outdoor Open	13.00 - 14.00	22/09/06 (Fri)
Outdoor Open	15.15 - 16.15	27/09/06 (Wed)

Table 4.3 Locations and times of observations

This method has allowed for straight forward 'fly on the wall' techniques to take place whereby the people being observed have remained unaware that they were being watched. The people being observed have had no relationship with the processes involved in the observation.

Jones (1996) provides further information about what potentially an observer needs to consider.

'Observing and systematically recording things that happen, informally or formally interviewing all those who might have information pertinent to the events under

study, and gathering relevant auxiliary information are all important. Note that the emphasis is on discovery, on finding out what life is like for people in the setting of interest – on learning, not on testing preconceived ideas' (Jones, 1996 p. 44).

In conducting a series of objective observations, several factors have been noted to create continuity. For example the eighteen observations were designed to last for a period of one hour each. The locations were chosen to ensure that a broad cross section of the public is collected into the data. Both indoor locations and outdoor locations were used to gather the data and each of the six locations were visited the same number of times.

4.3.1 Ethical considerations

It is difficult to argue as to whether noting people's actions in a public space, has ethical implications. The validity of the data would have been affected if people were pre-informed about being observed. It would also have been difficult to fully inform everyone within the environment of the research intentions and in turn gain their permission to conduct the observations.

In favour of observing without consent, the information being recorded is not considered to be personal. If the content of people's text messages was being included in the analysis then a different set of ethics would have to be considered. Jones (1996) argues in favour of observing without consent: *'Of course, if you are observing only public behaviour and individual people are not identified, informed consent is not necessary'* (Jones, 1996 p.66).

In further support of this argument, throughout the research, the identities of the people concerned are not revealed and the data does not encroach into personal lives. People observe each other on a daily basis - be it subconsciously or consciously and thus it is to an extent a part of everyday life.

Weilenmann and Larsson (2001) provide an excellent discussion about being observers in a public space. They could only gather data which the public members made available to them

anyway, which can be seen as ethically moral. Weilenmann and Larsson (2001) point out that they are only observing as much interaction as other people who are in the public environment.

Weilenmann and Larsson (2001) use ethnographic observations to focus on local interaction of mobile phones; the ways in which phones are used and shared in local situations of use. They report on how the mobile phone has come to be used as a tool for local social interaction rather than a tool for communication with dislocated other. Their fieldwork was carried out in a number of public places; cafes, public transport, shopping malls – all places where teenagers can be observed using mobile phones. They wanted to use naturally occurring situations to log the data from in order to gain naturally occurring interactions.

4.3.2 Processes and practicalities

The first factor that was an apparent problem was that an observer can only observe as far as the eye can see. Various objects can block the view of an observer; shape of the environment, pillars, people, plants, wooden dividing boards; all of which limit exactly how much of the environment can be observed and thus recorded. The solution for this work was to sit in the same location each time which allowed access to a good view and also allowed for continuity within the study.

Another practicality that the research encountered was how much information an observer should actually write down during an observation. If the observer was to write extensive notes they would be concentrating on the page and words in front of them rather than what was actually going on the environment. Emerson et al (2001) explain the process of writing field notes. They say that many researchers actively write brief preliminary reminders and notes whilst in the field and then write up the events after they have been in the setting. Emerson et al (2001) make the following statement about notating observational research:

'Mental and or jotted notes facilitate writing detailed elaborate field notes as close to the field experience as possible in order or preserve the immediacy of feelings and impressions and to maximise the ethnographers ability to recall happenings in detail' (Emerson et al in Atkinson et al (Eds) 2001 p.356).

It is apparent that from the observation examples in Appendix Three that there are detailed notes in some observations and whilst other observations show some rather brief notes. This was due to the pace of the environment – when the area was busy it was difficult to write down detailed notes without missing out on other interactions which were constantly occurring. Also there was the issue about how much of the information was relevant – in this particular study, extensive details e.g. the colour of people's clothes was not noteworthy, however the body language of a phone user and whether they were alone or in a group was particularly important to note.

It is difficult to definitely know whether all interactions have been noted down concisely from any one given moment during the observations. This was due to there only being one observer. Whilst concentrating on one set of interactions - another set of actions may have occurred close by but may have been unnoticed. If there had have been a team of researchers watching in the environment a different outcome may have been produced in the results.

Weilenmann and Larrson (2001) explain some of the methodological implications of writing field notes. They chose to write field notes, but do not discuss the short comings of writing these whilst observing. There is no description provided about whether Weilenmann and Larrson wrote their notes in the field or after the observations took place. Although they do explain that they found working and observing together as a team more beneficial as it helped to provide a true recollection of the situation.

Weilenmann and Larrson however do highlight a disadvantage to using field notes.

'When analysing the data, many times we lacked some crucial piece of information, which we could not remember, had not written down or simply had missed. For instance, sometimes we wanted to know how and where the phone was placed on the table after using it, but had no notes of this' (Weilenmann and Larrson, 2001 p.102).

This provides a potential problem with taking field notes; sometimes they are not detailed enough.

Another practicality which requires consideration is the amount of interpretation which has taken place when notating the information. The interaction may have been interpreted differently by another person, however in using this method there is no other data or other person's perspective on the situation to allow for comparisons. Jones (1996) explains some of the psychological pitfalls of observations. He describes how perception comprises of a number of different processes; attention, encoding or interpretation, short term memory and rehearsal of what has been stored in the short term memory. He also claims these processes are subject to bias. So then, it is clear from Jones (1996) argument that there is also the potential for bias in observations. If observations were carried out with preconceived ideas about the outcome of the data, then it would have been easy for certain actions to be specifically observed in order to gain the certain outcome in the analysis.

Plant's (2001) study on behalf of Motorola investigates the social impact of the mobile phone. The report is commercial and lacks description about the methodological processes. However there is a large description of the observational results gained and also a detailed analysis of the findings. It is clear that Plant has conducted a large scale observational study which spans several different countries and cultures. Descriptive field notes of observations from both open and closed public spaces have been formed. Some of the locations described include: streets; parks; markets and malls; restaurants and bars; airport concourses; hotel lobbies; trains; buses; ferries and trams. Whilst the locations both publicly and globally are vast, Plant does not seem to concentrate on any set of interactions. Instead a descriptive approach is followed throughout the study. The observations Plant discusses are accompanied by photographs and also interviews, although again the methodological description of these methods is missing.

The observations within *this* research study do not gain an insight in the percentage/ratio of people who were using their phone in comparison to those who were not. This information may have been useful in gauging how common phone use is within the setting which would lead to further implications within the analysis.

Observations are a strong qualitative method as far as they can allow people to uncover insights into social interactions which were previously inaccessible. These observations have uncovered people's use of mobile phone interactions in public. Specifically they have looked at how people manage their nonverbal communication in relation to the co-locals when using their mobile phones. The observations have also looked at how people react to other people's mobile phone use in public.

Observations were the main method employed by Lasen (2002) who made detailed notes describing mobile users' behaviour. Lasen notes:

Observations were recorded in notes describing users' behaviours on public transport, in bars, cafés and pubs as well as in streets, squares and parks. It was noted how people behave while talking and texting, their body language, the direction of their gaze, and also the display of the handset and where it is carried. Users' behaviours in relation to other people present and how they react to the phone user (attention, disinterest, censure) were also taken in account, as was the handling of the simultaneous use of the phone and the face-to-face interaction (Lasen, 2002 p.9).

In particular several elements of mobile phone use were observed in singles, dyads, and groups:

- Patterns of phone use by singles for both calling and SMS
- Patterns of phone use by dyads for both calling and SMS
- The management of calls by singles
- The management of calls by phone users in dyads
- The management of group dynamics during and after phone use
- Patterns of indoor and outdoor phone use by singles, dyads and groups.

The observations aimed to gather data about how people manage their remote communication and co-local communication simultaneously as singles, in dyads, and in groups in public locations. They also aimed to look at people's reactions to public phone use and how phone use impacts upon people in the immediate environment.

Plants (2001) research concerns the social impact of the mobile phone and draws upon the observations of people's behaviour and actions in relation to mobile phones. Plant (2001) obtained photographic evidence and carryout detailed notations in a variety of locations, including streets, parks, markets and malls; restaurants and bars, airport concourses and hotel lobbies, and trains, buses, ferries and trams.

However the validity and reliability of this method is questionable and as a research method it holds many potential intrinsic biases. However observational studies such as this one are not duplicated so few comparisons between the data can be made; meaning that the importance of information gained through observation can be heightened. This method is directly linked to interpretation; meaning that it could potentially vary depending on a researchers values and view points. If a broader insight into how certain actions take place in a certain setting is the main objective of the research, then observation is a good method to use. This was the point of using observations as a method within this study.

Overall the data gained through conducting observations can be triangulated with the questionnaire to form some conclusions about public mobile phone use. Some examples of the notes from the observations can be seen in Appendix Three and the results for the observations will be discussed in Chapter Five.

4.4 Photographs

In order to support the observation data, photographs of mobile phone users in public were taken using a mobile phone camera. Pictures of people using their phones to text and talk were taken in open public spaces and also in cafes, public houses, airports, and on public transport. Using photographs for research purposes raises ethical considerations, and these are discussed

below. However making use of photographic data, strengthens the observation data collected: the ethnographic approach to studying public mobile phone use is supported by images of the actual interactions as well as documented observations of patterns of behaviour.

4.4.1 Processes and practicalities

It quickly became apparent that there were several practicalities to consider when taking the photographs. For instance, people were often on the move which made it difficult to capture a clear image especially given the fact that the mobile phone camera being used had a delay before taking the picture. It was in hindsight easier to capture people's phone use when they were relatively still. For example people who were sitting down and texting would often be doing so for several minutes thus allowing more than one picture to be taken. Other times the environment was too dark to capture a clear image and this was mainly due to the device itself. The mobile phone camera resolution was low and the device was only suited to picture taking in well lit environments.

Another problem was calculating how discreet to be around the subjects. Mostly the pictures were openly taken of the subjects. At times people were completely unaware that their picture was being taken often because they were so engrossed with their phone. However on other occasions the subjects would notice that the camera elements of the phone were being used. Most of the time a decoy would be positioned close enough to appear as though they were the subject of the photograph to prevent suspicion. Although occasioned permission was sought to use the photographs after they were taken. Subjects were never pre-informed about the photographs as that would have hindered their behaviour. However when some of the subjects were aware that the mobile camera phone had been taking their picture, it seemed to be ethically correct to inform them about the nature of the research and also about how the photographs would be used. No subject prohibited the use of their image. However other mobile phone users had been captured and remained talking on their phone therefore there was no opportunity to obtain informed consent.

4.5 Ethics

Using photographs for research raises ethical questions about the consent for using the images without permission. Although permission was not sought by all of the subjects photographed, in order to ensure that the photographic data collected adheres to any potential ethical concerns, all of the images presented in this study have been made anonymous. To do this, the subjects faces have been covered upon any pictures where consent to use the photograph could not be sought. For those photographs consent to use the image was gained, the photographs have been left untouched.

Dunphy et al (2005) have produced a study which explores the ethical and legal issues of camera phones. One of the key issues which rises from camera phones is privacy. Although the privacy issue concerning camera phones is different. Rather than being linked to the ideas of 'big brother' and surveillance and governments, camera phones are often associated with impulsive one off invasions of privacy caused by fellow publicans.

Dunphy et al say:

'If we accept privacy as some sort of basic right, the problem then is to what degree people's privacy should be protected? Most people would agree for a need to preserve some degree of personal privacy. But, where the line should be drawn is very problematic' (Dunphy et al, 2005 p.124).

It appears there is no definition of privacy in relation to mobile phone use in public. How the camera phone is used is open to interpretation. Dunphy et al (2005) make an interpretation about how privacy can be used in relation to camera phones:

'A more practical view of the right to privacy is that we have a right not to be hurt by people infringing on our privacy. This would lead to the conclusion that it is legitimate for people to take our picture, as long as we are not hurt' (Dunphy et al, 2005 p.125).

This suggests that using the pictures from camera phones is acceptable. The pictures being used in this study will not be published within the media - they will simply act as a form of evidence

within this thesis. The identities of most of the phone users will be concealed by the poor quality of the camera. On cases where the person's identity is clear - permission to use the picture has been sort by the photographed person.

Most importantly the photographs act as a form of hard evidence to support the qualitative data obtained from the observations. This in turn means that the research doesn't rely solely upon interpretation and written description. Using photographs also means that the research is not heavily dependent on memory recall. People's true non-verbal communication, in particular body language and facial expressions, can be captured and preserved for later analysis. The pictures can be used as a part of qualitative analysis but can also be used for quantitative methods. Although on the other hand the photographs chosen for representation within the research could be subject to bias. The researcher can choose which images are appropriate to support a particular argument or theory.

A selection of photographs can be found in Appendix Four and some other photographs are presented in Chapter Five. All of the photographs have been censored for ethical reasons and the identities of the subjects have not been revealed.

4.6 Questionnaire – mobile phone use in private

The survey for mobile phone use in private was designed for work commissioned by Virgin Mobile and developed into a method for Study Two. The survey design was based upon research from Study One and was used to gather UK wide data for Virgin Mobile. Some of the survey questions are specifically relevant to Virgin Mobile's research agenda and are not relevant to this study (see questions 7-10, 37-41, and 42-49 in Appendix Eight) so will therefore be excluded from the analysis. Other questions which consider the topic of emotion and the mobile phone (see questions 6, 14, and 15 in Appendix Eight) are similar to those designed in the survey for Study One and will therefore be included in the data analysis for Study Two but will not be included in the Study One data analysis. Since this questionnaire was funded by Virgin Mobile, a national telephone survey took place: the processes and questionnaire design are explained in the following sections.

4.6.1 Processes and practicalities

Given the project required a national telephone survey, a team of trained Sheffield Hallam University staff were provided with the survey materials and a random sample of thirteen thousand telephone numbers which were bought from a marketing database. They carried out phone based surveys and obtained eleven hundred responses.

Before conducting the survey, a pilot questionnaire design was given to the Virgin Mobile research team to approve. They advised upon the questions they wanted to be removed and made some suggestions for additional questions, and therefore modifications were made on the survey design. The questions Virgin Mobile didn't want to use were still added to the survey for this research project, and the additional questions suggested by the Virgin team are excluded in this data analysis (see questions 7-10, 37-41 and 42-49 of Appendix Eight). This pilot questionnaire drew upon the prior survey design from Study One so there was a limited need for piloting.

There was a need for an initial 'welcome' message to inform people for the reason for the call. This was to assure people that the purpose of the call was not commercial. It also persuaded people to participate in the research (see Appendix Eight).

The team also had a method of dealing with the thirteen thousand telephone numbers. They divided the numbers up equally across the team members and then followed a strict process. Each number would be dialled up to three times to gain a response. If after three times there was no answer or the researchers could not get through for any reason e.g. the number was inactive, the number would be crossed off the list. Sometimes the researchers came across people who said they were too busy so they passed on a web address which included a link for the survey which could be conducted online.

People who had never owned a mobile phone (usually from older generations) were not asked to participate in the research since this study did not concern non-mobile phone owners.

4.6.2 Explanations for the questionnaire questions

Section / topic of questionnaire	Question numbers	General Topic	Related Existing Literature / Topic
1. Mobile Phone use	1-5	Numbers of texts and calls made and received	N.A Demographic Information
2. Emotion and the Mobile Phone	6	Types of emotion felt	Lasen (2004) Harper (2004) Vincent (2005)
3. Mobile Phones and Relationships	11-13	Use of phone to call / text partner	Harper (2003) Geser (2004) Hoflich (2006)
	14-15	Emotions when contacting partners	Taylor and Harper (2003) Lasen (2004) Vincent (2005)
	16-20	Ending and initiating relationships	Goffman (1959) impression management Goffman (1963) face management Hoflich (2006)
	21-24	Declaring true feelings	Reid and Reid (2004) Retti (2006)
	25	Saving messages	Taylor and Harper (2003) Harper (2004) Vincent (2005)
	35-36	Declaring feelings when drunk	Goffman (1963) - face management Reid and Reid (2004) Retti (2006)
7. General Questions	50-51	Demographic Data	N.A - Demographic Data

Table 4.4 Existing literature and the questionnaire design

Questions 7 - 10, and 37 - 49 which fall under sections five and six are excluded from the table above as these were specific to the Virgin Mobile Study.

Section one relates to general mobile phone use. It questions how many text messages people send and receive and how many calls they make and receive on an average day. The results for these questions will show statistically which participants are heavy or light users and can be used within the statistical analysis (see Appendix Eight and Chapter Eight for analysis).

Section two relates to emotion and the mobile phone. It questions the types of emotions people feel during or after using a mobile phone, and is informed by Lasen (2004), Harper (2004) and Vincent (2005). Questions 7 - 10 within this section are also excluded as they relate specifically to the Virgin Mobile research.

Section Three asks an initial question about whether or not the participant is in a relationship. If they are in a relationship they are asked to complete all of the questions from section three and if they are not, they are able to skip several specific questions relating to mobile phone use in relationships. The 'mobile phones and relationships' section is informed by literature from nine different research studies. Questions eleven to thirteen are concerned with the number of calls and texts made to partners on an average day. This information will gain patterns of use, and also help to establish whether phones help to create a sense of constant connectivity (Harper 2003, Geser 2004, and Hoflich 2006).

Whilst questions fourteen and fifteen are concerned with the emotions phone users feel when sending and receiving text messages to loved ones. Questions sixteen to twenty request information about phone use in relation to initiating relationships and ending relationships via the mobile phone. Hoflich (2006) considers the phone to be *the* technological communication medium for relationships from the beginning to the end. These questions also relate to Goffman's concepts of impression management (1959) and face management (1963) since a user can to an extent hide behind the face of the phone.

Questions twenty-one to twenty-four address whether people declare their true feelings via mobile phone calls and text messages and are informed by Reid and Reid (2004) and Retti (2006). Reid and Reid suggest that their participants use text messages to build and maintain

relationships and that text messaging allows an opportunity for intimate contact. Whilst Retti (2006) suggests that respondents thought that men were more romantic via text messages than they were during face to face contact and that it was less embarrassing to send a text message than it was to say something in person. These questions were included to find out whether people use their phone for face management (Goffman 1963) where deeply personal matters are concerned (see Appendix Eight). Question twenty-five considers whether people save text messages as suggested by Taylor and Harper (2003) and Harper (2004).

Questions thirty-five and thirty-six consider declaring true feelings when drunk. Given that according to Retti (2006), it is less embarrassing to send a text message than it was to say something in person and that according to Reid and Reid (2004) more socially anxious use the phone to send texts, these questions were included. The mobile phone and alcohol involve an equation of constant connectivity and a loss of inhibitions. Retti's list of characteristics assigned to why text messages are so successful is useful when considering that people may send text messages when drunk; Goffman's (1963) concept of face management is also applicable to these questions.

Section four, of the survey relates to mobile phones and monitoring communication. These questions have not been included into the analysis due to the large amounts of data gathered although the data can be found in Appendix Eight.

Section seven of the questionnaire requests basic demographic information about the participant's age, gender. A full copy of the questionnaire is available for referral in Appendix Eight and the analysis of the data for this questionnaire is in Chapter Eight.

4.6.3 Sample

The sample gained from conducting this questionnaire is random. There is no way of judging or knowing about the participant's social backgrounds. Although the postcodes of the participants were gained so this provides some basic demographic information. The telephone numbers were purchased from a prescribed random digital dial database. Therefore all the numbers were live and randomly selected from the total UK population. The numbers used did not include those

listed as not wanting calls and were not ex-directory telephone numbers. The survey data can be accessed in Appendix and will be discussed further in Chapter Eight.

4.7 Semi-structured interviews

Originally the research design included focus groups, however after several months of trying to recruit participants for these (as described in the following section) it was decided that semi structured interviews would take place instead. The aim of the interviews was to gather people's opinions and ideas surrounding emotion and the mobile phone, and to discuss and elaborate on experiences closely linked to mobiles and emotion. The interviews are used to support the questionnaire data.

The following section will explain why it was so difficult to recruit people for the focus groups. The second section will touch upon the pilot interviews, whilst the third section will discuss some of the processes and practicalities of conducting semi structured interviews. A brief discussion of the sample will then be given.

4.7.1 Problems with the focus groups

Using focus groups as a method became a pilot process after recruiting participants proved to be difficult. The request for participation in the focus group research was advertised on the Sheffield Hallam website. Even with a five pound music voucher for each participant there was little response. Five people did volunteer to participate in a focus group; however their time tables clashed meaning it was virtually impossible to arrange for them all to be in the same place at the same time!

The opportunity then arose to conduct a focus group through tutoring a class of seven students. Three participants actually turned up of which two were international students. Several problems were highlighted after conducting the focus group and the experience proved to be a learning curve. The dynamics of the room; the positioning of the participants; language barriers; and the focus group design all contributed to its failure. Looking on the positive side, the focus group acted as a pilot experience and inspired the idea to conduct interviews.

Two more opportunities arose to conduct a focus group. Rather than there being too few people in the groups, there were too many people participating. Some of the participants did not get a chance to voice their opinion. It was also difficult to manage the large groups efficiently; some people would start their own conversations whilst others were trying to make a point.

However some of the points from the large focus groups were useful and inspired some of the interview questions. Overall a similar set of questions were asked to individuals participating in the interviews and focus groups. Another problem with the focus groups was that the nature of the topic was not suited to group discussion. Some of the participants possibly agreed with certain points made by others because they were too shy or embarrassed to speak up about their true or personal feelings. After listening to the recorded focus groups, it was also difficult to work out who was speaking and what point they were making during the discussion. Also documenting the differentiations between the statements of parallel speakers was going to be problematic.

The main issue for conducting focus groups was the difficulty of recruiting participants when students in particular have busy time tables. Therefore semi structured interviews were chosen to be carried out rather than conducting a set of focus groups. The structure of the semi structured interviews was based upon the questions set for the focus groups. However before the interviews were carried out several piloted versions were conducted.

4.7.2 Pilot interviews

During the pilot stages of the interviewing, the opportunity to interview two participants at once arose on two occasions (when several other people didn't turn up for one of the focus groups). The tandem interviews turned out to be useful; interviewing two people at once proved to have some advantages. Even though the participants in each of the interviews didn't previously know each other, they interacted well. This was because on each occasion, there were only three people in the room and the atmosphere was informal: this led to a greater amount of detailed discussion.

The data from the pilot interviews consisting of two people contain valuable data therefore they will be used within the analysis.

4.7.3 Interviews – processes and practicalities

It was considerably easier to get one person to commit to a time and place than it was to coordinate a group of people. Several participants confided that they preferred to talk to a person on a one-to-one basis than to discuss ideas with a group of people. Overall, five men and six women were interviewed, using a semi structured approach. A general guide with some questions from the focus group plan was used. Some questions were developed on an ad hoc basis and were included into the plan after conducting several of the interviews.

Reassuring the participants that the interview wouldn't be difficult and that it was a very informal affair helped the participants to feel at ease. For most of the participants, after initially feeling awkward, they started to relax and develop upon their answers by providing stories and giving examples.

There are a few noticeable occasions where participants have not interpreted the questions properly and this is reflected in their responses. Even though it was difficult at times, further explanation was always provided to them to ensure they fully understood the questions. This highlighted the fact that whilst some people are just naturally talkative, responsive and eloquent, others need a little help and guidance. Given the informality of the situation, sometimes it was difficult not to influence the participant's responses by inputting some personal experience and stories. When personal input and conversation were included in the interview, the participants seemed to relax and forget about the recording equipment. They then provided more information about their own personal experiences.

It is also noticeable that some of the participants were distracted by the background noises in the public environments. At times the participants are interrupted e.g. by people tidying the tables of the café. However several interviews were conducted in silence, where there was no background noise and this also had an effect on the participants. In silent environments the main focus was obviously on the questions and on what the participants were saying. The participants

appeared to be more at ease in the less formal locations. Therefore the interviews took place in café's, and public houses (during the day time).

It was also difficult to keep people on the right track as far as the topics were concerned. People tried to stray away from the subject and would start to talk about the device itself and the nature of their phone contracts. They would also talk about situations which had recently occurred relating to mobile phones, but didn't relate to the questions in hand. Gradually with experience it was easy to push them back onto the subject; however the first few interviews clearly show a lack of assertiveness with regards to this (see Appendix Seven - transcripts one to eleven).

4.7.4 The interview questions

The focus group / interview schedule was designed to be semi structured. This was so that if a detailed discussion resulted from one of the questions further probing questions could be added where necessary.

The first sets of questions used within the interviews were designed to make the interviewee feel at ease and to encourage them to start talking. Questions were asked about phone ownership and whether or not the participants would class themselves as heavy or light users (see Appendix Six).

The second section linked to questions regarding to phone attachment. Questions '*Do you think you have an emotional attachment to your phone?*' and '*If yes there is an attachment - is it the device it's self which you are attached to or the actual content of the phone e.g. the text messages?*' are examples of the questions asked within this section (see Appendix Six).

This section particularly links to Vincent's (2005), Lasen's (2004), and Harper's (2004) work which concludes that people have an attachment to what the phone can do for them in terms of connectivity and also in term's of it's content rather than to the device it's self (see section 7.2). Further to these questions are questions related to losing the mobile phone and the emotion that is associated with losing connectivity. The participants are also asked to imagine their life

without a phone. This was to help them reflect upon how their life was like prior to their mobile phone use and to help them gauge and express how important their phone is to them.

The third section details questions relating to the mobile phone's impact on relationships and is inspired by Hoflich's (2006) suggestion that the phone is a valuable medium for relationships. Questions were asked about the part mobile phone's play in managing relationships.

Some of the questions used within this section are detailed below:

- *'Have you ever used your phone to initiate a date / relationship?'*
- *'If you just started dating someone - which aspect of the mobile phone would you use - texting or calling?'*
- *How do you feel about ending a relationship by text message?* (See Appendix Six for further questions).

These questions are an extension upon Vincent (2005) and Lasen's (2004) work about emotion and the mobile phone. The questions in this section are also relevant to Reid and Reid's (2004) work and also Grinter and Eldridge's (2003) study. Reid and Reid suggest that people use their phones to build and maintain social relationships rather than just for practically co-ordinating arrangements (as Grinter and Eldridge imply). The questions aim to establish whether mobile phones do play a part in exclusively initiating communication and relationships and how they are used for managing personal relationships.

The questions within the fourth section specifically link to emotion and the mobile phone and are informed by Lasen (2004), Vincent (2005), and Harper (2004).

Some examples of questions include:

- *Have you ever felt any of the following emotions during or after using your phone to text loved ones?*

Excitement

Happiness

Stress

Anxiety

Sadness

Annoyance

- *Can you think of any stories or incidences that stick in your mind where you were really happy or really sad when using your phone?*
- *Has anyone ever told their partner their first true feelings of love for them via text message?*

Some of the questions from the survey are reflected in the interview guide. For example several questions consider the participants' drunken experiences with their mobile phones.

The questions were used as a guide only - it is evident in the transcripts (see Appendix Seven) that several questions were added on an ad hoc basis and were dependent upon the participant's responses.

4.7.5 Sample

One of the main limitations of this method was how to sample individuals partaking in the interviews. Given the nature of the topic, the participants had to be single, or had been single within the last two years, and they must have been dating within the last two years. Very little information was known about the interviewees, other than they were living in Sheffield at the time of the interview and that they were all between the ages of eighteen and thirty-five. If they had to be categorised, most of the participants were upper working class to lower middle class, educated people (since most participants were under graduates, graduates, or post graduates). The sample for the interviews would be described as an opportunist sample. Several people volunteered to participate whilst others were asked.

The interview data can be seen in full in Appendix Seven and will be discussed in Chapter Seven.

4.8 Conclusion

This chapter has provided information about the processes concerning five research methods. It has detailed the process of conducting an online survey, observations - including photographs, a national telephone survey, and interviews. The processes, practicalities, advantages and disadvantages of each of the methods have been presented. Where necessary the ethical considerations have been included.

The methods used in both Studies One and Two have been informed by the existing studies from the literature in Chapters Two and Three. The questions within the survey for Study One were informed by Goffman (1959, 1963) Ling (1997) Weilenmann and Larson (2001) Lasen (2002) Taylor and Harper (2003) Arnold (2003) Love and Perry (2004) Katz (2004) Geser (2004) Holflich (2006) (see table 4.1). The survey for Study One consists of three main sections relating to public mobile phone use. The first part of the survey establishes demographic information and patterns in general phone use. 'Patterns of mobile phone use in public' establishes whether people make or answer calls when with dyads and groups and questions whether people have used interaction management strategies for their public phone use. This section also considers questions relating to embarrassment and over hearing mobile phone calls. 'Public mobile phone use and opinion' seeks to establish acceptable public phone use, etiquette of public phone use and specifically what annoys people about public phone use. Other survey questions relate to emotion and the mobile phone and connectivity which cross over to Study Two's topics.

Ling (1997) Plant (2001) Weilenmann and Larson (2001) Lasen (2003) Love and Perry (2004) and Humphreys (2005) made use of observations, and their approaches have been used to inform the observations in this study. Observations were extensively used by Plant (2001) in her world wide research study and as an extension upon these Plant photographed mobile phone users in public places. Whilst Weilenmann and Larson (2001) and Taylor and Harper (2003) observed teenagers using and sharing mobile phones. Love and Perry (2004) on the other hand observed people's reactions to mobile phone use in an artificial setting. The observations in this

study aimed to look at the patterns of public phone use of both texting and calling for singles, dyads and groups. How people manage their phone (remote) interactions whilst managing their co-local environment was observed as well as other people's reactions to mobile phone use in the local environment. The observation data is accompanied by photographic data of people using their phones in public spaces and shows clear images of people's non-verbal communication during these interactions.

Interviews have been used to support observational methods by Plant (2001) Love and Perry (2004), Taylor and Harper (2003). The interviews which have been conducted provide this study with some detailed account of private phone use. Due to their semi-structured nature some of the questions were developed during the course of the interview and others were planned.

As well as the interviews, Study Two is dependent upon a telephone survey which concentrated upon questions concerning private use of the mobile phone. The questions consider emotion and the mobile phone and also how people manage their relationships using their mobile phone. The survey questions were particularly informed by Weilenmann and Larson (2001) Taylor and Harper (2003) Reid and Reid (2004) Lasen (2004) Vincent (2005).

This chapter has shown that this study is heavily dependent upon primary research. The individual methods have highlighted some drawbacks which present the process of conducting research as a learning curve. It is clear that reading about research and actually putting the knowledge into practise are two separate accomplishments. Designing a research plan which is cost effect and fulfils the methodology criteria is a time consuming process. The actual data collection and following the research design is also a time consuming process. Conducting two surveys (with eleven hundred and eight hundred responses), interviews, and observations with photographs, presents data which can be analysed for both patterns and opinions public and private mobile phone use. Further information relating to the research designs and data collected from the methods employed above can be found in the Appendices.

The following four chapters present the data collected from the methods discussed above. Chapter Five discusses the observational data, and Chapter Six presents the survey data for Study One. Whilst Chapter Seven analyses the interview data and Chapter Eight presents the survey data for Study Two.

5 Data Analysis observations – mobile phone use in public

'The evidence confirms then that people are communicating with absent others. Doing so is becoming increasingly the norm in society; and these contacts are with, as it were, small social worlds. Thus the world is paradoxically getting smaller as the technology strips away the need for people to be side by side' (Harper in Nyiri 2003 p. 186).

5.1 Introduction

In order to validate the survey data for study one, a set of eighteen one-hour observations were made and over 200 pictures of people using their mobile phones were collected using a mobile phone camera. This method of data collection takes inspiration from Humphreys (2005) who conducted observations of people's public mobile phone use and Plant (2001) and Lasen (2002) who also conducted large observational studies (see section 4.3). This chapter will detail the results of the observations conducted and provide an analysis of the results.

The main objective of the observations was to monitor people's use of the mobile phone in public places. The observations were conducted over an eighteen week period and took place in the following public locations: park; cafe; bar; pub; city centre (outdoor); a shopping centre (indoors) and train station. In each of the various locations three observations were made for one hour each. The photographs were taken opportunistically over a period of twelve months.

This chapter will analyse the observational data and use the photographs to look at the issues described in Chapter Two:

- How mobile phone users manage their communication with remote people and co-located people simultaneously.
- How phone use affects group and dyad dynamics in public.
- How Goffman's concepts of public behaviour apply to public mobile phone use.

The observational data will be compared to the survey data and this will further help to establish patterns in people's mobile phone use. Goffman's concepts will also be applied to the analysis and where applicable the observation data will be used to support or query the survey data.

The following chapter is divided into six sections. Section 5.2 addresses the key behavioural findings of 'single' (Goffman 1963) mobile phone user's. Section 5.3 addresses mobile phone use in dyads. How mobile phone use effects group dynamics follows in section 5.4 and then indoor phone use is examined in section 5.5. Outdoor phone use is addressed in section 5.6 and last, locations of mobile phone use is analysed in section 5.7.

5.2 Single user behaviour

Goffman's (1963) concept of 'singles' is applicable to 'single' mobile phone users in public.

Although it alters with the use of mobile phone - since the 'single' can be in communication with a remote other via the mobile device. Therefore although a person may be 'single' in a physical context, they are not necessarily 'single' in a communicative context.

Several instances of single phone users in public have been observed and are reflected in the photographs (see appendix 4). Patterns of mobile phone use by singles will be explored using the following concepts from Goffman: involvement shields; main and side involvements; impression management; and self defence mechanisms.

The phone becomes an involvement shield for the 'single' (Goffman 1963). It acts as a symbol to signify that the 'single' is actually engaged in remote communication (Fox 2001). Often these 'single' phone users will use closed body language when using their phone. This warns other people not to approach them and also signifies that they are otherwise involved in communication outside the co-local environment. During these instances the phone assists people in impression management since it symbolises that even though they are in the co-local environment and a 'single' in a physical context, they are engaged in remote communication in a technological context.

Phone use can but not always requires users to disconnect from the local context therefore phone users need to indicate their disconnection. In doing this they need to provide signals to validate other's civil inattention. Since phone users can't use talk or when texting use eye contact to do this, they use body orientation and the manner of phone display to achieve this. The following findings are examples which show how phone users achieve the management of their remote communication in a co-local environment as a 'single'.

5.2.1 Key findings

5.2.1.1 Closed positions are more frequently adopted than open positions when a 'single' is talking on their phone - whether they are indoors or outdoors

The 'single' uses closed body language to signal to near-by people that they are on the phone. Non-verbally, mobile phone use in public leads to 'closed' and passive public behaviour. Whilst the phone user is physically present, their mental orientation is towards someone who is unseen (Puro 2002).



Figure 5.1 'Single' phone user adopting closed positions whilst on the phone

The man in figure 5.1 is displaying closed body language whilst on the phone - both his arms and legs are crossed. The body language acts as a barrier to communication and signifies to others that the phone call is their main involvement (Goffman 1963), the priority communication and that the

caller is otherwise occupied. People using the phone avert their concentration from their surrounding environment towards the phone interaction (Plant 2001).



Figure 5.2 'Single' phone user adopting closed positions whilst on the phone

Using closed body language shelters the conversation from the physical environment and this action helps to minimise the annoyance to others. The caller also avoids being over heard by others in the local environment (Lasen 2002). Closed positions allow the phone user to focus upon the conversation and prioritise the remote communication against the other communication in the local environment.

5.2.1.2 Arms crossing the body when standing or sitting is commonly adopted by singles who are talking or texting on the phone



Figure 5.3 'Single' phone user crossing arms whilst on the phone

The arm acts as a shield for phone users, and when sitting down crossing the arms is a comfortable position to adopt. This position is a barrier which signifies to others that the user is on a call and their 'main involvement' is the phone communication.



Figure 5.4 'Single' phone user crossing arms whilst on the phone

5.2.1.3 Crossed legs are commonly adopted both by singles standing up and sitting down whilst talking on their phone



Figure 5.5 'Single' phone user crossing legs whilst on the phone

When sitting down crossed legs helps the user 'curl into themselves'. The legs act as a shield and also as a shelf on which the upper part of the body can lean upon. When standing up - people seem

to either lean up against a wall with crossed legs or stand freely with crossed legs. When sitting down the legs can either be positioned with the ankle is resting upon the knee crossed in the conventional way - at the knee, or crossed at the ankles with legs stretched straight out.



Figure 5.6 'Single' phone user crossing legs whilst on the phone

These positions are closed and help the single to shelter themselves from the public. This, together with the phone acting as an involvement shield, perhaps makes a phone user feel as though they are the only person in the environment (Goffman 1963, Persson 2001). The closed body language also represents what Plant (2001) terms as 'Innie' behaviour.

5.2.1.4 Holding the phone to the ear naturally shields the upper part of the body when a person is talking on the phone

This is because the arm bends into a right angle. There are two different positions adopted when talking on the phone: head up and elbow out, which appears to be a more open position, and head down elbow in, which appears to be more closed. Phone users could potentially hold their phone in front of them, talk into it and place the caller on the loud speaker function however it is more private to answer the phone in the traditional way. The 'traditional' position has developed from landline use: the method of holding the telephone has been adopted by mobile phone users and acts as a signifier - that the person is using a mobile phone and prioritising their remote communication.

This position is so common that it perhaps now represents one of the norms of mobile phone use. The arm and elbow when held close to the body act as a shield. These signals are clear markers that the phone user is otherwise engaged.

5.2.1.5 The common position of holding the phone to text (i.e. the phone held at waist height directly in front of the body) acts as a barrier to communication

This position signals to others that the phone user is otherwise engaged. However holding the device in this way by 'singles' is unobtrusive towards other interaction in the surrounding environment. Phone users are not engaged in synchronous communication and it is difficult to know which action is the main involvement and which is the side involvement: for example the text messaging or the walking. Phone users are also perhaps switching between the main and side involvement whilst walking and texting. Figure 5.7 below shows a phone user walking and texting in the street.



Figure 5.7 'Single' phone users walking and texting

However the action of texting not only gives the impression that the phone user is a 'single' in public, but that they are needed and wanted by a remote contact. In these instances being a 'single' is

technologically contextual and Goffman's (1963) concept becomes modified. When the phone was first adopted this position symbolised that the phone user was 'showing off' their phone as an accessory (Fortunati 2002) – however given the ubiquity of the device in the UK it no longer has those connotations.



Figure 5.8 'Single' phone user texting

People no longer appear to think about displaying their phone in public to text; they just do it. When texting, people still hold their phone close to the body which combined with the level of engagement with the phone, makes texting appear as a main involvement.



Figure 5.9 'Single' phone user texting

However if a 'single' appears to be monitoring the bystanders and surrounding environment whilst texting then the act of texting becomes a side involvement (Goffman 1963).

5.2.1.6 Phone users often look to the ground during a phone conversation.



Figure 5.10 'Single' phone user looking to the ground whilst on the phone

This position could be adopted by the user to avoid distraction by the surrounding environment. The phone user focuses upon the floor thus avoiding eye contact with any 'bystanders'. Looking to the ground allows the phone user to focus upon the phone communication and acts as a form of closed body language that symbolises they are otherwise engaged. This type of action is a form of absent presence (Gergen 2002) and also allows by-standers to adopt 'civil inattention' (Goffman 1963). This data reasserts Puro's (2002) research which highlights that phone use in public spaces leads to 'closed' and 'passive' public behaviour.

5.2.1.7 Phone users who are texting usually point their head towards the ground

This position assists civil inattention (Goffman 1963). A phone user holds the phone close to the body at waist height and therefore a natural position to adopt involves looking down.



Figure 5.11 'Single phone user looking down whilst texting on the phone

Looking down again avoids invitations for interaction from others and allows others to be inattentive (Goffman 1963). This position signifies to others that the phone user is otherwise engaged and that the communication via the phone is the main involvement (Goffman 1963). This position also assists in performing 'absent presence' (Gergen 2002).

5.2.1.8 'Singles' will stop by a door way or find somewhere to sit e.g. on some steps in outdoor spaces.

Presumably this is to concentrate on the phone use and make the conversation the main involvement. Alternatively the single user may be using their phone to assist absent presence whilst waiting for someone. Standing in a door way allows people to escape from the environment (Lasen 2002) and helps the phone user to manage problems of anywhere location. In a doorway the phone communication becomes the main involvement and the task of walking is not a distraction to that of talking (Goffman 1963).

5.2.1.9 'Single phone users sitting alone indoors can often be seen playing with their phone - either checking through the contents or sending text messages



Figure 5.12 Phone user sitting and playing with their phone

The phone acts as an involvement shield – according to Goffman (1963) a person who is alone in public needs to have a reason for being there, and the phone provides people with the excuse for being a 'single' in public since they are engaged with a remote contact. The phone also allows the user to be in contact with the people on their phone, and signifies to others that they have business being alone in public. The phone acts as a pacifier for people who don't feel comfortable being alone in public places – they can call and text and be distracted from the fact that they are alone whilst giving the impression that they are otherwise engaged in other communication, and that they are needed and wanted (Arnold 2003). The phone use during instances like this becomes the main involvement and can, according to Fox (2001) warn others not to approach the user.



Figure 5.13 'Single' phone user playing with their phone

5.2.2 Summary

In summary 'singles' whilst using the phone, use closed body language. This is in line with Love and Perry's (2004) research. Crossed arms, crossed legs, and a bowed head are all notable positions adopted by phone users. The positions convey to other people in the surrounding environment that the 'single' is otherwise occupied with their phone communication. This helps the phone user to indicate their disconnection from the co-local environment whilst engaging in the remote communication. The closed postures used, help people to manage their phone use in public by signalling to others that although they are physically present, their main involvement is the remote phone communication (their side involvement is being present in the environment). It also gives bystanders warrant to and implies a requirement to engage in civil inattention. Phone users often provide signals to indicate their disconnection and validate other's civil inattention. Since they can't talk or when texting use eye contact to do this, phone users adapt their body orientation and the manner of phone display to achieve this.

This section has shown that Goffman's (1963) concept of 'singles' when modified is applicable to public mobile phone use. It shows that 'singles' can use their phone to assist their own impression management; to show to others that even though they are alone in public they are needed, wanted

(by the remote contacts) and want to be contacted in a technological context (Arnold 2003). A 'single' phone user can be alone in public, but with a phone they are engaged in remote communication and the phone becomes an involvement shield.

5.3 Dyad behaviour

Instances of mobile phone use in dyads were observed. This section will show that there are several interaction strategies used for managing both remote communication and co-located communication at once. Humphrey's (2005) concept of 'dual front interaction' shows that the context within communication has changed since people are able to interact with the co-located without the remote person knowing. Performing 'dual front interaction' assists the phone user in managing the co-located interactions and remote communication at once and helps to prevent the co-located person from becoming a 'single'. The survey results show that 47.9% of 16 - 18 year olds, 34.8% of 19 - 21 year olds and 32.0% of 35-44 year olds always answer a call when with one other person in public. However when it comes to making calls there were no significant Chi Square test results. This implies that people will answer call when in a dyad but they won't particularly make calls when with one other person (see section 6.3.4). This is because taking or making a call has the potential to break a dyad into a remote interaction and a single. In order to prevent the break up of a dyad both the phone user and co-local employ methods to manage the maintenance of the dyad:

- The phone user may or may not demand civil inattention from the co-local.
- The caller may undertake absent presence.
- The caller may choose to involve the co-local.

The following section will list some key findings of dyad behaviour and use Humphrey's concepts of cross talk, three-way talk and dual front interaction.

5.3.1 Key findings

5.3.1.1 When one member of the dyad is making a call, (and adopting what Gergen (2002) terms 'absent presence') often the other co-located person will adopt what Goffman (1963) terms 'civil inattention'

Very often in a dyad, when the phone user becomes involved in the remote communication, the co-located person will occupy themselves with something else, or look as though they are occupied with something else, by for example looking out of a window or reading a menu. Goffman (1963) terms these as self defence mechanisms. By being 'preoccupied' with something else (or performing civil inattention) the co-located person is managing themselves as a 'single' whilst the mobile phone interaction takes precedence.

Figure 5.13 below shows that the co-located person is attempting to be interested in the surrounding environment. The co-located also has a cup of coffee to drink and holding the cup provides a distraction. The co-located is performing civil inattention (Goffman 1963) whilst the phone user is engaged in remote communication and adopts absent presence (Gergen 2002).



Figure 5.14 A non-phone user adopting 'civil inattention' whilst the phone user is talking on the phone

People were observed using the following self defence mechanisms in assisting them to perform civil inattention:

- looking out of window
- looking at the menu
- looking at their own phone
- texting on their own phone - thus transferring themselves into interaction with a remote other
- checking their bag
- going to the toilet / bar
- checking the time on their watch.

Some of these actions - particularly looking at a menu and looking out of the window, have similarly been observed by Humphreys (2005).

Gergen's (2002) concept of absent presence is particularly applicable to these kinds of reactions to public phone use, since the phone user although present physically, becomes absent when concentrating on the phone communication. The remote communication becomes the phone user's main involvement whilst the co-located person's main involvement becomes performing civil inattention. Performing civil inattention assists the co-located in two ways:

- It shows the phone user and bystanders that they are not eavesdropping into the remote communication.
- It helps them to manage their new status as a 'single' whilst the remote communication occurs.

The results from the survey suggest that people generally do not find it rude when someone else is using their phone in their own company. Although people in the older age groups are more likely to

believe that it is rude (66.7% of 55-64 year olds whilst only 28.0% of 19-21 year olds believe it is rude - see section 6.5.9). This suggests that younger people are used to managing themselves as a 'single' in public when the co-located answers a call.

5.3.1.2 When sitting at a table, phone users have been observed involving the co-located person into their remote communication

This type of interaction is what Humphrey's (2005) deems as three-way talk. The non user often strains to hear and sits forward in their chair, whilst the phone user bends the phone slightly so that the non-user can over hear. Sharing phone conversations allows the non phone user to be involved in the communication and prevents them from becoming a 'single' whilst the remote communication is being performed. Occasionally when the phone user is on the phone and shares communication with the non user - they do it by repeating what the virtual contact has said without using the 'loud speaker' mode. The non-user will usually respond and the phone user will either repeat what the non user has said or will say 'did you hear that?' Weilenmann and Larsson (2001) and Taylor and Harper (2003) also observed instances of this kind of interaction in their research.

The survey data found that 70.4% of 16-18 year olds, 76.3% of 22-24 year olds, 53.7% of 25 - 34 year olds and 56.0% of 35-44 year olds split their conversation between the person on the phone and a person in their company. These results suggest that this type of interaction (three-way talk) is fairly common method for managing both remote and co-local communication simultaneously (see section 6.4.1).

5.3.1.3 Apologetic nonverbal cues can be signalled by the phone user to the non user

Often if the phone user's attention is taken up by the phone call for several minutes they will make non-verbal cues by signalling apologetically. This is a politeness strategy and a way of acknowledging that the non phone user is left with nothing to do but overhear the phone conversation. The phone user has interrupted the face-to-face co-local communication in favour of the remote communication and so must compensate for this. They must also try and manage the

communication between two people – especially if the remote contact is unaware of the co-located others. This type of communication is a form of dual front interaction (Humphrey's 2005).

5.3.1.4 A phone user will use non-verbal cues to indicate that they no longer want the conversation to continue e.g. rolling the eyes or pretending to yawn

This is another example of dual front interaction (Humphrey's 2005). This particular action almost acts as an apology to the co-local and implies that the phone user does not really want to be on the phone - they are being forced into being involved in another conversation. It is a form of managing the remote and co-local communication simultaneously and helps to compensate for the interrupted co-local interaction.

Non-verbal cues from the phone user can give signals to indicate that the other person in the conversation is talking too much e.g. by using a hand signal which simulates the movements of a person's mouth moving quickly. This again helps the phone user portray to the remote contact that they themselves are aware that the phone call has interrupted their communication. Any non-verbal interactions also help the co-located other to manage their civil inattention and thus eases their position as a single.

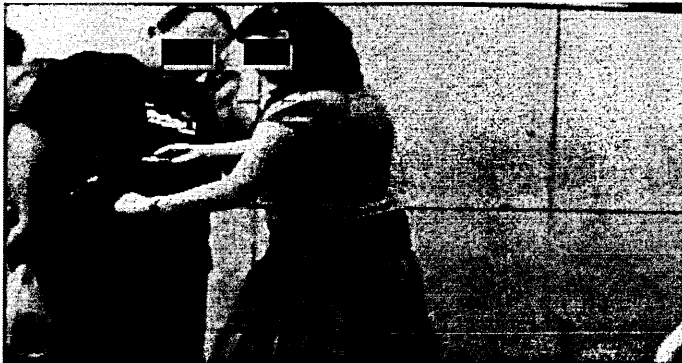


Figure 5.15 A dyad interacting without the remote person's knowledge

5.3.1.5 When a dyad is walking together, the co-local other leads the phone user and often also performs civil inattention

The main involvement for the non-phone user is to walk and take control of leading both parties through the public domain. Meanwhile the phone user's main involvement becomes the phone conversation whilst the walking becomes the side or minimal involvement. By walking slightly ahead the single looks as though they are not interested in the conversation even though they can easily over hear.

5.3.1.6 Dyads often share the contents of their phone by showing each other text messages or pictures

During these interactions both co-locals lean towards each other in order to share the contents of the phone and the screen.



Figure 5.16 The phone as the centre of the dyads attention

Occasionally the phone owner will hand the phone over and the other person will sit and scroll through pictures. In return the other person may then exchange and share some of their own photos or messages. This is what Weilenmann and Larsson (2001) term 'minimal sharing'. During these interactions the phone becomes a focus point to the conversation. Taylor and Harper (2003) suggest that sharing text messages and the phone's content builds up a level of trust between people.

5.3.2 Summary

Taking or making a call has the potential to break a dyad into a remote interaction and a single. In order to prevent the break up of a dyad both the phone user and co-local employ methods to manage the maintenance of the dyad:

- The phone user may or may not demand civil inattention from the co-local.
- The caller may undertake absent presence.
- The caller may choose to involve the co-local.

When a member of a dyad is on the phone and performs absent presence (Gergen 2002) the other co-located person is left to perform civil inattention Goffman (1963). The co-located person almost becomes a single as the mobile phone interaction take precedence. The newly 'single' must then look as though they are not eavesdropping and also as though they have something else to do whilst the other person is otherwise engaged. However, sometimes the phone user will involve the co-located person into the remote communication to avoid any threats to the dyad. Humphrey's (2005) deems this as three -way talk. This kind of interaction ensures that the other person is not left as a single. Dual front interaction (Humphrey's 2005) can otherwise take place when one member of a dyad is on the phone. This is where the phone user communicates to the co-located other and the remote other simultaneously without the remote other knowing. Dual front interaction also assists the co-located other and help to maintain the dyad during the remote interaction.

Lastly dyads can be seen sharing the contents of their phone. The phone becomes a key tool during the interaction and conversations focus around the phone's content. Sharing the phones content can demonstrate a level of trust between the dyad (Taylor and Harper 2003) and is what Weilenmann and Larsson (2001) term 'minimal sharing'.

5.4 Group dynamics

This section will analyse the dynamics of group behaviour and shows that calls and text messages can both interrupt and enhance communication.

The survey results show that more people in the young age groups admit to always answering their phone when in a group (47.2% of 16 - 18 year olds - see section 6.3.2). More of the younger participants admitted to making calls when in a group although the percentage for making calls was smaller (20.4% of 16 - 18 year olds always make calls when in a group - see section 6.3.2). The results indicate that younger people in general would answer and make more calls than people in the older age categories when in a group. The results also suggest that people are more likely to answer calls than make calls when in a group.

Making a call when in a group has a similar consequence to being in a dyad. However unlike when in a dyad co-local others do not need to undertake other nonverbal actions as the group interaction continues. The group on the whole can perform civil inattention towards the phone user, but the phone user must undertake the non-verbal actions (absent presence) to sanction and support civil inattention of others. Another method for managing the remote communication whilst in the group involves the caller including the group into the call. This prevents the group from having to perform civil inattention and the phone user from performing absent presence. Alternatively texting allows the phone user some interaction with the group whilst remotely communicating outside the group.

This section will present some of the key observational findings of mobile phone use in groups.

5.4.1 Key findings

5.4.1.1 Groups of young people can be seen sharing the contents of their phone with friends

People may be exchanging files, contacts and photographs, or they may be reading out text messages. Minimal sharing takes place (Weilenmann and Larsson 2001). The phone becomes the group's focal point for communication.



Figure 5.17 Phone users sharing the contents of their phones

It is uncommon to see more than three phones being used during 'minimal sharing'. People who are not sharing their phones content are still included in the interaction, and are able to see the contents of the shared phone (Taylor and Harper 2003).

5.4.1.2 Younger people are seen more often using their phones in groups in public

The results in Chapter Six indicate that more of the younger age groups use their phones in general (see section 6.2) and the observations reflect this. The phone for young age groups has different social implications and significances. It has become a part of every day routine therefore the norms and values attached to using the phone in public differ to those which existed even four years ago and still perhaps exist in older age groups. The phone has become a prolific part of young people's lives so their social acceptance of the device will affect the use, and the amount of use of the phone in public. When in groups the mobile phone can be a key tool for initiating communication with others and can help people to feel as though they are part of a group, since they have a commonality: a mobile phone and its contents which assist them in their communication.

5.4.1.3 When people call whilst in a group it is common to see the co-local other's performing civil inattention

Figure 5.18 shows an example of a person using their phone whilst in the company of others. The other co-local people start a separate conversation and thus appear not to be eavesdropping. The

phone user has closed their body posture slightly and moved away from the group slightly. The co-locals perform civil inattention (Goffman 1963) whilst continuing in conversation. This makes it easier for the phone user as they are not being overheard by the group and they do not feel like they have interrupted the group's interaction.



Figure 5.18 Phone user calling whilst in a group

Figure 5.19 shows that the phone user is stood close to the other group members and this may be because the phone call is contextual to the group communication. However an element of civil inattention is still performed by the co-locals.



Figure 5.19 Phone user calling whilst in a group

5.4.1.4 A person can be seen leaving the group when talking on the phone

This could be due to politeness but also to the fact that the phone user may not want their conversation being overheard (Lasen 2002). Before mobile phone interruptions when people in groups were disturbed they would excuse themselves from the environment to be polite and avoid the embarrassment of their 'private business' being overheard by the group. This existing norm seems to have been adapted to suit mobile phone use. Not only is leaving the group a form of etiquette but it also allows the phone user privacy. The phone user is able to engage with the person on the phone without causing too much disruption for the group. Phone users may have to change roles when taking a phone call: the parent role is no longer applicable when the phone call is a work related matter (Arnold 2003, Geser 2004) and leaving the group to take the call allows the phone user to manage the role transaction more easily.

The survey results presented in section 6.4.5.1 suggest that 78.8% of the men and 85.5% of the women questioned agree that they have walked away from a group to answer a call (see section 6.4). However there are no significant results for walking away to make a call. The results suggest that more people agree that they walk away from a group to answer calls when in a group than walk away to make calls. This implies that in walking away people do not want to disturb the group communication or be overheard by the group.

5.4.1.5 If a phone user remains sitting with the group during a phone call, they will often use closed body language and even turn away from the group

The closed position again signifies that the phone user is otherwise occupied. They are attempting to be polite by turning away so that others in the group are not subjected to the conversation. This action helps to prevent others from hearing the phone conversation which gives the phone some privacy whilst on the call. It also allows the group to re-focus their communication whilst the phone user is engaged in the remote communication.



Figure 5.20 Group member using the phone to talk and also adopting a closed position

This position is adopted to minimise annoyance and avoid being over heard. During instances such as this, the phone users must carefully manage their remote and co-located communication carefully and is most likely to be managing multiple roles.

Whilst some research (Ling 1997, Katz 2004) found that people find public mobile phone use annoying, the survey data suggests that generally people in the younger age categories do not consider it to be rude to use their phone whilst in the company of others. Although for age groups over 25-34, more people consider it to be rude (see sections 6.5.8 and 6.5.9). People who use their phones whilst remaining in groups are referred to by Plant (2001) as 'Outies' since they openly use their phone openly during group interaction.

5.4.1.6 The person using the phone often sits quietly after their phone call and listens to other group members before talking and rejoining the conversation

As the phone user has been temporarily removed from the group conversation etiquette often dictates that it is not the phone users place to immediately start talking. This is mainly because they have not been a part of the conversation so need to catch up with the conversation's content, and is also due to politeness. Goffman's (1963) concept of communication boundaries (see section 2.2.10) is particularly applicable to this type of interaction - especially when people move from civil inattention to involvement - they are expected to match the tone of the conversation and minimise

the disruption caused. This shows that an existing norm has been adopted and adapted to suit social mobile phone interactions. Ling (2002) notes that reintegration back into the social setting is an issue for mobile phone user's in public.

5.4.1.7 At times people can be talking on the phone and be at the centre of the group's attention

This happens when the phone user is trying to include the remote person into the group communication. The phone interaction can bring a new context and dynamic to the group communication. By sharing the remote communication the phone user does not have to perform the non-verbal cues which indicates they require civil inattention and the group does not have to perform civil inattention. Nor does the phone user have to perform absent presence. Often the other group members can be seen leaning forward so that they can hear the virtual contact speaking. These interactions act as a form of phone sharing (Weilenmann and Larsson 2001).

5.4.1.8 The phone users can perform non verbal signals to the group members whilst talking on the phone

The phone user can be seen signalling to the physical contacts. The remote contact is unaware of these actions. Often the signalling communication can be in relation to the environment - e.g. the phone users will signal for another drink by performing a 'thumbs up' action to confirm 'yes'. These interactions were observed by Humphrey's (2005) and named dual front interaction. Dual front interaction allows the phone user to manage two faces at once and allows the phone user to manage their remote and co-local communication simultaneously. There is an element of minimal and main involvement in these dual front interactions, since the phone user temporarily switches focus from the phone conversation to the face to face conversation.

5.4.1.9 People in groups are more often seen texting on their phone

Texting is the more private and discrete method of communication (Retti 2006) which allows the user to be communicating with the remote contact and to be involved with the group communication without causing interruption. The phone user is managing their minimal and main

involvements simultaneously whilst interacting (Goffman 1963). Although if group members see a person texting, they will often be excluded from the conversation because it is perceived that their main involvement is sending the text message. If the phone user chooses to continue to text rather than converse with the group, they become temporarily distracted whilst sending the text message.

The results from the survey suggest that people in the younger age groups are not annoyed when people text whilst in their company. 95.9% of 16 - 18 year olds, 88.1% of 19 - 21 year olds and 84.8% of 22 - 24 year olds are not annoyed by other people texting whilst in their company (see section 6.5.6.1). This suggests that sending a text message whilst being involved in group communication is a common occurrence and may be an accepted norm.

5.4.2 Summary

Young people can be seen sharing the contents of their phones when in group situations (Taylor and Harper 2003) and usually it is what Weilenmann and Larsson (2001) term 'minimal sharing' which takes place. The phone during these interactions becomes the focal point of the group interaction.

Making a call when in a group has similar consequences to being in a dyad, although the difference is that the co-local others do not need to undertake other nonverbal actions as the group interaction continues. The group can perform civil inattention towards the phone user, but the phone user must undertake the non-verbal actions (absent presence) to sanction and support the civil inattention of others. A phone user will often use closed body language in these instances. This not only gives the caller a degree of privacy but also helps to signify that they are otherwise engaged in remote interaction and temporarily disconnected from the group.

Phone users may choose to manage the remote communication by involving the group into the call. Dual front interaction (Humphrey's 2005) can also be performed whilst a member of the group is on the phone. This helps the phone user to manage their communication with the co-located and remote contacts - often without the remote person knowing.

Texting is an alternative method for phone users in groups which allows them some interaction with the group whilst communicating remotely. This type of interaction is less intrusive upon the group communication (Retti 2006).

However some people can be seen leaving a group when talking on the phone (and is what Plant (2001) terms as 'flight'); this allows the phone user to fully engage with the other person on the call without disrupting the group. After terminating the call, the phone user will sit quietly before joining back into the conversation and this is mainly due to etiquette (Ling 1997).

5.5 Indoor phone use

Indoor contexts tend to be institutional places which have an existing set of norms and values to that environment and allow more observations of others. This section will present some of the patterns in phone use within indoor locations. It shows that indoor (place) phone use can differ from outdoor (space) use. Even though people are in close proximity to others they continue to make calls. In some cases the calls are a form of staging, whilst for others, the calls require people to carefully manage the environment they are communicating in.

Some of the following findings are applicable to single and dyad phone behaviour however examples are specific mobile phone use in indoor places.

5.5.1 Key Findings

5.5.1.1 Single phone users in indoor places use closed body language although more men than women sit back in their chairs when texting and sitting down alone



Figure 5.21 'Single' phone user using closed body language

Closed body language signals for other people not to approach phone users whilst they are alone in public. 'Single' women may not sit back in their chairs in order to avoid attention from others (Fox 2001). Men's more open use of body language is mentioned in Plant's (2001) research and described as 'stage phoning'. Men may use more 'open' positions to assert to others that they are comfortable being alone. The phone for both men and women represents connectivity and for men, their open body language gives the impression that they are confident - even when they are a 'single' in public. Open, expansive, confident positions are described by Plant (2001) as 'speak easy'.

Figure 5.23 shows an example of a man using open body language. Despite his head pointing towards his phone, his elbow and torso positions are open.

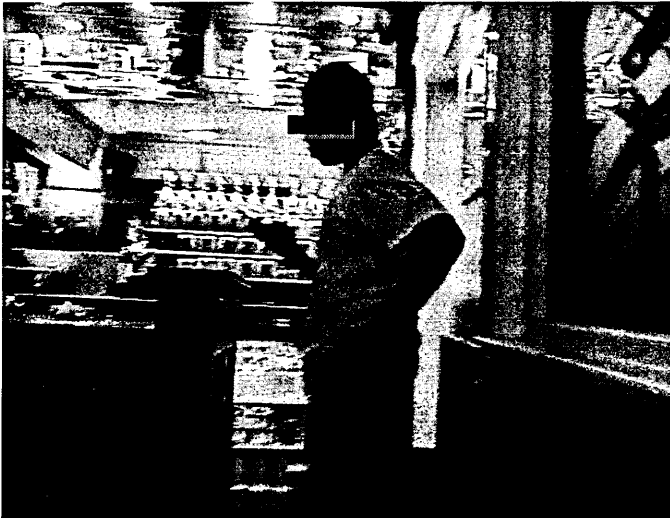


Figure 5.22 Phone user using open body language

5.5.1.2 Phones are often left on a table in certain indoor locations such as cafes, bars and pubs



Figure 5.23 Phones displayed on a table in a bar

Locations such as pubs and bars can often have loud music which would prevent a phone owner from hearing it ring. Placing it in front on the table allows the user to see it light up and helps them too avoid missing calls and text messages. Displaying the phone on the table allows the user to see it light up when it is on silent - thus avoiding attracting attention when it rings. For other people it is uncomfortable to sit down with their phone in their trouser pocket. Other people may find it more convenient to display phones this way as they may not even have pockets.



Figure 5.24 Phone displayed on a table in a pub

Plant's 2001 research found that in 32% of cases, men were the only party to have their phone displayed on the table, whilst only 10% of the cases found women doing the same. Either way the display of phones in public places reaffirms them as a prolific device.

5.5.1.3 Some women can be seen checking inside their bags and looking at their phone's screen

This particular finding can be compared to a survey question for Study One (see section 6.5.10). 85.8% of women compared with 78.4% of men check their phone even though it hasn't rung. Plant (2001) also notes that women store their phone in their bags and are more discrete about displaying it. Referring to a bag to check a phone screen is an action which could assist in performing civil inattention. This action also suggests that the notion of connectedness can be at the forefront of a phone owner's attention. Perhaps some phone users are expecting to receive a reply to a text message or a call back, whilst others are constantly aware of the constant connectivity and the possibility that someone may have contacted them.

5.5.1.4 People using their phone indoors can still often be in transit i.e. walking to and from the bar / toilet

People perhaps do this when in company to avoid other people overhearing their conversation (Plant 2001). People are contacting each other in ignorance of where they are operating and of which groups they are operating with (Harper 2003). This combined with the need to manage and maintain multiple roles (Arnold 2003, Ling 1997 Geser 2004) means that people leave the group to make / receive calls. It may be more acceptable to take a call when in transit than when sitting down in company since not only is a level of privacy maintained, but others in the group are not disturbed by the communication of phone user.

5.5.1.5 People can be seen answering their phones near to entrances / door ways - at the entrances of indoor locations

This may be because it is quieter in these locations - the doorway is close to the outside where the phone user can escape to if they aren't able to hear the conversation (Lasen 2002). In some locations the signal from the network provider will make a difference to the quality of the call.



Figure 5.25 Phone user conducting a call in a doorway

People gain a certain amount of privacy through conducting the conversation away from others. Phone users also save face through managing their communication by walking away (Goffman 1963); they do not have to simultaneously manage the remote and co-local communication or deal with the management of multiple roles.

5.5.1.6 The conversation of phone users can be overheard more easily in smaller locations such as cafes and bars

Some phone users are unconcerned about whether people in the surrounding environment can hear their conversations whereas others perhaps don't even realise that they can be heard. Puro (2002) suggests that it is difficult to understand the norms of 'openness' and 'closedness' as phones privatise public spaces. Puro says that talking on the mobile phone lends itself to a certain social absence

where there is little room for other social contacts. Furthermore, Persson (2001) suggests that people have nothing to lose in sharing secrets with strangers since it is unlikely that they will come into contact again. The civil inattention performed by others allows phone users to think that nearby others are not listening to the conversation anyway (Persson 2001).

The survey data discussed in Chapter Six shows that more of the younger participants would not reject a phone call if they knew another person could overhear their conversation (87.8% if 16 - 18 year olds and 69.2% of 35 - 44 year olds would not reject a call). This suggests that people - especially those from younger age categories are making calls regardless of whether people can overhear the content of their conversation. Even though it is easier to over hear conversation in indoor locations this does not deter phone users from conversing in intimate environments where they can be overheard.

5.5.2 Summary

Some men can be seen using more open body language when sitting alone with their phone - and Plant (2001) refers to this as 'stage phoning' which gives the impression that they are confident and connected. On the other hand, women perhaps use their phones when alone in public to avoid being approached by others (Plant 2001, Fox 2001). In certain indoor locations, phones can be seen displayed on tables whilst most women keep their phones in their handbags.

People can be seen using their phones whilst in transit in indoor locations. People may gain a level of privacy through being in transit and it also helps phone users to manage multiple roles in front of others (Arnold 2003, Geser 2004).

In indoor locations, phone users can be partially overheard in smaller locations such as cafes and bars. Younger people seem less concerned about this (Lasen 2002). People in the local environment often perform civil inattention thus letting the phone user believe that no-one is eaves-dropping

anyway. Phone users also feel like they have nothing to lose in sharing secrets with strangers since they most likely will never see them again (Persson 2001).

5.6 Outdoor phone use

The following section will analyse some observations of mobile phone use from outdoor locations.

Most outdoor locations are associated with open spaces; therefore mobile phone users gain a certain sense of anonymity since there appear to be no immediate eavesdroppers. The existing social norms that may be present in indoor places are not applicable to outdoor spaces since they are less defined.

The main reason for outdoor phone use is that a sense of privacy is gained when a call is made outdoors. The second motivation for outdoor mobile phone use is that conversations become less intrusive towards others. Phone users can create their own sense of space more easily since there is more space to negotiate with. Surrounding people in the environment tend to be passers-by who at most gain a snippet of the conversation but more often gain no sense of context. Passers-by may have more space to negotiate with and can avoid the phone user in advance and in turn manage their own boundaries more easily (Goffman 1963). In outdoor use there is no need for the phone user to worry about managing multiple roles and the phone user will usually not have to worry about managing the remote and co-local communication simultaneously. The following section presents some key findings from outdoor mobile phone use.

5.6.1 Key findings

5.6.1.1 People are more frequently seen calling than texting whilst on the move in outdoor spaces

It is easier to walk and talk than it is to walk and text. Outdoor locations on the move allow for more privacy than closed locations since no-one is in close proximity to overhear the conversation. Humphrey's (2005) suggests that where we are physically no longer determines who we are socially and mobile phones are assisting in the blurring of the boundaries between the physical location and the social sense of self. This idea, coupled with the level of privacy people gain means that calling

in outdoor locations is ideal for people on the move. The conversation can be in another place as outdoor space is less defined.



Figure 5.26 Phone users walking and talking on their phones

Lasen (2002) suggests more people use the street to avoid being overheard indoors. The results from the survey suggest that 53.9% of women and 49.2% of men sometimes mind if other people can overhear their conversation, whilst 13.9% of women and 18.9% of men always mind (see section 6.5.3). Outdoor use also allows people to manage multiple roles since the conversation is mostly private as other people are unable to hear the recipient and the whole conversation. Being in transit is an opportunity to be in touch. 62.6% of standard users and 80.1% of high users would always or sometimes use their phone to text or talk if they were walking along side one other person. The open spaces and anonymity contribute to outdoor public phone use.

5.6.1.2 Phone users often focus their gaze on where they are walking e.g. straight forward whilst on the move and talking on the phone. Although some phone users can be seen walking with their head bowed and their gaze focused on the floor

Focusing on the floor rather than looking at people in the surrounding areas is signalling to other's that they are otherwise engaged on the phone call. Averting the eyes from the surrounding environment means that they are not providing any openings for communication (Goffman 1963) and it allows people to concentrate on the phone communication. When walking and focusing straight ahead or upon the ground, a level of civil inattention is being performed. Using the phone whilst performing other tasks (such as walking) means that the user is balancing their primary and secondary involvements. The primary and secondary involvements may subtly change depending on the environment. For instance if a person is walking through a crowd of people, the primary involvement would be to manage the physical interaction, however if the person is walking alone in an open space the conversation becomes the primary involvement and walking the secondary involvement (Goffman 1963).

5.6.1.3 People taking calls on the street can often be seen standing in shop doorways or leaning up against walls



Figure 5.27 Phone user leaning up against a shop doorway

They may be standing outside to gain privacy from the inside - people leave indoor locations for privacy. Standing in doorways and up against walls allows the phone user to avoid being carried into the sea of people walking by (Lasen 2002).



Figure 5.28 Phone user leaning up against a wall and speaking on the phone

Phone users can take a moment to concentrate on the call (making it the main involvement) over concentrating on their environment and the surrounding people (side involvements). Stopping to concentrate on the call allows the phone user to focus upon their impression management, and face, towards the remote contact. In some instances mobile phone users are unable to make calls in mobile-free zones and are relegated to the outside environment e.g. cinemas, lecturer halls, hospitals (Humphreys 2005).

5.6.1.4 People can be seen pacing, often in circles, whilst talking on their phone outside shops, bars, and in other outdoor locations such as train stations

The phone conversation is the primary involvement whilst the pacing is a secondary action. Plant (2001) refers to mobile phone users who pace in circles as 'spacemakers' and suggests that the action is a way of carving out a private arena whereby any external interference is deliberately and visibly excluded.



Figure 5.29 Phone user pacing and talking on the phone

The man in figure 5.30 is carving out a space even though there are no other people in the vicinity. He paces around in circles, perhaps helping him to concentrate on the remote communication and helps to signify to others that he is engaged.



Figure 5.30 Phone user kicking the wall whilst talking on the phone

Figure 5.31 shows a women with her back turned against the people walking by – as if to shelter the conversation – but also as a way of creating a personal space within the public sphere. Goffman's (1963) concept of boundaries is applicable here since the passers-by are considered as 'by-standers' who perform civil inattention. The phone user also performs civil inattention to the by-standers' whilst turning away from them and concentrating on the call. Goffman's (1963) primary and secondary involvements can apply to this type of phone interaction. Since the primary involvement

is the phone call and the secondary involvement is ensuring that their space is mapped out within the environment. In turning away from the 'by-standers' the phone user does not have to perform in the co-local environment and can focus upon the remote communication.

5.6.1.5 Smokers who are banned from smoking indoors can be seen standing smoking and talking or texting on their phones

This is related to being a single in public. Using the phone in this case has multiple functions. Smokers have to be outside and may often find themselves alone hence they reach for their phones to signify that they are in contact with others and at the same time warn others away. In these situations the phone acts as a self-defence mechanism and an involvement shield (Goffman 1963). The phone acts as an excuse for the person being a 'single' in public. A person may also purposely choose this time to call as they are away from their immediate group; making a call away from the group is perceived as polite and helps the phone user to manage their performance towards the remote caller without compromising the existing performance in front of the group (Goffman 1963).

5.6.2 Summary

Outdoor locations are less socially defined spaces. Therefore people may find it easier to make phone calls since they are not constricted by an existing set of social norms. Outdoor spaces tend not to be institutional and are open and so callers gain a certain amount of privacy.

People taking calls on the street are often seen standing in doorways or leaning up against walls. These people have either removed themselves from an indoor location to take the call or have stopped outside to concentrate on the call. Phone users can also be seen pacing whilst talking on the phone, whilst others can be seen kicking objects on the ground or playing with objects with their feet: these are secondary actions which allow the phone user to carve out their own space within the local environment.

The remote communication gives the 'single' an excuse for being alone in public. It also helps them to manage their performance with the remote caller since they do not have to negotiate their actions in front of the dyad or group or the indoor co-local environment.

5.7 Locations

Mobile phone use results in more private behaviour in public than ever before and there are fewer boundaries to acceptance of where and when a mobile phone can be used (Harper 2003). One of the most distinctive features of mobile phones is that they privatise public spaces (Puro 2002). The following section will briefly describe some of the phone use observed in specific places which define common shared activity such as public transport.

5.7.1 Key findings

5.7.1.1 More people who are alone using public transport send text messages than call

When in confined spaces, sending text messages aids privacy. Texting helps the phone user to save face since they do not risk the embarrassment of being over heard and their communication remains private. Sending a text message signifies to others that they are in communication with a remote contact. It also prevents co-located people from initiating interaction (Fox 2001). 54.2% of 16 - 18 year olds and 56.1 % of 25 - 34 year olds in the survey in Chapter Six sometimes mind if other people can hear their mobile phone conversations (see section 6.5.3). Sending a text message acts as a discrete involvement shield which prevents others from being subjected to a personal conversation. The phone user benefits from texting rather than calling since it means that the phone user is not subject to performing in front of the people on the bus or train. It is often loud on public transport and so a text message helps to phone user to save face since they are not shouting over the noise in the environment.

5.7.1.2 When using the phone to call on public transport, phone users tend to talk loudly

This is because the environment is fairly loud, so the phone user has to increase their own volume so that the recipient can hear. 'Loud talk' (Ling 1997) tends to happen when the phone user is sitting

alone and feels as though there is a degree of privacy since there are no people immediately close by. Several conversations were observed of phone users performing 'loud talk'. Usually the conversation was not of a personal nature and often social arrangements could be overheard. One conversation involved a woman arranging for her builder to attend her house. Whilst a younger woman discussed the logistics of a night out with a friend. On the train several business men took calls and spoke loudly about business deals and meeting arrangements. Within the survey 17.4% of 45-54 year olds, whilst 5.3% of 22-24 year olds always feel embarrassed by hearing other people's mobile phone conversations. The results overall show that older people tend to feel more embarrassed by hearing other people's conversations (see section 6.5.2) Love and Perry's (2004) study found that most of the participants felt embarrassed by the mobile phone conversation. Another results showed that 72.0% of standard users feel annoyed when a person talks too loudly on their phone when in their company. These results suggest that people are aware of other people's 'loud talk' because they are subjected to part of a conversation, however some people in public clearly do not have a problem sharing the contents of their calls with others in the surrounding environment.

5.7.1.3 Mobile phone use is common on public transport journeys

Being on public transport may be an opportunity for the phone user to communicate during the journey. The opportunity arises for the phone user to communicate their whereabouts or that they are running late. Plant (2001) suggests one of the rituals for mobile phone use has come to be associated with a handful of phrases such as 'I'm on the bus!' or 'I'm running late!' or the most common 'Where are you?'. Finding out someone's location and in turn reciprocating location is a common part of people's communication. Several instances where loud ring tones have sounded on a train carriage were observed, noticeably disturbing other people who rolled their eyes or winced at the noise level. For 'singles' travelling alone the phone acts a self defence mechanism and makes

the user feel connected. On public transport, some people read the newspaper, others listen to music whilst some people call, text and play with their phone to pass the time.

5.7.1.4 Mobile phone use is particularly common in train and bus stations

People are socially co-ordinating times, locations and their current status – especially since they are on the move. People are seen both sending text messages and calling on their phones. Mobile phone use in these locations is more overt. Perhaps this is because train and bus stations have more open space than the spaces on the trains and buses. People may use the opportunity to call before they know they are going to be confined and in close proximity to others. On the other hand, people may be calling to advise of the transport times or be gaining advice from remote others about their options for transport. Train and bus stations are usually loud locations, so the phone user may feel that talking on the phone is not disturbing other people, and they are gaining a certain sense of privacy since they are not in danger of being overheard.

5.7.1.5 People use more open body language when they are using their phones in indoor spaces that are open

Shopping malls and train stations are good examples of places where phone user's body language is open. Perhaps the phone users feel as though they are in an open space even though they are indoors and feel as though they are gaining the same amount of privacy as a phone call outdoors. 'Speak easy' poses are adopted by the phone users (Plant 2001) which imply that they are confident and un-distracted by the outside world. The notions of space and boundaries are important here. There is enough space in the environment for the phone user to negotiate their own personal sense of space. They are able to create a boundary between themselves and the passers-by which leads them to feel secure in gaining privacy.

5.7.1.6 Mobile phone use is more commonly seen in informal restaurants

With the prolific use of phones it has become more acceptable to use them in more and more places in public. Plant (2001) found that mobile phone use was more frequent in informal cafes and

restaurants. Informal restaurants tend to be loud, busy environments so a caller may feel as though their phone call cannot be heard by others. They may also feel as though their conversation will not disturb others. Ling (1997) suggests that restaurants are a special social situation since people can be positioned in close proximity to one another. 'Loud talk' and loud ring tones can be abrupt and violates territories and makes it difficult to maintain face. Informal restaurants tend to be noisy and their environments are not as intimate, so perhaps allow phone users to feel they can manage their mobile phone use more easily in these locations.

Formal restaurants still hold a certain amount of traditional social etiquette and it would be considered impolite to start a loud conversation in what is usually a quite environment. However in informal locations the same social norms do not apply. The survey results suggest that 61.5% of men and 50.2% of women would not reject a call in a restaurant implying that more calls are being made in places where it was previously socially unacceptable (see section 6.4.4.1).

5.7.1.7 People can be seen texting before the start of a film at the cinema

Perhaps people text to inform others that they will be temporarily unavailable for the duration of the film. Alternatively they may actually be placing their phone on silent mode so not to disturb the audience throughout the film. Sending a text message is a more discrete form of interaction which is perhaps more acceptable now in this kind of environment than it used to be. Making calls at the cinema is not a common occurrence and often people can be seen standing outside the cinema screenings on the phone. A traditional norm is that people do not speak during the film, so a mobile call is no exception to this rule. The results within the survey (see section 6.4.4.7) show that 83.6% of standard users and 76.7% of high users would reject a call in the cinema. This shows that another traditional social norm has been extended into mobile phone etiquette.

5.7.2 Summary

When in confined and well defined social spaces - especially on public transport where others are in close proximity, phone users tend to send text messages rather than call. Texting helps them to save

face since they do not risk being over heard and their communication remains private. Phone use is especially noticeable in public transport locations where people are on the move and co-ordinating time and space. People are seen calling on their phones more frequently in outdoor locations - especially when they are on the move. People again gain a sense of privacy although this is due to the open space rather than the mode of communication. Despite phone use being less frequent in cinemas and restaurants there are exceptions to these locations: phone use can be seen in informal restaurants and texting can be seen in cinemas before a film starts. This implies that public phone use is becoming more acceptable as it becomes more prolific.

5.8 Conclusion

Mobile phone use was observed for 'singles', dyads, and groups, in indoor places and outdoor spaces and by location. The data indicates that there are some specific patterns of public mobile phone use. Some of the key findings will be summarised in the following section.

5.8.1 Singles

Goffman's (1963) concept of singles alters with the use of the phone - since the 'single' can be in communication with a remote other. Therefore although a person may be 'single in a physical context, they are not necessarily single in a communicative context.

For a 'single' in public, a phone can act as an involvement shield and provides them with an excuse for being alone in public. Whilst single men in public may use their phones for what Plant (2001) terms as 'stage phoning', single women may use their phone to avoid being approached by others (Fox 2001).

Generally 'singles' adopt closed positions when using their mobile phone in public. Phone use can but not always requires users to disconnect from the local context, therefore phone users need to indicate their disconnection. In doing this they need to provide signals to validate other's civil inattention. Since phone users can't use talk or when texting use eye contact to do this, they use body orientation and the manner of phone display to achieve this. So then the closed positions help

people to manage their phone use in public by signalling to others that although they are co-locally present; their main involvement is their remote phone communication.

5.8.2 Dyads

The making or taking of a call has the potential to break a dyad into a remote interaction and a 'single'. In order to prevent the break up of a dyad both the phone user and the co-local employ methods to manage the maintenance of the dyad:

- The phone user may or may not demand civil inattention from the co-local.

If it is required the co-local other may read a menu; check their own phone; drink a cup of coffee; look out of the window. Performing civil inattention assists the co-located in two ways: it shows the bystanders that they are not eavesdropping into the remote communication; and it helps them to manage their new status as a 'single' whilst the remote communication occurs.

- The caller may under-take absent presence. (Often this signals that the co-local should perform civil inattention).
- The caller may choose to involve the co-local. (Humphreys 2005 describes these actions dual-front interaction or three-way talk).

'Dual front interaction' (Humphrey's 2005) can be performed by the phone user through non-verbal gestures and helps the co-located person from becoming a single. Often the remote caller is left completely unaware of the interaction whilst communication between the dyad is maintained.

'Three-way talk' (Humphrey's (2005) is method for managing communication which also prevents the co-located person from becoming a single. The phone user includes the co-located person into the phone conversation with the remote person. The remote person is aware of the co-located other and the co-located other contributes to the phone interaction.

5.8.3 Groups

The making or taking of calls when in a group has similar consequences to being in a dyad. However unlike when in a dyad, co-local others do not need to undertake other non-verbal actions as the group interaction continues. The group on the whole can perform civil inattention towards the phone user, but the phone user must undertake the non-verbal actions (absent presence) to sanction and support civil inattention of others.

Another method for managing the remote communication whilst in the group involves the caller including the group into the call. This prevents the group from having to perform civil inattention and the phone user from performing absent presence. 'Three-way talk' or dual front interaction (Humphrey's 2005) may be performed by the phone user in an attempt to manage both their co-local and remote communication simultaneously.

Some phone users can be seen leaving the group to continue their remote interaction. This may happen when the phone user does not want their conversation being overheard (Lasen 202). Moving away from the group helps the phone user to manage their face (Goffman 1959) and their potential multiple roles (Palen et al 2001, Arnold 2003, Harper 2003). However when phone users have finished their conversation they must then carefully re-engage with the group (Ling 1997). Often phone users will sit quietly and listen to the conversation before joining into the group interaction - this is because they may have to catch up with the conversation and is due to etiquette.

Alternatively texting allows the phone user some interaction with the group whilst remotely communicating outside the group since it is a more private and discrete method of communication (Retti 2006). The phone user manages their main and minimal involvement simultaneously (Goffman 1963) whilst interacting with the group.

5.8.4 Indoor places

Indoor contexts tend to be institutional places which have an existing set of norms and values to that environment and allow more observation of others. Even though people are in close proximity to

others they continue to make calls. In some cases the calls are a form of staging (or what Plant 2001 terms 'phone staging'), whilst for others, the calls require people to carefully manage the environment they are communicating in. Since people must adhere to a set of existing social norms in indoor places phone users can often be observed managing their phone communication away from the group by conducting the following actions:

- Being on the phone during transit e.g. walking to and from the bar / toilet whilst using their phone.
- Answering phones near to entrances / door ways - at the entrances of indoor locations.

People perhaps move away from the group to avoid other people overhearing their conversation (Plant 2001). People are contacting each other in ignorance of where they are operating and of which groups they are operating with (Harper 2003). This combined with the need to manage and maintain multiple roles (Arnold 2003, Ling 1997 Geser 2004) means that people leave the group to make or receive calls.

It may be more acceptable to take a call when in transit than when sitting down in company for the following reasons: a level of privacy maintained; the nonverbal cues required to perform civil inattention are avoided; others in the group are not disturbed by the communication of phone user.

Those who do perform 'stage phoning' (Plant 2001) in indoor places, can be over heard more easily in smaller locations such as cafes and bars. The results from the survey data suggest that more of the younger participants would not reject a phone call if they knew another person could over hear their conversation. Even though phone users can be over heard in indoor places, this does not deter them from conversing in intimate environments.

5.8.5 Outdoor spaces

Most outdoor locations involve a certain amount of open space; therefore mobile phone users gain a certain sense of anonymity when calling since there appear to be no immediate eavesdroppers. The

existing social norms that may be present in indoor places are not applicable to outdoor places since outdoor spaces are less defined.

In outdoor locations, people tend to call more than text whilst on the move. This is because it's easier to walk and talk than walk and text, and the caller gains a certain sense of privacy through being in an open space.

People in outdoor locations can be seen doing the following things:

- Stopping and standing in doorways (perhaps to avoid being carried into the sea of people walking by (Lasen 2002)).
- Leaning up against walls (to take a moment to concentrate on the call - making it the main involvement (Goffman 1963)).
- Pacing in circles (to carve out a private arena whereby any external interference is deliberately and visibly excluded (Plant 2001)).
- Kicking or playing with objects whilst pacing (this is another way of carving out a sense of personal space).

So phone users do gain a sense of privacy in outdoor spaces but also define their own sense of space whilst on the phone.

5.8.6 Locations

People's acceptance of the use of mobile phones in public is growing since people are using their phones, for example, in informal restaurants and in cinemas before the films start. This supports Katz (2004) and Vincent's (2005) suggestion that after a period of adjustment, mobile phone use in public will no longer be considered as disturbing, and humans will normalize the mobile phone use.

Although as Persson (2001) suggests that as the phone becomes more prolific the power of impression is not as important, people are still aware that they must carefully manage their remote interactions in public. For instance many people were observed texting rather than calling in intimate spaces i.e. on public transport and in restaurants. Texting is a more private form of communication which assists in saving face since people in close proximity are not subject to a conversational content.

On the other hand when people do use their phone to call, 'loud talk' (Ling 1997) tends to happen when the phone users is sitting alone and feels there is a degree of privacy since there are no people in close proximity. Mobile phone interactions seem to be most common on public transport, and in public transport locations. This is because people want to communicate time and space and are socially co-ordinating via their mobile phones.

As mobile phone use has become prolific, some social norms of public phone use have been adopted, whilst other codes of practise have been adapted from existing social norms. This chapter has shown that people using their phones in public use several methods for managing their remote and co-local communication simultaneously, depending on whether they are a 'single', in a dyad, in a group, and on their location. How phone use effects dyad and group communication has been presented and Goffman's concepts of public behaviour have been applied to public phone use where possible.

Further pictures of public phone use can be found in the Appendices. The information presented in this chapter will be discussed in Chapter Nine; however some further analysis from the survey data continues in the following chapter for Study Two.

6 Data Analysis questionnaire mobile phone use in public

'Many people feel irritated and disconcerted by this new electronic soundtrack. All ringing phones are disruptive, even arresting. As Marshall McLuhan observed in Understanding Media, an incoming call provokes a sense of expectation, even urgency, which is why people usually feel compelled to answer a ringing phone, even when they know the call is not for them. Like a calling bird, a ringing phone demands a response. Public uses of the mobile spread this tension to all those within earshot, while leaving them powerless to intervene: only the person to whom the call is made is in a position to respond' (Plant 2001 p.30).

6.1 Introduction

This chapter provides an analysis of the survey data for Study One and will draw upon the literature from Chapter Two. Study One focuses upon the use of the mobile phone in the public sphere. This survey has collected 691 responses about people's opinions of public mobile phone use. It addresses questions concerning the following topics:

- general phone use;
- public phone use;
- patterns of mobile phone use in public;
- management strategies for public phone use;
- social norms and acceptance of public mobile phone use.

Study One focuses upon how people manage their phone interactions in public: that is how they manage both their remote and co-local interactions simultaneously. Further more this study aims to find out people's opinion of public mobile phone use - especially in relation to social norms and etiquette. The data in the survey focuses upon patterns of phone use and also focuses upon questions relating to opinions of public phone use.

The following chapter presents the results from the survey data and shows that there are differences in patterns of public mobile phone use and opinion, according to age, user type and in some cases gender. Age has been used as a measure in several of the studies listed in the literature review (Ling 1997, Weillenman and Larson 2001, Grinter and Eldridge 2003, Taylor and Harper 2003). Gender is used as a measure by Plant (2001), Skog (2002), Grinter and Eldridge (2003), and Taylor and Harper (2003). Whilst there are fewer studies which use user type as a measurement (Reid and Reid 2004).

A cross tabulation analysis has been conducted on the data. This form of analysis is most effective to use when data has been gathered in nominal form. It is also the main type of statistical analysis which can be performed on nominal data. Whilst other types of analysis can be constructed by altering the data type, at the time of conducting the analysis, this method was the only approach available due to software training issues. This type of analysis may be a limitation of the study, however further statistical methods will be used in future work. For this analysis, Chi Square tests have also been carried out in order to identify significant results. Significant results are those shown with a result of $P < 0.50$ or below. Results reading over this number are not significant.

In order to analyse the data, user type was a category which had to be defined. To define user types, the number of texts sent and received, and the number of telephone calls made and received, were split into categories. Of these categories three scores were calculated to provide a measure of text use, phone use and total phone use. Then the distribution of the total use was analysed. Any results which scored eight or under defined a respondent as a standard user and results scoring nine or above defined them as a high user.

The analysis for gender within this survey reveals that for most of the questions, the Chi Square tests are not significant. This implies that there is very little difference in phone use, and opinion on phone use in public, between men and women. The results for gender will therefore not be discussed unless a significant Chi Square result has been revealed.

For the purpose of this analysis, the participant's age has also been categorised. The participants aged sixteen to twenty-five are divided into more specific age groups. The age categories are split every three years. For example, sixteen to eighteen years olds in one category and nineteen to twenty-one year olds in another. For participants aged twenty-five onwards the categories are split every ten years. For example, twenty-five to thirty-four year olds in a category and thirty-five to forty-four years old in the following category. The high user category is linked to the age category – therefore there is a correlation between high users and age. Therefore the younger age groups have been further divided into smaller categories – this will allow for further comparisons to be made – even between young high-user groups. There are more participants in the younger age groups so categorising 16 to 25 in the same way as the other categories would provide fewer patterns of use within the data.

Where there are two variables, Fisher Tests will be conducted. These are the only tests which can be used to measure significance on two categorical variables. Where there are only two variables a Chi-Squared test is not suitable for the analysis, because the number of degrees of freedom is always one in a 2×2 contingency table. Significant Fisher test results will be presented in the following chapter when applicable.

The results relating to Section 6 of survey - 'emotion and the mobile phone' have been eliminated from this analysis as this topic was further developed in Study Two, however they can be found in appendix 2a.

In the following chapter each of the results will:

- detail the questions from the survey;
- present cross tabulation percentages in tables where necessary;
- present Chi Square results where necessary;
- provide a brief discussion of the results.

Several sections are presented in this chapter. Section 6.2 will present some patterns of general phone use. Section 6.3 shows the results of patterns in mobile phone use in public. Management strategies for public phone use are presented in section 6.4. Section 6.5 addresses social norms and acceptance of public mobile phone use. Last, section 6.6 provides a conclusion.

6.2 General phone use

The results from these questions provide background information about the sample's general phone use and more specifically phone use in public. The participants were asked about their general phone use to gain an insight about whether they would be considered as 'standard users' or 'high users' and the analysis can be conducted on 'user type'. The patterns of phone use according to age and gender are also relevant to establish similarities and differences in the data.

The results show a correlation between high phone user and age: people in the younger age groups are more likely to be classed as high users.

	Standard User	High User
16-18	46.6%	53.4%
19-24	54.0%	46.0%
25-34	68.0%	32.0%
35-44	79.5%	20.5%
45-54	82.7%	17.3%
55-64	82.6%	17.4%
65-74	100%	0.0%

Table 6.1 User type and Age

Table 1 above shows a clear difference between age and user type and this result helps to understand why many of the mobile phone studies have focussed upon younger users and in particular, teenagers (Weilenmann and Larsson 2001, Taylor and Harper 2003, Ling 2005).

6.2.1 Thinking about an average day, how many texts do you think you SEND?

The result for user type was expected to be significant ($P < 0.000$) since text message use partially defines user type.

As expected the high users send considerably more text message than the standard users.

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
Standard User	10.0%	16.8%	28.6%	29.7%	11.8%	0.8%	2.3%
High User	0.3%	1.0%	1.0%	3.6%	3.0%	22.3%	68.9%

Table 6.2 User type and number of texts sent

The result for gender and number of texts sent was significant ($P < 0.003$).

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
Men	9.8%	13.5%	17.8%	17.2%	7.7%	8.6%	25.2%
Women	3.7%	8.7%	18.0%	21.2%	8.9%	9.5%	30.1%

Table 6.3 Gender and number of texts sent

According to the results, women believe they send more text messages than men. Higher percentages of men than women say they send up to two text messages per day. 30.1% of the women compared with 25.2% of the men believe they send more than ten text messages per day. These results suggest that men and women have different estimates of how many texts they send - however the actual number of text messages sent may be different to their perceived use measured here.

The test for age and number of texts messages sent was significant ($P < 0.000$).

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
16-18	3.4%	2.0%	8.8%	21.6%	10.1%	11.5%	42.6%
19-21	2.9%	7.1%	15.1%	19.0%	10.6%	9.6%	35.7%
22-24	8.0%	16.8%	21.6%	20.8%	4.0%	8.0%	20.8%
25-34	8.9%	20.5%	30.4%	17.0%	7.1%	7.1%	8.9%
35-44	9.6%	11.5%	28.8%	28.8%	3.8%	7.7%	9.6%
45-54	26.1%	39.1%	17.4%	4.3%	0.0%	4.3%	8.7%
55-64	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 6.4 Age and number of texts sent

The results show that higher percentages of younger people send more texts than participants in the older categories. There is also a difference between the numbers of text messages sent by participants within the younger age categories. For instance 42.6% of 16 -18 year olds compared with 20.8% of 22-24 year olds send more than ten texts on an average day. The results suggest that even between four years, patterns of mobile phone use can differ. Several factors could contribute to change in the number of text messages sent between 16-18 and 22-24: social life changes; the novelty of owning a mobile phone reduces; mobile phone contract terms and conditions change; the amount of leisure time available reduces (Reid and Reid 2004, Retti 2006, Hoflich 2006).

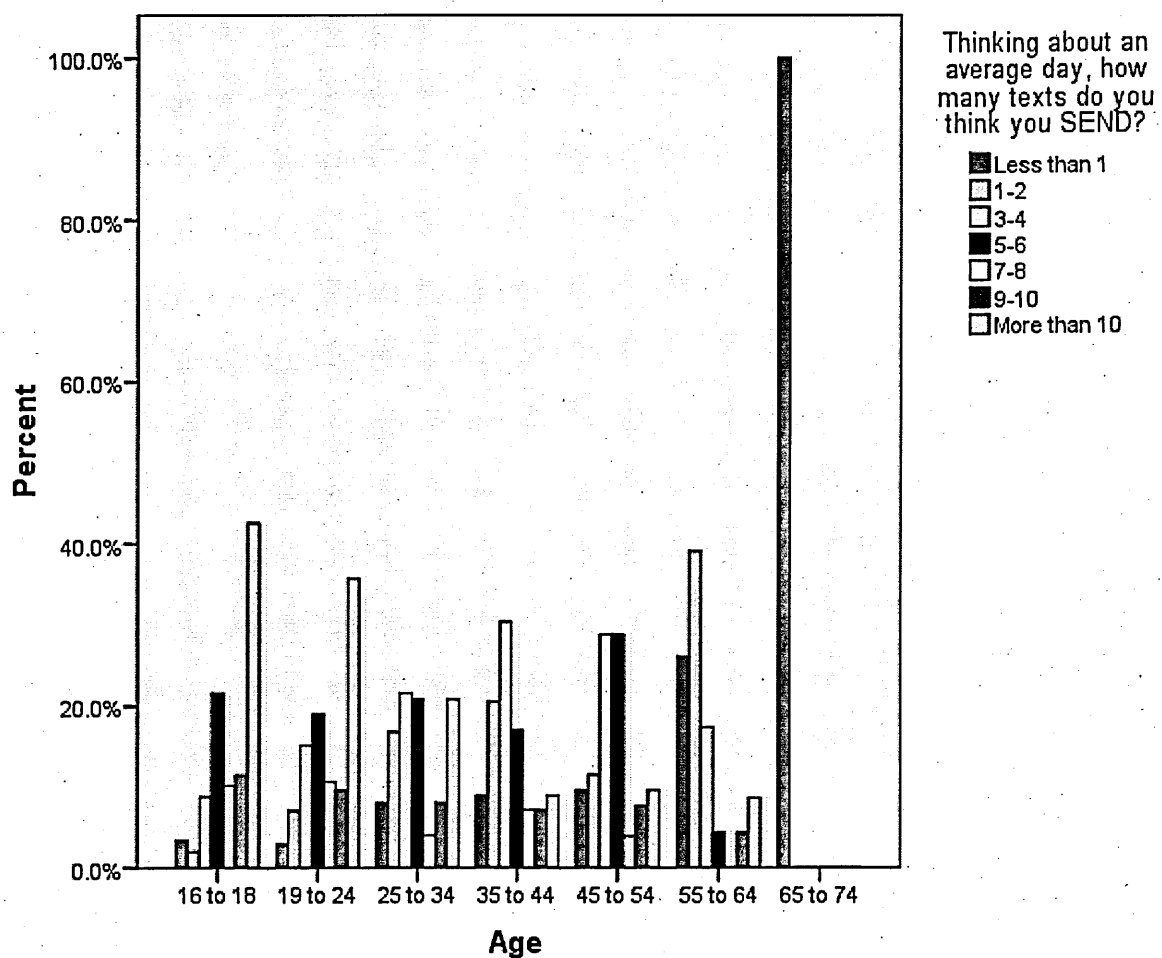


Figure 6.1 A graph to show age and number of texts sent

6.2.2 Thinking about an average day, how many texts do you receive?

The Chi Square test for user type this question was significant ($P < 0.000$). High users believe they receive more texts than standard users and this is expected due to the prior categorisation of the two groups.

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
Standard User	8.3%	21.4%	27.2%	28.8%	11.2%	1.0%	2.1%
High User	0.0%	1.6%	2.0%	6.2%	9.8%	18.7%	61.6%

Table 6.5 User type and number of texts received

The Chi Square test for gender and number of text messages received was significant ($P < 0.006$).

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
Men	8.0%	15.7%	19.7%	16.9%	10.5%	6.5%	22.8%
Women	3.0%	12.3%	15.8%	22.3%	10.8%	8.9%	26.8%

Table 6.6 Gender and number of texts received

The Ofcom 2008 report reveals that 58.8 billion outbound text messages were sent in 2007. Whilst this result shows a continuous increase in UK mobile phone use, this study shows that women said they receive more text messages than men. The results above indicate that people believe that they send more text messages than they receive. 30.1% of women send more than ten text messages but only 26.8% of women receive more than ten text messages. Whilst 25.2% of men send more than 10 text messages, and 22.8% of men receive more than ten text messages. Skog (2002) found that more girls (75%) than boys (62%) agreed that sending SMS was an important factor.

The Chi Square test result for age and number of texts received was significant ($P < 0.000$).

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
16-18	2.0%	3.4%	13.5%	19.6%	12.8%	9.5%	39.2%
19-21	2.9%	9.6%	12.9%	20.6%	12.9%	10.0%	31.2%
22-24	5.6%	18.4%	22.4%	22.4%	9.6%	4.8%	16.8%

25-34	7.1%	25.9%	26.8%	17.9%	7.1%	5.4%	9.8%
35-44	7.7%	19.2%	25.0%	25.0%	7.7%	5.8%	9.6%
45-54	21.7%	43.5%	17.4%	4.3%	0.0%	4.3%	8.7%
55-64	100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 6.7 Age and number of texts received

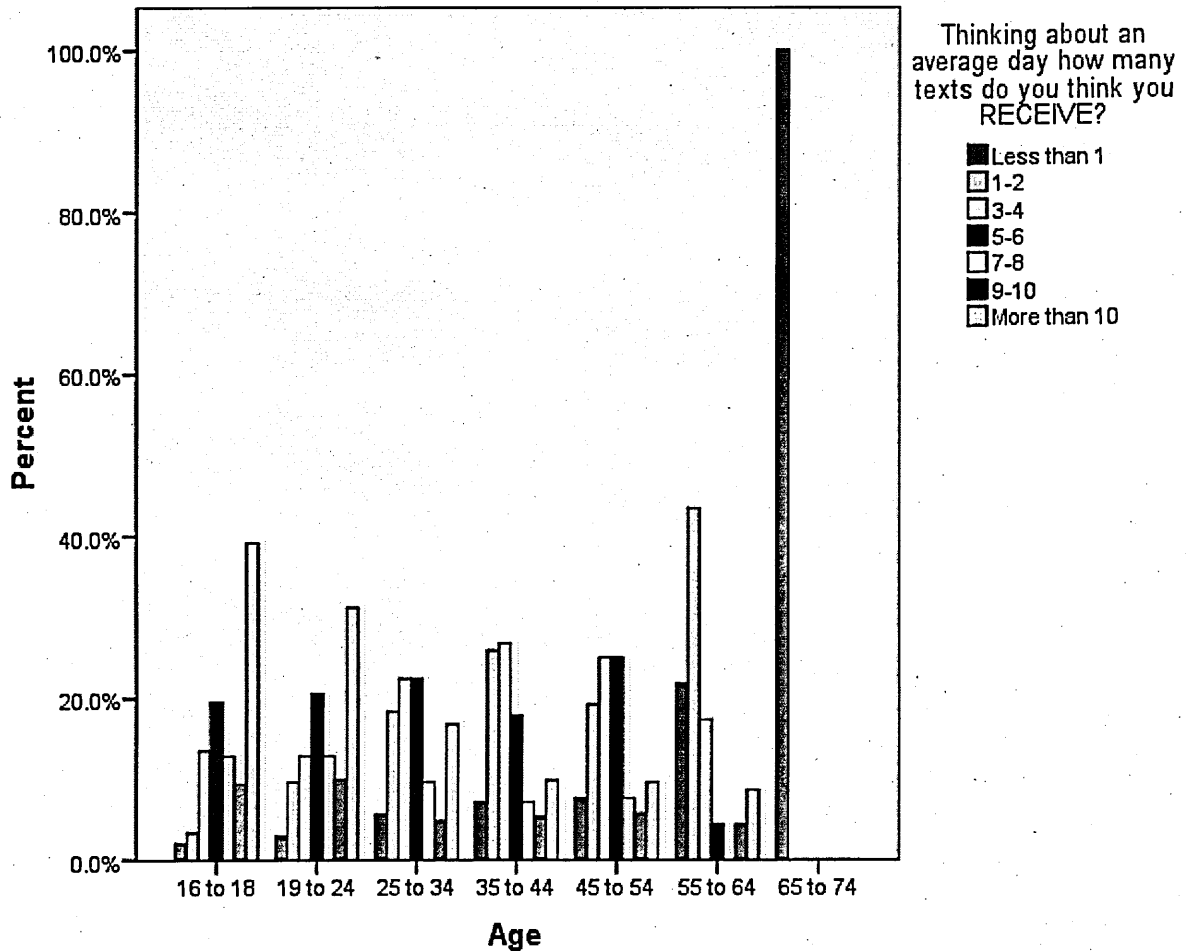


Figure 6.2 A graph to show age and number of texts received

More of the younger people in this study send and receive text messages than people in the older age categories. Phones have been integrated into younger people's lives from an early age (and some people perhaps cannot even remember what life was like without them). The ubiquity and familiarity of the device means that sending and receiving text messages almost becomes an inherent social norm in younger people's lives. Oblinger and Lombardi (2008) suggest that the new 'net generation' must be considered and understood since:

'Their habits, expectations and behaviours may anticipate what the rest of society will come to consider as its culture or norms. In fact, indicators suggest that society's shared beliefs, values, customs and behaviours are being reshaped by globalisation and technology. These changes apply across the spectrum of age and occupation – not just to young people' (Oblinger and Lombardi 2008 p.390).

The management of social lives may play a part in the number of texts sent and received in young people since text messages are used for social coordination (Weilenmann 2003). People in the older age categories have previously managed their lives (and social lives) without text messages and may not be as dependent upon sending and receiving texts for social coordination.

6.2.3 How many phone calls on average do you make per day?

Another expected result is that high users make more phone calls per day than standard users.

The table below shows that there is a distinct difference between the standard phone user and the high phone user. The Chi Square test result was significant ($P < 0.000$).

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
Standard User	23.7%	42.6%	23.5%	6.5%	3.6%	0.0%	0.2%
High User	3.0%	32.8%	28.2%	14.1%	7.5%	4.3%	10.2%

Table 6.8 User Type and number of calls made

The results for this question also show that younger people make more phone calls than people in the older age categories. The Chi Square test indicates that the results for age and number of calls made was significant ($P < 0.000$).

	Less than one	1-2	3-4	5-6	7-8	9-10	More than 10
16-18	12.2%	39.2%	29.7%	10.8%	3.4%	0.7%	4.1%
19-21	12.3%	44.3%	22.7%	11.7%	5.2%	0.3%	3.6%
22-24	12.9%	33.1%	34.7%	8.1%	4.0%	0.8%	6.5%
25-34	20.5%	31.3%	25.0%	7.1%	8.9%	3.6%	3.6%

35-44	28.0%	32.0%	22.0%	6.0%	6.0%	4.0%	2.0%
45-54	43.5%	34.8%	4.3%	0.0%	4.3%	8.7%	4.3%
55-64	25.0%	50.0%	0.0%	0.0%	0.0%	0.0%	25.0%

Table 6.9 Age and number of calls made

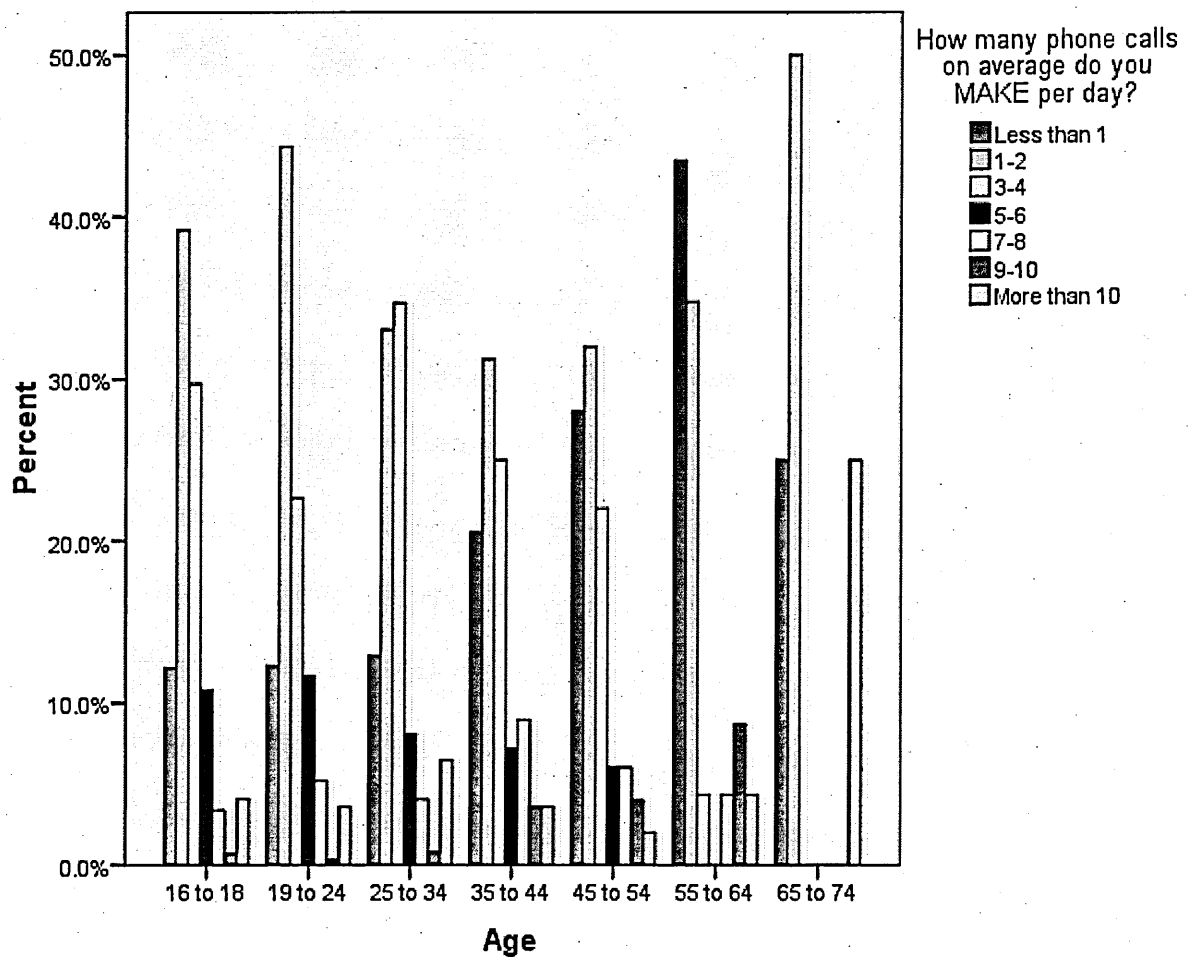


Figure 6.3 A Graph to show age and number of calls made per day

The target user group for mobile phones is aged 16 - 35 so it is unsurprising that the results show that younger people generally make more calls than people in the older age groups.

6.2.4 How many phone calls on average do you receive per day?

As expected the high users receive more phone calls than the standard users and the Chi Square test for user type was significant ($P < 0.000$).

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
Standard User	19.8%	44.6%	25.8%	5.8%	4.0%	0.0%	0.0%

High User	2.3%	34.4%	28.5%	14.1%	7.9%	3.3%	9.5%
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Table 6.10 User type and number of calls received

The Chi Square test for age and number of calls received indicated a significant result ($P < 0.013$).

	Less than one	1-2	3-4	5-6	7-8	9-10	More than 10
16-18	8.1%	40.5%	31.1%	11.5%	3.4%	1.4%	4.1%
19-21	11.0%	44.0%	26.2%	8.7%	6.5%	0.6%	2.9%
22-24	8.0%	42.4%	26.4%	8.0%	8.0%	1.6%	5.6%
25-34	17.9%	33.9%	30.4%	7.1%	5.4%	2.7%	2.7%
35-44	28.8%	28.8%	23.1%	11.5%	3.8%	1.9%	1.9%
45-54	39.1%	30.4%	13.0%	4.3%	0.0%	0.0%	13.0%
55-64	25.0%	50.0%	25.0%	0.0%	0.0%	0.0%	0.0%

Table 6.11 Age and number of calls received

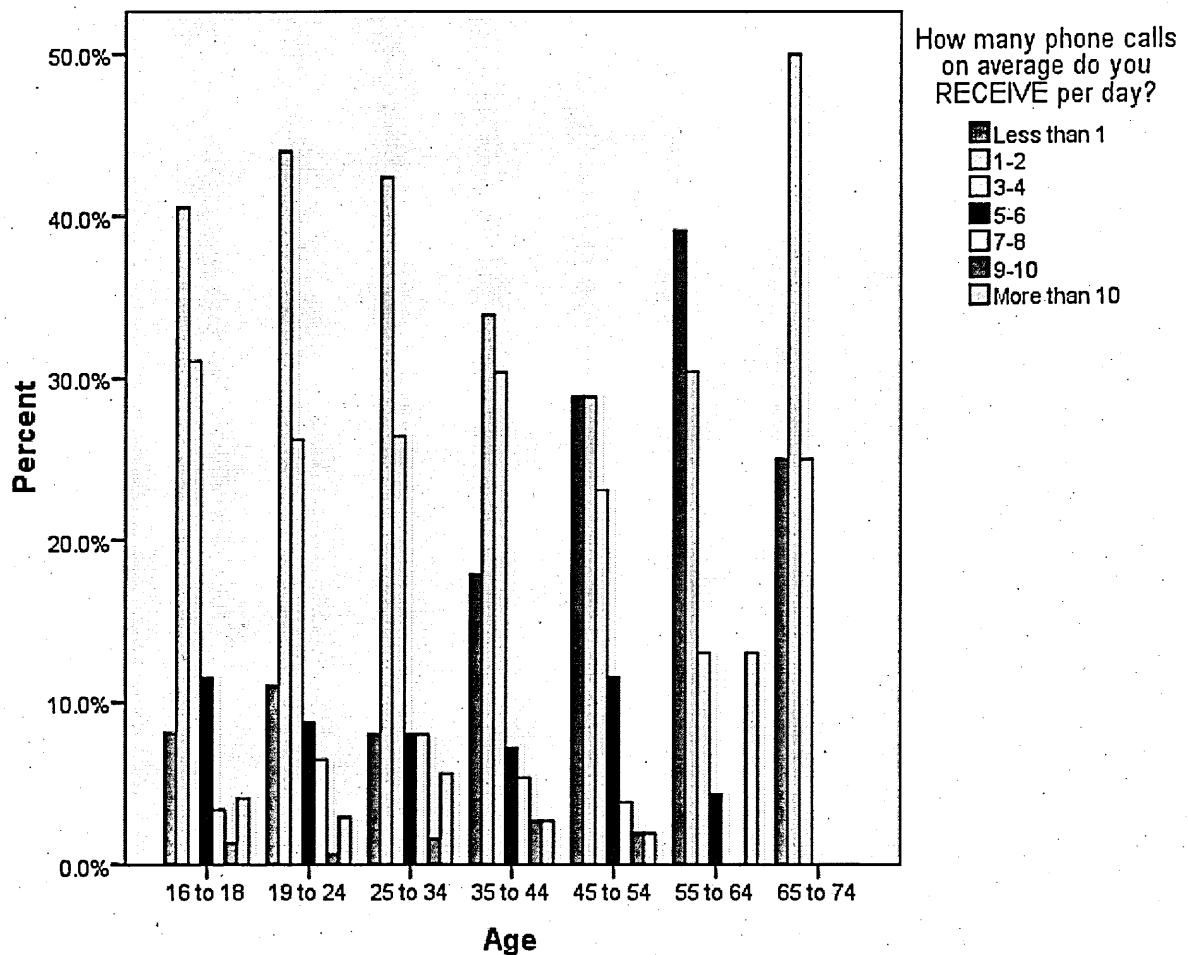


Figure 6.4 A graph to show age and the number of phone calls received per day

The Chi Square test for gender is not significant ($P < .671$).

Generally the younger participants in this study make and receive more calls. An interesting finding from these results indicates that people believe they send more text messages than they receive and that they receive more calls than they make.

6.2.5 On an average day, how many calls would you say you answer in public?

The Chi Square test for user type and calls answered in public was significant ($P < 0.000$).

Generally, a large number of both high and standard users answer up to four calls per day in public. This indicates that mobile phone use in public is prevalent. High users manage more calls than standard users since they believe they receive more calls generally.

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
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Standard User	31.3%	47.3%	15.5%	5.5%	0.4%	0.0%	0.0%
High User	9.1%	41.8%	26.8%	11.5%	5.9%	1.4%	3.5%

Table 6.12 User type and number of calls answered in public

When considering age and number of calls answered in public, the Chi Square test was significant ($P < 0.007$). Table 6.13 shows that more of the people in the younger age groups answer up to four calls in public. What's more, the highest number of people answering more than ten calls in public is the 45-54 age group. This may be because the mobile phone is used for both professional and personal calls.

Age	Less than one	1-2	3-4	5-6	7-8	9-10	More than 10
16-18	15.5%	45.8%	24.6%	8.5%	4.2%	0.7%	0.7%
19-21	19.1%	49.1%	21.2%	7.8%	1.0%	0.7%	1.0%
22-24	16.7%	45.6%	21.1%	8.8%	6.1%	0.0%	1.8%
25-34	32.7%	38.3%	18.7%	4.7%	2.8%	0.9%	1.9%
35-44	42.9%	36.7%	12.2%	6.1%	0.0%	0.0%	2.0%
45-54	47.8%	39.1%	4.3%	4.3%	0.0%	0.0%	4.3%
55-64	75.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 6.13 Age and number of calls answered in public

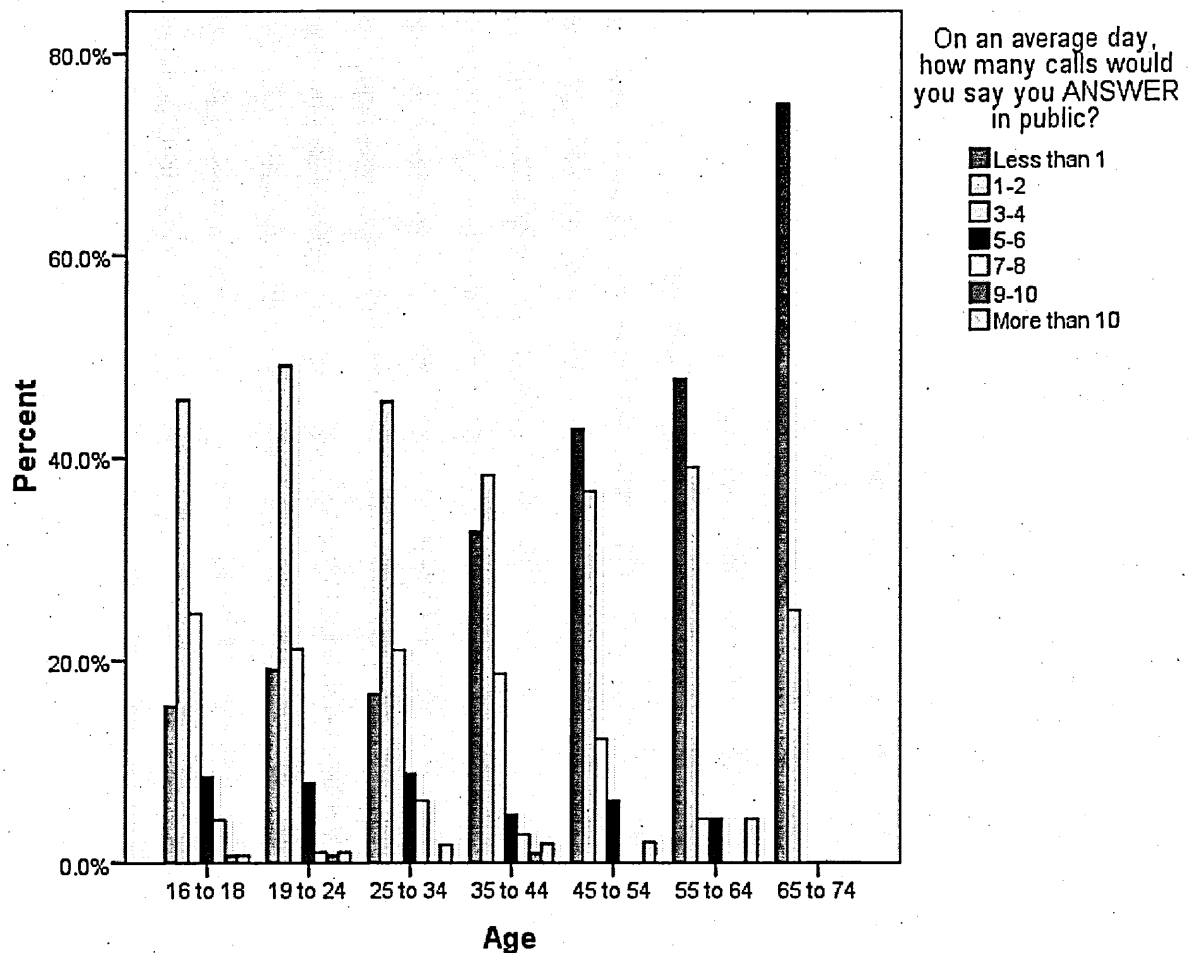


Figure 6.5 A graph to show age and the number of calls answered in public

6.2.6 On an average day, how many calls would you say you make in public?

Unsurprisingly the high users make more calls in public and the difference between standard and high users on the Chi Square test was significant ($P < 0.000$).

	Less than 1	1-2	3-4	5-6	7-8	9-10	More than 10
Standard User	36.8%	43.9%	16.4%	2.0%	0.4%	0.4%	0.0%
High User	13.4%	45.8%	22.2%	10.9%	4.2%	0.7%	2.8%

Table 6.14 User type and number of calls made in public

The table below shows a much clearer result for age in relation to the number of calls made in public. Fewer calls are made by people in the older age categories. The Chi Square test was significant ($P < 0.000$). Table 15 shows that 9.1% of 45 – 54 year olds make more than ten calls in public and this again may be due to making professional as well as personal calls in public.

	Less than one	1-2	3-4	5-6	7-8	9-10	More than 10
16-18	22.9%	45.7%	20.0%	7.9%	2.9%	0.0%	0.7%
19-21	23.0%	51.2%	18.2%	6.2%	0.7%	0.3%	0.3%
22-24	21.9%	46.5%	21.1%	5.3%	4.4%	0.0%	0.9%
25-34	39.8%	29.6%	19.4%	3.7%	2.8%	2.8%	1.9%
35-44	40.8%	42.9%	14.3%	0.0%	0.0%	0.0%	2.0%
45-54	59.1%	27.3%	4.5%	0.0%	0.0%	0.0%	9.1%
55-64	75.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 6.14 Age and the number of calls made in public

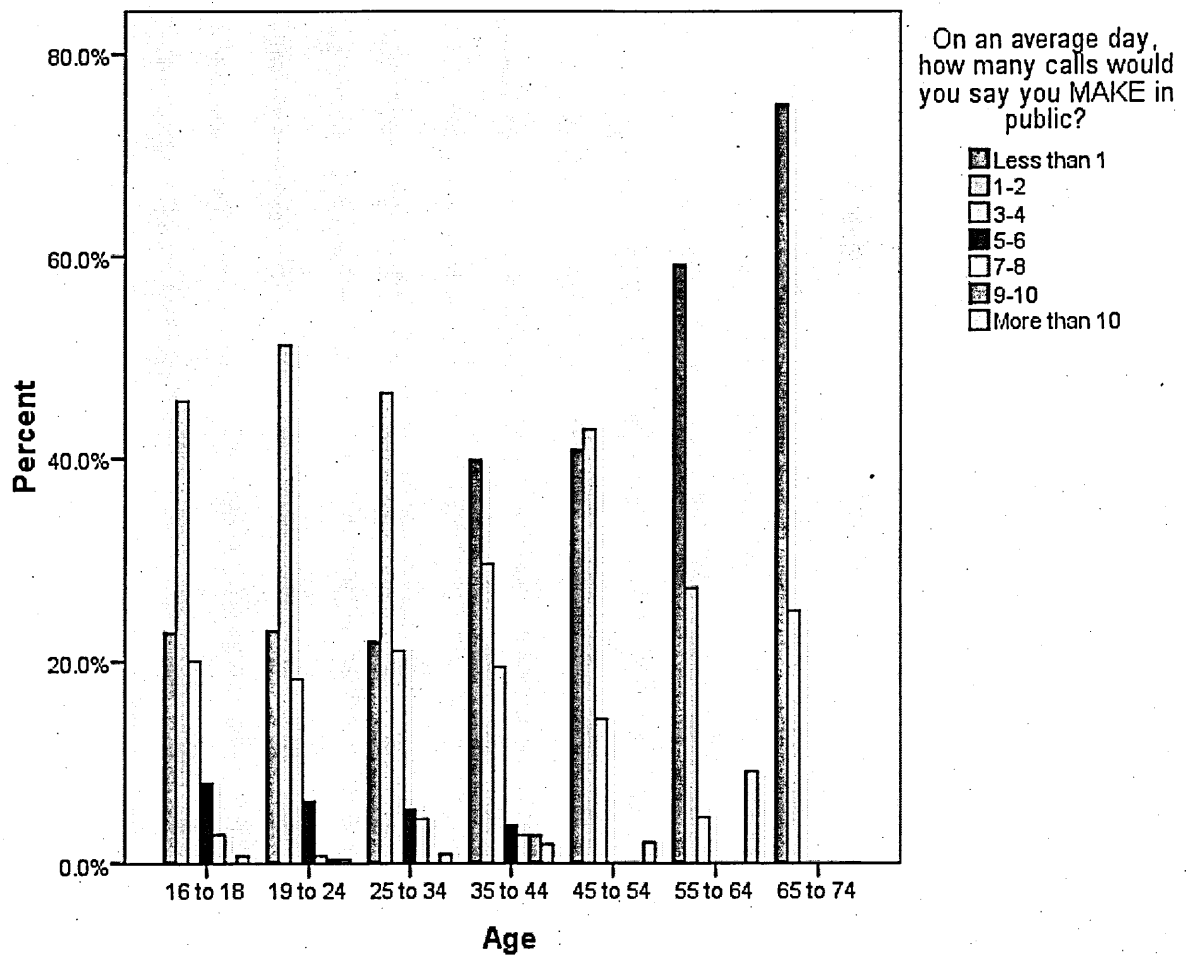


Figure 6.6 A graph to show age and the number of calls made in public

The results indicate that more people in the younger age categories make more calls in public than people in the older age categories. Younger people may make more calls in public because they are less concerned about being over heard in public (Lasen 2002). The social norms

surrounding public mobile phone use for younger people imply that it is socially acceptable to use a mobile phone in public.

The results show that there is a difference between the number of calls made in public and the number of calls received in public. Generally people admit to answering more calls in public than they make. However an interesting result is shown in the 45 - 54 year olds group: 9.1% admit to making more than ten calls in public on an average day. The mobile phone is perhaps answered through obligation since according to Geser (2004) it's an inherent norm to answer a ringing phone. People are contacting each other in ignorance of where they are operating (Harper 2003) and phone users can always be contacted regardless of their location if their phone is turned on. Therefore the phone user has a certain amount of obligation to communicate with the people wanting to contact them via the phone.

By answering the phone in public, the phone user is showing that they are needed and wanted by remote contacts, (Arnold 2003) which may assist in giving an impression that they are in demand and popular and this in turn assists the management of face.

These results also suggest that people are not choosing to make as many calls as they are obliging incoming calls. This may be due to social etiquette; making calls whilst in public means that the user is putting themselves into a potentially difficult situation - especially if they have to manage face and also avoid being overheard.

6.2.7 Summary

The section above has detailed some results for general mobile phone use in public. According to the results, women admit to sending and receiving more text messages than men. However the Chi Square tests reveal that there is no significant gender difference in the number of calls made and received.

High percentages of younger people send and receive more text messages than participants in the older age categories. Furthermore, there are differences in the results for sending text messages even between the younger categories: 42.6% of 16 - 18 year olds compared with

20.8% of 22-24 year olds send more than ten text messages. The results also show that younger people make more phone calls than people in the older age categories.

For phone use specifically in public, younger people answer and make more calls. There is also a small difference between making and receiving calls in public: more people answer the phone than make calls. It is perhaps more socially acceptable to answer a ringing phone – since people always answer a ringing phone – even if it interrupts important communication (Geser 2004). The 'remote contact' often does not know the whereabouts of the phone user (Harper 2003) and so people may have more empathy towards a ringing phone; it is not the fault of the phone user if their phone rings. On the other hand, if a phone user makes a call in public they are purposefully choosing to interact with a remote contact and therefore surrounding by-standers may not be as sympathetic towards the interruption (Geser 2004).

6.3 Patterns of mobile phone use in public

The results within this section show how people believe they would manage receiving and making calls in dyads and groups and addresses more specific patterns of phone use in public. It questions whether people will call and text when in dyads and groups when in public places. In particular it shows that there are significant results for the data relating to age.

6.3.1 If you were with a group of people in a public place would you answer a phone call?

A person's user type does not determine whether they will answer their phone when with a group of people in public: the Chi Square test for user type was not significant ($P < .335$). There is very little difference between high users (35.3%) and standard users (33.9%) in relation to 'always' answering a call in public when in a group. The results may not largely differ for user types because the norms of mobile phone use are linked to social acceptance and etiquette rather than norms relating to frequency of use.

The results for age indicate that more young people would answer a call in public when they are with a group of people. The Chi Square test for age was significant ($P < .000$).

Age	Always	Sometimes	Don't Know	Rarely	Never
16-18	47.2%	45.8%	2.8%	4.2%	0.0%
19-21	37.2%	54.9%	3.1%	3.4%	1.4%
22-24	29.8%	64.9%	0.9%	4.4%	0.0%
25-34	21.3%	65.7%	2.8%	10.2%	0.0%
35-44	30.0%	48.0%	0.0%	16.0%	6.0%
45-54	17.4%	65.2%	0.0%	13.0%	4.3%
55-64	0.0%	75.0%	0.0%	25.0%	0.0%

Table 6.15 Age and calls answered when in a group

Lasen's (2002) study suggests young people are less concerned about being overheard using their mobile phone in public. This result supports Lasen's (2002) viewpoint since a higher number of younger people 'always' answer their phone when in a group in public. Younger people are generally more familiar with the technology since they use it more frequently and therefore their perception of its use in public may differ to that of people in the older age groups. For younger people it may be more socially acceptable to answer a call in public. It is also easier to manage answering a call when in a group as the group can continue their interaction (see section 5.4). Goffman's (1959) concept of impression management (see section 2.3.3) may also be applicable here since younger people may want to give off a certain impression – for example that they are in demand from a remote contact; that they are important; or that they are needed and wanted by others (Arnold 2003).

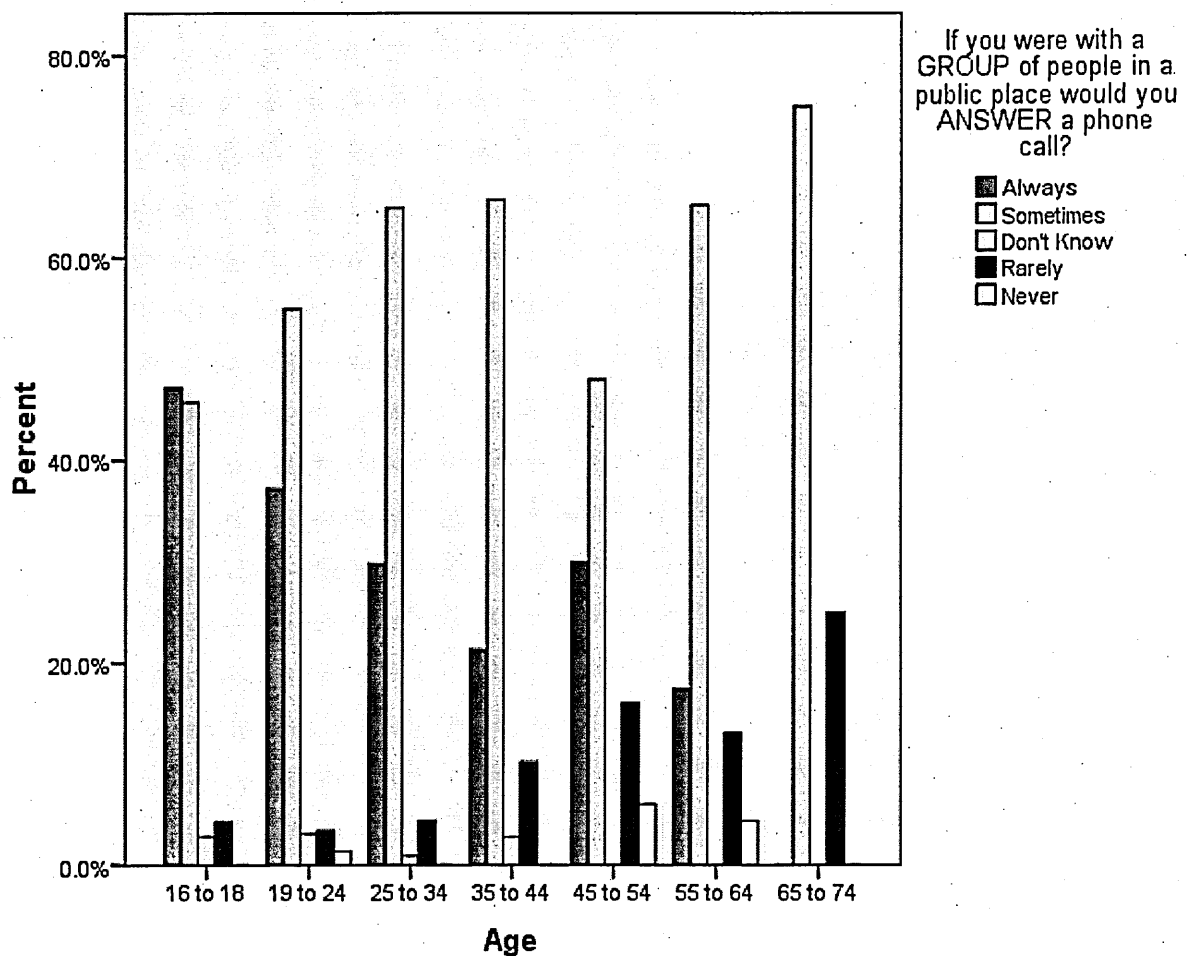


Figure 6.7 A graph to show age and answering calls in a group in public

Arnold (2003) concept of roles and performance in mobile phone use and the management of face may contribute to the difference in use between the generations. Younger people may want or need to perform in order to support their impression management. As a person gets older they may have more roles to manage (i.e. professional roles, parent roles, family roles) making the management of multiple roles and impression management harder to perform in front of others. Furthermore fewer people in the older categories may answer a call in public to avoid contradicting their current position of face.

Chapter Five considers that answering calls when in a group may require fewer interaction management strategies since the remaining group members can continue their conversation whilst the phone user interacts with the remote contact (see section 5.4).

6.3.2 If you were with a group of people in a public place would you make a phone call?

The Chi Square test for user type was not significant ($P < .137$). However the result shows that people are less inclined to make calls in public when in a group than answer calls when in a group. The percentage for 'always' *answering* calls when in a group for standard users is 33.9% and for high users is 35.3%. This is comparable with the 'always' response for *making* calls when in a group with 16.2% for standard users and 19.7% for high users. The results suggest that people don't necessarily make calls during group interactions - but they will answer calls when in a group. When making calls the phone user is specifically in control of the face they will assume with the remote contact, in front of the group. If the call involves a renegotiation of face, they may choose not to make the call in order to avoid a contradiction in the face they assume with the group. The concepts of face management, multiple roles, and managing the remote and co-local contacts simultaneously are applicable. A phone user must decide how best to manage the remote and co-local (group) communication simultaneously when making a call in front of a group since a call may threaten the group interaction – especially when the caller is prioritising the remote communication over the co-local interactions (see section 5.4 for observations of how people manage calls in groups). The face assumed by the phone user in front of the group must not contradict existing faces that are familiar to the group (Palen et al 2001). The stage management of making a call in a group may become complex (Ling 1997) which may be why people are less inclined to make calls than answers calls when in a group in public.

The Chi Square test for age and making calls when in a group was significant ($P < 0.001$). Across all of the age categories a higher percentage of people agreed that they 'sometimes' make calls when in a group. More of the younger participants admit to 'always' making calls when in a group.

Age	Always	Sometimes	Don't Know	Rarely	Never
16-18	20.4%	54.2%	8.5%	15.5%	1.4%

19-21	18.8%	53.9%	5.1%	19.8%	2.4%
22-24	21.9%	51.8%	1.8%	20.2%	4.4%
25-34	13.9%	48.1%	1.9%	31.5%	4.6%
35-44	10.0%	46.0%	2.0%	32.0%	10.0%
45-54	0.0%	52.2%	0.0%	34.8%	13.0%
55-64	0.0%	50.0%	0.0%	25.0%	25.0%

Table 6.16 Age and making calls when in a group

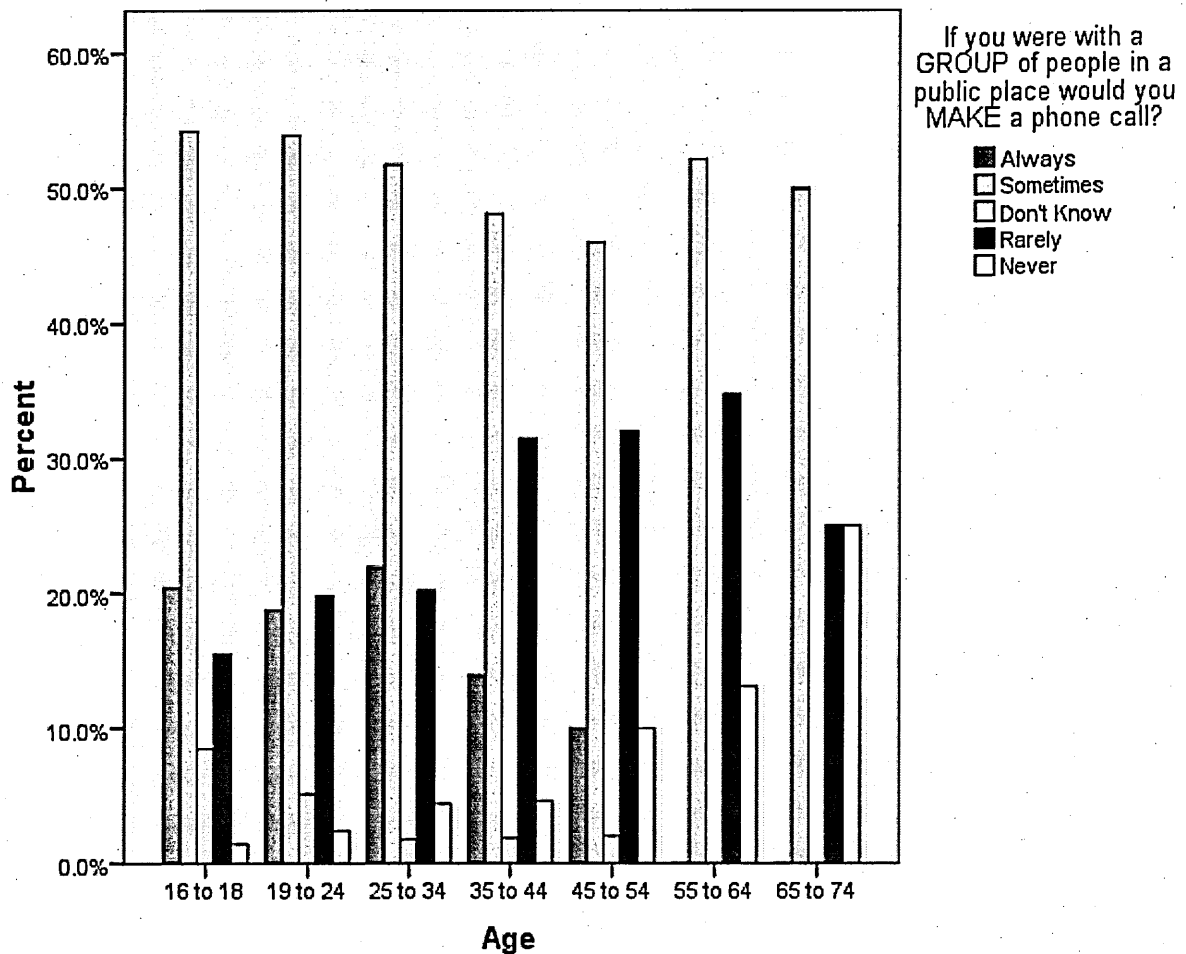


Figure6.8 A graph to show age and the number of calls made in a group in public

Overall however these results show that people answer more calls than make calls when in a group. Etiquette could play a part in these interactions: prioritising the remote communication over the co-local (group) interaction could be perceived as rude since the group's communication flow is interrupted (unless the call has contextual cues). When receiving a call during group interaction, the other people are left to continue other conversations around the

call and perform civil inattention towards the phone user which can feel awkward for others. The phone user must in turn emit cues to display that they require civil inattention. The management of the simultaneous remote and co-local interactions may be too complex for some people to manage - especially when they must also consider what face they are assuming in front of the group, and ensure that their face doesn't contradict with an existing presentation of a role (see section 5.4 which also addresses phone calls during group communication).

6.3.3 If you were with one other person in a public place - would you answer a phone call?

The Chi Square result for the user type is not significant ($P < .658$). This indicates that user type does not determine whether a person would answer a call in public when with one other person: high and standard users have similar social norms and values towards mobile phone use in public and being with one other person, as they do about being in a group. However there are different implications for answering a call when in a dyad because the other person is left a 'single' whilst the communication with the remote contact takes priority. The 'single' must perform civil inattention whilst the phone user manages their remote and co-local interactions at once (see section 5.3).

The results for age indicate that higher percentages of people in the younger categories are more likely to 'always' answer their phone in public when with one other person. The Chi Square test for age was a significant result ($P < 0.001$).

Age	Always	Sometimes	Don't Know	Rarely	Never
16-18	47.9%	39.4%	5.6%	7.0%	0.0%
19-21	34.8%	46.1%	6.8%	11.3%	1.0%
22-24	27.2%	57.0%	1.8%	11.4%	2.6%
25-34	21.3%	62.0%	1.9%	13.0%	1.9%
35-44	32.0%	46.0%	4.0%	16.0%	2.0%
45-54	26.1%	56.5%	4.3%	4.3%	8.7%
55-64	0.0%	75.0%	0.0%	25.0%	0.0%

Table 6.17 Age and answering a call when with one other person

This implies that phone use when in a dyad is more socially acceptable for people in the younger age categories. Perhaps as high users they are more practised at managing the phone interactions in front of one other person. The phone user in a dyad sanctions being directly overheard and since younger people are less concerned about this (Lasen 2002) it may be easier for them to perform their mobile phone calls whilst managing both the remote and co-local contacts. Either way generally more people in the younger age groups will 'always' answer a call when with one person. This has implications for both younger and older people's perceptions on the social norms and etiquette of phone use during dyad interactions.

6.3.4 If you were with one other person in a public place - would you make a phone call?

There are no significant Chi Square tests for this question. This implies that the social norms and etiquette of mobile phone use may be a contributing factor to this result. When the phone user chooses to make another call, the other person is forced to become a single (Goffman 1963) whilst the remote communication takes place. The dyad communication is interrupted and this could be perceived as being rude. Making calls when with one other is not as common as receiving calls.

The results for making and answering phone calls whilst with one other person in public do differ. More people would answer a phone call than make a phone call when in public with one other person. As with the results for public mobile phone use when in groups, the compulsion to answer a ringing phone may be a factor affecting people answering calls (Hopper 1992, Geser 2004). However there is also Goffman's (1963) concept of singles and withs to consider. When in a group, people close by are able to converse and perform civil inattention more easily since they are still classed as withs when the phone user is answering a call. However when in a dyad, by shifting attention to their remote communication, a phone user leaves the other person as a single performing civil inattention. If the phone user is in demand and receives a call, the choice of shifting attention to the phone communication is excused since people understand they are compelled to answer the phone. If the phone user chooses to make a call when in a dyad, then

they are prioritising the remote communication, potentially threatening the dyad, and leaving the co-local to perform civil inattention as a single (see section 5.3.1.1).

6.3.5 Summary

More people in the younger age groups would always or sometimes answer or make a call when in a group. Younger people may be less concerned at being overheard, more familiar managing remote and co-local interaction simultaneously, and it may also be easier to manage face as there may be fewer roles to perform.

People are more likely to answer calls when in groups or one other person than make calls. When making calls the phone user has more control over the management of face, and the remote and co-local - and is choosing to prioritise the remote communication over the co-local communication. Answering a call means that the interruption is involuntary and phone users may have to use interaction management strategies to ensure their face, role, and co-local interactions are not compromised.

6.4 Management strategies for public phone use

Chapter Five shows that there are several management strategies for using a mobile phone in public when with dyads and groups. Some of the management strategies include three-way talk (Humphrey's 2005); civil inattention (Goffman 1963); rejecting calls (Plant 2001); walking away from the remote contacts (Plant 2001) (see sections 5.2, 5.3 and 5.4). These strategies allow people to manage their remote and co-local interactions simultaneously, whilst ensuring that they are managing their face. In conducting this communication management, phone users are ensuring that they are performing the correct roles in front of the remote and co-local contacts. This section provides data about what management strategies people think they use: the results below show people's opinions of how they manage these kinds of interactions.

6.4.1 When in a group situation have you ever split your conversation between a person on the phone and the people present in the group?

The Chi Square test for user type was a significant result ($P < 0.000$).

	Yes	No	Don't Know
Standard user	56.2%	36.5%	7.2%
High user	72.7%	22.1%	5.2%

Table 6.18 User type and splitting a phone conversation in a group

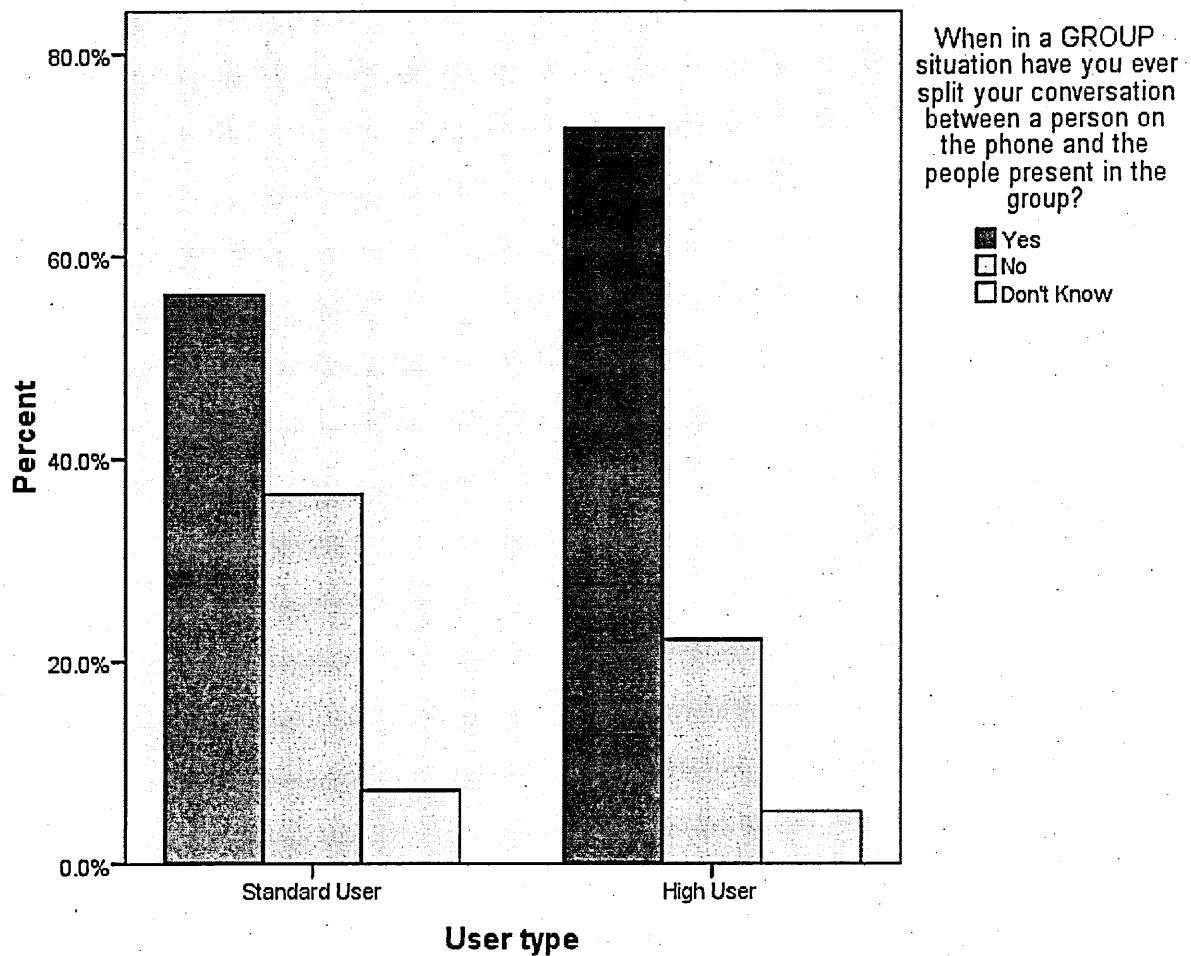


Figure 6.9 A graph to show user type and splitting a phone conversation in a group

A larger percentage (72.7%) of high users than standard users (56.2%) agree that they have split a conversation between a person on the phone and people in the group. High users may feel more confident in managing the communication when receiving calls in a group situation as they may be more practised at managing the communication between the caller and group (see section 5.4).

The Chi Square test for age indicated a significant result ($P < 0.000$).

Age	Yes	No	Don't Know
16-18	72.5%	20.4%	7.0%
19-21	66.2%	28.0%	5.8%
22-24	71.1%	25.4%	3.5%
25-34	50.0%	38.9%	11.1%
35-44	38.0%	54.0%	8.0%
45-54	47.8%	52.2%	0.0%
55-64	25.0%	75.0%	0.0%

Table 6.19 Age and splitting a mobile phone conversation when in a group

More people under the age of 35 agree that they split their conversations, than people in the older age categories. Humphrey's (2005) concepts of dual front interaction and three-way talk can be applied to the sharing of the remote communication with the co-local others. When the group is involved in the remote communication, they do not have to perform civil inattention or start new conversations. This type of interaction management may be a method for compensating for the call changing the focus of the group communication. The caller does not miss any of the group's other interaction whilst on the phone. The phone user becomes the centre of the group's attention and the group's main involvement becomes the three-way talk. The phone user is not prioritising the remote communication and uses three-way talk as a method for managing the remote and co-local at once. Since younger people are using their phones more frequently in public they may be more practised at using three-way talk for managing public mobile phone use when in group situations.

6.4.2 When with one other person, have you ever split your phone conversation between the other person on the phone and the person in your company?

The Chi Square tests for the user type ($P < 0.176$) and gender ($P < 0.325$) are not significant. However the Chi Square test for age is significant ($P < 0.001$). A higher percentage of people in the younger age categories agree that they have split their conversation between a phone contact and someone in their presence (see section 5.4.1.7 and 5.4.1.8 which relates to observations of this management strategy).

Age	Yes	No	Don't Know
16-18	70.4%	21.8%	7.7%
19-21	67.9%	23.9%	8.2%
22-24	76.3%	18.4%	5.3%
25-34	53.7%	38.0%	8.3%
35-44	56.0%	36.0%	8.0%
45-54	43.5%	56.5%	0.0%
55-64	25.0%	75.0%	0.0%

Table 6.20 Age and splitting a phone conversation when with one other person

Phone users have a special reason for splitting a conversation with the remote and co-local contacts in dyads: it prevents the break up of the dyad and the co-local from becoming a single. It is a management method for ensuring that the co-local communication is not disturbed by the call and helps to prevent the co-local from performing civil inattention. These results imply that sharing the remote communication with a co-local other is a socially accepted norm for younger people. Weilenmann and Larsson (2001) and Taylor and Harper (2003) found that young people do perform various levels of phone sharing. Young people may have a different set of social norms towards public phone use because their concept of public media differs - especially behaviours surrounding acceptable public phone use. They are particularly familiar with managing and balancing technology and interaction simultaneously and so their interaction management strategies may be the norm for young users.

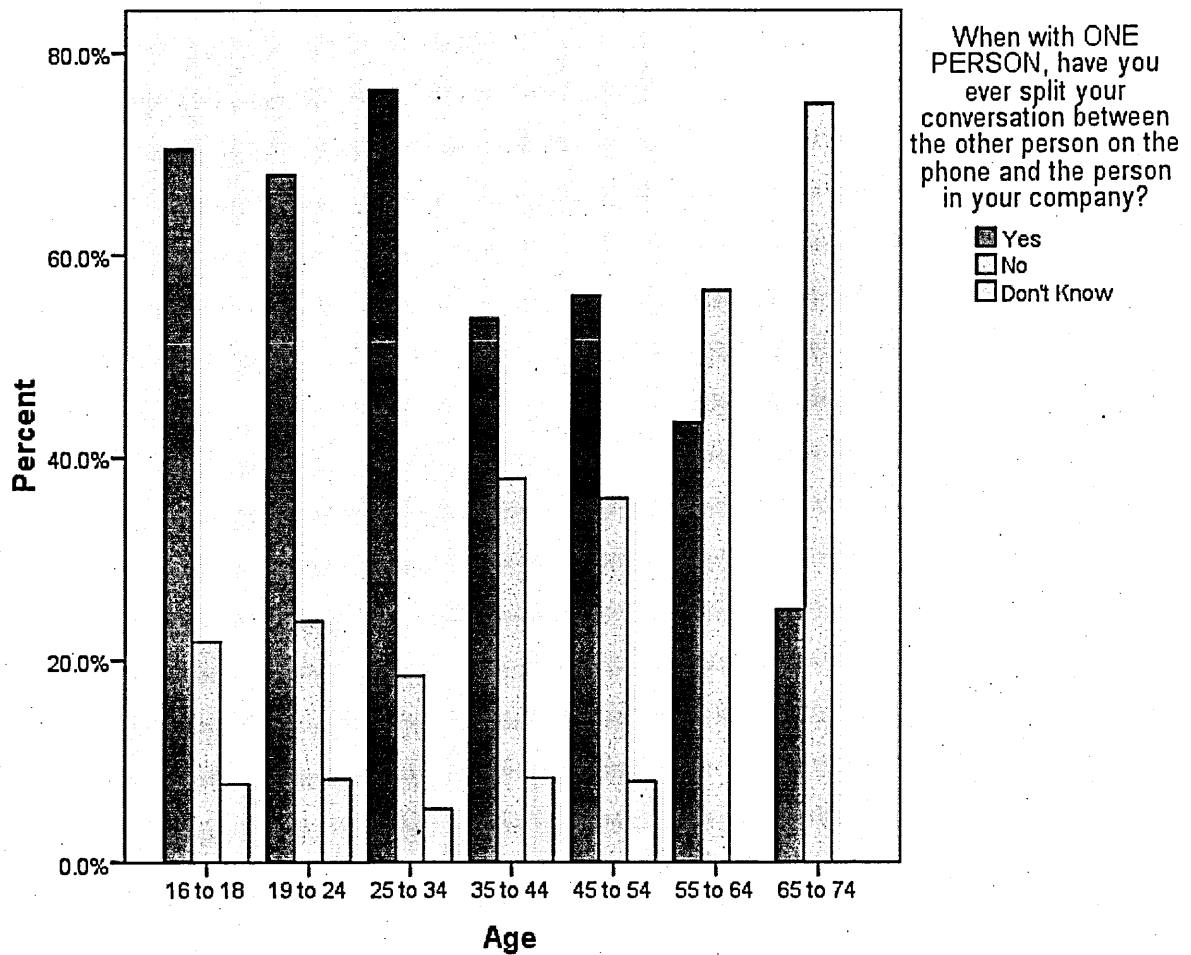


Figure 6.10 A graph to show age and splitting a conversation when with one other person

Humphreys (2005) three-way talk is again applicable to this type of interaction management. The primary interaction is the mobile phone talk and often the single tries to half listen to the conversation. This action may be performed as a method of compensating for the change in communication flow which is more apparent when the other person is left a single. Rather than feeling like the mobile conversation is an interruption to the communication, the co-local person feels involved and still important as they are a part of the shift in attention. The three-way talk also helps to avoid the performance of civil inattention which the potential single would have to perform if they were excluded from the phone interaction.

Overall people say they are more likely to split their conversation with one person than with a group implying there is a need for greater compensation when managing one person. The percentages for age and splitting a conversation when in a group and when with one other

person only differ slightly. This suggests that the management of the two different social interactions is similar since people do not perform one type of interaction more than the other.

6.4.3 Under which of the following circumstances would you reject an incoming call?

This question had several multiple choice questions - each of which will be analysed separately below.

6.4.3.1 In a quiet environment

The Chi Square test for age ($P < 0.663$) was not significant however the Fisher test results for user type, ($P < 0.049$) and gender ($P < 0.016$) are significant.

	Would Not Reject	Would Reject
Standard User	41.7%	58.3%
High User	48.9%	51.1%

Table 6.21 User type and reject call in a quiet environment

High users may feel more comfortable taking calls regardless of the location due to the high levels of use. They may be more practised at using a management strategy e.g. walking away from the quiet environment or performing civil inattention.

	Would Not Reject	Would Reject
Men	49.5%	50.5%
Women	40.9%	59.1%

Table 6.22 Gender and reject call in a quiet environment

The results for gender suggest more men would not reject a call in a quiet environment and this supports Plant's (2001) concept of 'stage phoning'.

6.4.3.2 In a noisy environment

The Fisher test result for user type ($P < 0.482$) and Chi Square test for age ($P < 0.661$) are not significant. The Fisher result for gender ($P < 0.020$) was significant. More women would not reject a call when in a noisy environment suggesting that women will take calls when they can't be overheard by others in the co-local environment.

	Would Not Reject	Would Reject
Men	73.2%	26.8%
Women	80.3%	19.7%

Table 6.23 Gender and reject call in noisy environment

6.4.3.3 During a serious conversation

Whilst the results for user-type ($P < 0.174$) and age ($P < 0.625$) were not significant, the result for gender was significant ($P < 0.001$). More women would reject a call during a serious conversation. The results for the question in section 6.5.6.1 suggests that more women are annoyed by people who text during a serious conversation. This implies that there are gender differences towards the acceptance of mobile phone interactions during serious conversations.

	Would not reject	Would reject
Men	31.1%	68.9%
Women	20.6%	79.4%

Table 6.24 Gender and reject call during a serious conversation

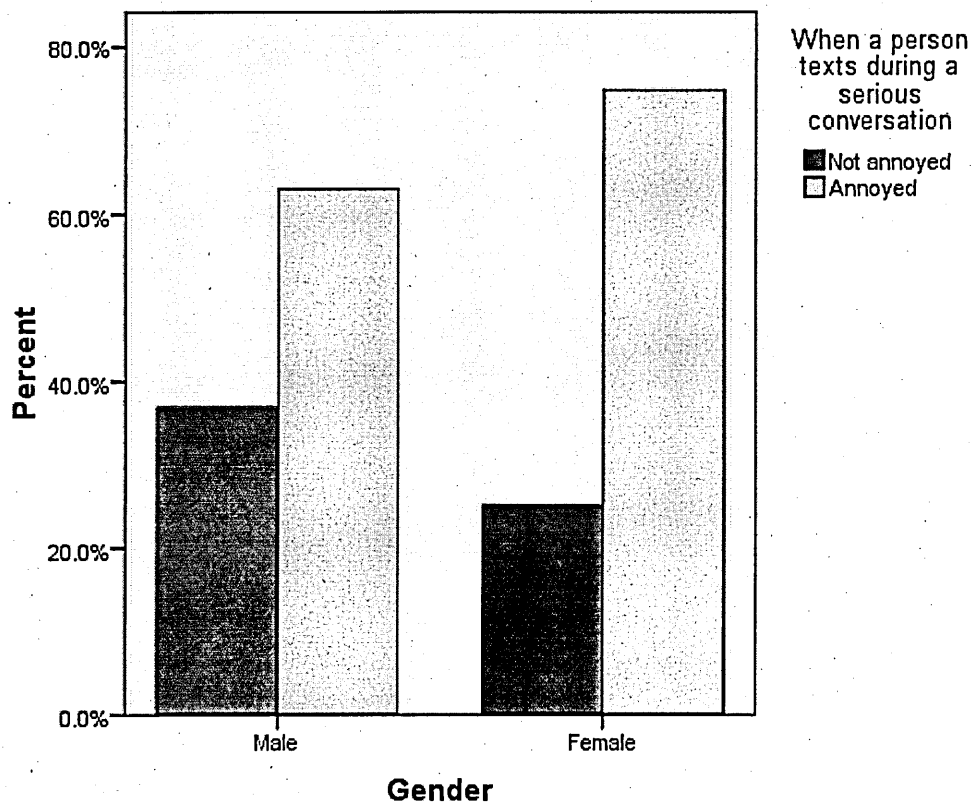


Figure 6.11 A graph to show gender and annoyance at texting during a serious conversation

6.4.3.4 If another person could over hear the phone conversation

User type ($P < 0.076$) was not significant Fisher test result and gender ($P < 0.260$) was not a significant Chi Square test result.

The Chi Square result for age was a significant result ($P < 0.000$). The older participants are more likely to reject a call if people can overhear their conversation. This result further asserts that younger people are less concerned about being overheard (Lasen 2002) and also highlights what is considered as socially acceptable by younger people may not be by people in the older age groups.

Age	Would not reject	Would reject
16-18	87.8%	12.2%
19-21	79.7%	20.3%
22-24	79.2%	20.8%
25-34	68.8%	31.3%
35-44	69.2%	30.8%
45-54	52.2%	47.8%
55-64	50.0%	50.0%

Table 6.25 Age and rejection if a person could over hear

People in the younger age categories may not have to manage as many roles in front of other people as older people. Consequently they may be less concerned about the management of face when answering a call. Young people may be more adjusted to the concept of managing multiple roles (if any) and also the multiple interactions between the remote and co-local contacts.

6.4.3.5 In a mobile-free zone

The Fisher test for user type ($P < .033$) was significant: more standard users would reject a call in a mobile free zone.

	Would Not Reject	Would Reject
Standard User	26.3%	73.7%

High User	33.4%	66.6%
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Table 6.26 User type and reject in mobile-free zone

Gender is a significant Fisher test result ($P < 0.000$). The results in the table below suggest that women are more likely to reject a call in the 'mobile free' zones.

	Would not reject	Would reject
Men	39.4%	60.6%
Women	21.9%	78.1%

Table 6.27 Gender and reject a call in a mobile free zone

Age ($P < .474$) was not a significant Chi Square test.

6.4.4 In which of the following places would you reject an incoming call?

The observation data in Chapter Five reveals that indoor phone use can differ to outdoor use and this is mainly due to the amount of space available to the phone user. People feel more able to talk on their phones when they are not in close proximity to other people. Phone users often use closed body language which indicates to remote others that they are prioritising their phone communication (see section 5.6).

6.4.4.1 In a restaurant

The Fisher test for user type ($P < .275$) and the Chi Square test for age ($P < .594$) were not significant results. Restaurants seem to be a special setting where by there is an existing set of norms which have directly impacted upon phone use since a certain level of etiquette is maintained by all in a restaurant setting. Ling's (1997) study suggests that the dynamics of a restaurant's social space (intimate) means that people are invaded by 'loud talk'. The observation data revealed that mobile phone use was more common in informal restaurants (see section 5.7.1.6).

The result for gender and rejecting a call in a restaurant was significant. The Fisher test result was $P < 0.002$ - more women would reject a call when in a restaurant. This implies that women's and men's social acceptance of phone use in a restaurant setting may differ.

	Would not reject	Would reject
Men	61.5%	38.5%
Women	50.2%	49.8%

Table 6.28 Gender and reject a call in a restaurant

6.4.4.2 In a park

User type ($P < 0.332$) and gender ($P < 0.527$) were not significant, although the Chi Square result for age ($P < 0.001$) was significant. Section 5.7 highlights the fact that people may feel more comfortable using their phones in open spaces as they are less defined.

Age	Would not reject	Would reject
16-18	99.3%	0.7%
19-21	99.4%	0.6%
22-24	97.6%	2.4%
25-34	96.4%	3.6%
35-44	94.2%	5.8%
45-54	95.7%	4.3%
55-64	75.0%	25.0%

Table 6.29 Age and reject a call in a park

Park's are open space's which allow people to gain a certain level of anonymity. This is why generally people may not reject a mobile phone call in a park. Weilenmann and Larrson (2001) also suggest that young people can be seen hanging around parks using their mobile phones. This result supports the notion that people may be more willing to use their mobile phones in open public spaces where the management of the local environment is less necessary.

6.4.4.3 In a pub

The Chi Square results for age ($P < 0.51$), user type ($P < .463$) and gender ($P < .486$) are not significant. The percentages for each variable reveal that most people would not reject a call in a pub. Public houses are informal places so people may feel more able to answer mobile phones calls in these environments. Perhaps people find it easier to simultaneously manage their remote and co-local interactions in pubs as they can be noisy environments and therefore rejecting a

call is not usually a management strategy used. Section 5.6 provides data about observations of phone use in pub environments.

6.4.4.4 In a bar

The results similarly indicate that most people would not reject a call in a bar. The Chi Square results for age ($P < .638$) user type ($P < .127$) and gender ($P < .319$) were not significant. Bars are also informal places where it may be easier to manage mobile phone interactions during face-to-face interactions. In informal locations there may be other management strategies available to phone users, for instance people may choose to walk away to answer their phone (see section 5.4.1.4) or take the call whilst in transit or near the entrance of the bar (see section 5.5.1.5).

6.4.4.5 In a café

The Chi Square results for gender ($P < .479$) and user type ($P < .084$) are not significant. The result for age is significant ($P < .013$) more people in the older age categories would reject a mobile phone call in a café.

Age	Would not reject	Would reject
16-18	94.6%	5.4%
19-21	92.6%	7.4%
22-24	91.2%	8.8%
25-34	82.1%	17.9%
35-44	90.4%	9.6%
45-54	82.6%	17.4%
55-64	100.0%	0.0%

Table 6.30 Age and reject call in cafe

The results reveal slightly more people would reject a call in the 25 - 34 age group. Cafes are smaller more intimate environments where phone users could be overheard.

6.4.4.6 In a shopping centre

The Chi Square tests for age ($P < .326$) user type ($P < .572$) and gender ($P < .401$) are not significant. High percentages of people would not reject a call in a shopping centre. Shopping centres are usually large indoor venues that have open spaces; therefore people may feel they

gain a certain sense of privacy when speaking on the phone. People may feel comfortable using their phones as they are informal and can be noisy. Section 5.6 highlights that open body language is used in spaces that are more open.

6.4.4.7 In a cinema

The Chi Square test for cinema and age was not significant ($P < .946$) - most people would reject a call in the cinema. However more standard users than high users would reject a call in the cinema. The Chi Square test is significant ($P < .011$). The observations found that people could be seen texting before the start of a film and this may be a method for managing remote communication in environments where it is less appropriate to call (see section 5.7.1.7).

	Would not reject	Would reject
Standard User	16.4%	83.6%
High User	23.3%	76.7%

Table 6.31 User type and reject in a cinema

The Chi Square results for gender were also significant ($P < .000$) more women than men would reject a call in a cinema.

	Would not reject	Would reject
Men	26.8%	73.2%
Women	13.6%	86.4%

Table 6.32 Gender and reject in a cinema

These results show that across the generations people would reject a call in a cinema. This may be due to the nature of the public place: an existing social norm is that that the audience must be quiet during the film. It seems as though this existing norm has been adapted to include mobile phone use. The fact that more men than women would not reject a call supports Plants (2001) concept of 'stage phoning'.

6.4.4.8 In a theatre

Theatres could be considered as a formal environment as they hold an existing set of norms relating to social etiquette and conduct. Therefore it is unsurprising that the Chi Square test for

age is not significant ($P < .807$). Age does not affect whether a person would reject a call in a theatre. This suggests that some norms are embedded into social behaviour.

However the result for user type is significant ($P < .019$): more standard users than high users would reject a call in a theatre.

	Would not reject	Would reject
Standard User	22.6%	77.4%
High User	29.5%	70.5%

Table 6.33 user type and reject in theatre

The Chi Square result for gender is significant ($P < .000$) more women than men would reject a call in a theatre.

	Would not reject	Would reject
Men	33.8%	66.2%
Women	19.3%	80.7%

Table 6.34 gender and reject in theatre

6.4.5 When receiving an incoming call in public have you ever done any of the following actions?

Plant 2001 explains that people manage their calls in different ways and by doing different actions: flight / suspension etc. This question allowed the participants to choose the management strategies that were most applicable to their own public phone use.

6.4.5.1 Walked away from a group to answer a call

The Fisher test results for user type ($P < .306$) and the Chi Square test for age ($P < 0.769$) were not significant. The results suggest that high numbers of people have walked away from a group to answer a call.

Gender ($P < .014$) was a significant Fisher test with 78.8% of men and 85.5% of women agreeing that they have walked away from a group to answer a call. In this instance, perhaps women are more likely to walk away from a group to avoid being overheard. Perhaps women have some different perspectives concerning politeness and find walking away from a group to answer a

call an effective interaction management strategy for communicating with a remote contact when there are co-locals in the immediate environment.

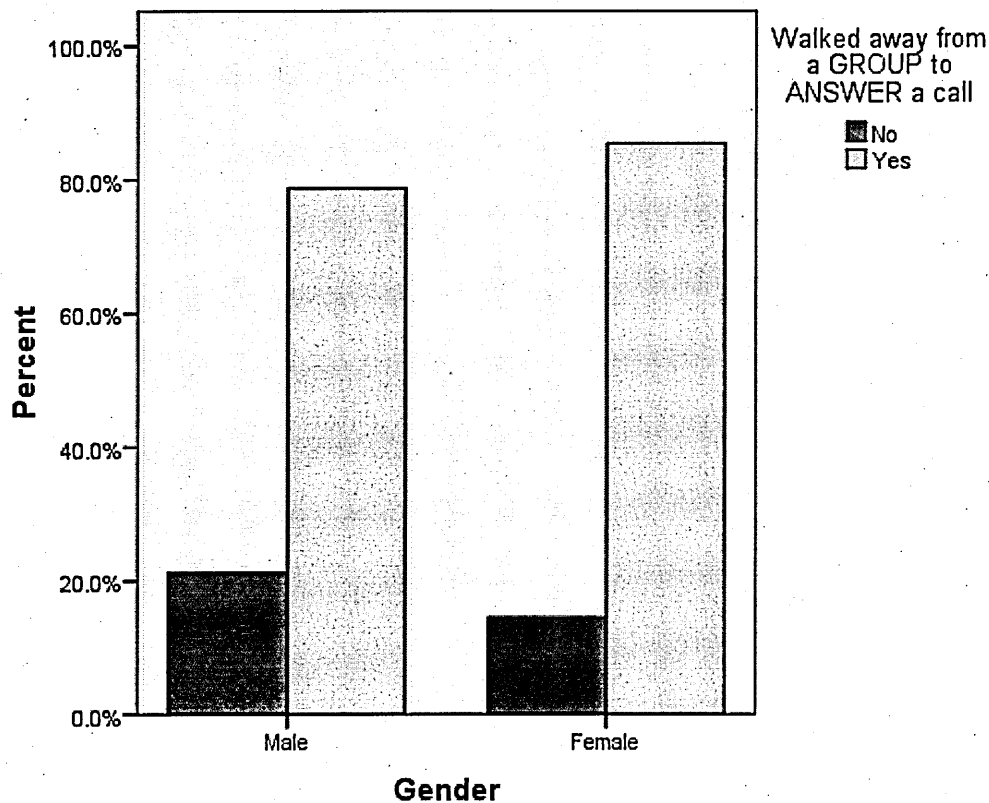


Figure 6.12 A graph to show gender and walking away from a group to answer a call

6.4.5.2 Walked away from a group to make a call

The results indicate that generally more people would walk away from a group to make a call. The Fisher test for user type ($P < 0.377$), gender ($P < 0.508$) and age ($P < 0.292$) were not significant. The observations revealed that people can be seen leaving a group when talking on the phone. Walking away from a group is a management strategy to avoid being overheard by the co-local contacts and Plant (2001) terms this as 'flight'. Not only does this strategy allow the phone user privacy, but it also acts as a form of etiquette since the phone user is allowing the group to continue their interactions with little disruption, and this also prevents them from having to perform civil inattention. Using this management strategy shows that the phone user is prioritising the remote communication over the co-local group interaction.

6.4.5.3 Walked away from one person to answer a call

This is a management strategy for phone user's who are managing their co-local dyad interaction and remote communication simultaneously. Flight allows the caller to leave the co-local interaction and ensures that the conversation cannot be overheard. By walking away from the co-local the caller gains a degree of privacy in their conversation. The results reveal that user type ($P < .413$) and gender ($P < .392$) are not significant Chi Square tests.

However the result for age ($P < .009$) was significant. More people in the older categories have walked away from one person to answer a call. They may be less practised at public mobile phone use and may find it difficult to manage the remote and co-local contacts simultaneously. By walking away the phone user is leaving the co-local to perform the act of being a single. Even though neither party has to perform civil inattention towards each other the dyad has been threatened as one member has walked away, leaving the co-local other as a single. The management of multiple roles may be another issue for people in the older age groups since they may have more social roles to manage (Palen et al 2001, Arnold 2003, Geser 2004). The management of face towards the remote contact may be difficult to perform in front of a co-local since it may contradict the face that the co-local is familiar with. The younger 'net generation' may find it easier to manage mobile phone interruptions during dyad interactions as they are integrated into their communication patterns and norms. Younger users also may not have as many roles to manage and faces to assume.

Age	No	Yes
16-18	81.1%	18.9%
19-21	72.3%	27.7%
22-24	70.4%	29.6%
25-34	67.0%	33.0%
35-44	67.3%	32.7%
45-54	52.2%	47.8%
55-64	25.0%	75.0%

Table 6. 35 Age and walk away from one person to answer a call

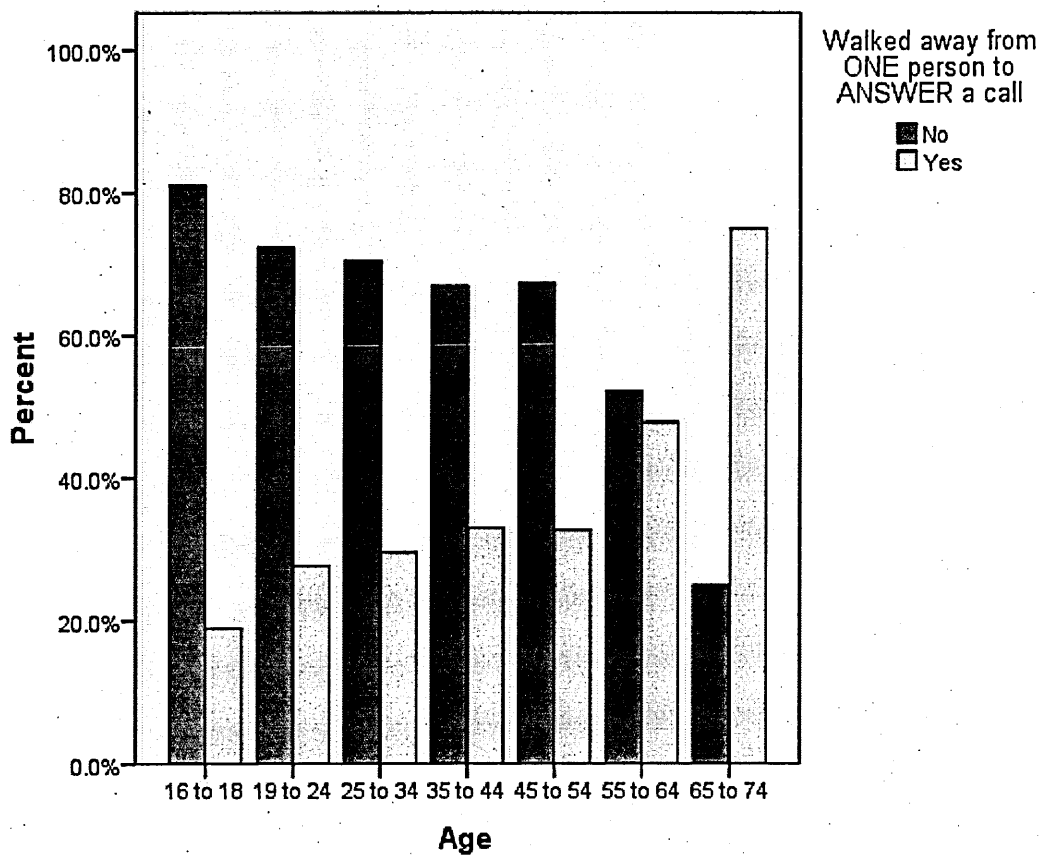


Figure 6.13 A graph to show age and walking away from one person to answer a call

The results in section 6.5.3 show that younger people are less concerned about other people hearing their conversations so it is not surprising that more of the people in the younger categories have not walked away to answer a call when with one other person.

6.4.5.4 Walked away from one person to *make* a call

User type ($P < .862$) and gender ($P < .486$) were not significant Chi Square tests. The Chi Square result for age was significant ($P < .004$). More people in the older age categories have walked away to *make* a call. Although, the results generally for walking away to make a call are lower than walking away to receive a call. Section 6.3.2 is applicable here since more people in the older age categories would rarely or never make a call in front of a group of people. This result shows that the norms of phone use do vary when it comes to age: people in the older age categories may have a different perspective as to what is socially acceptable. Politeness, privacy, the management of multiple roles and the management of the remote and co-local may also be factors.

Age	No	Yes
16-18	84.5%	15.5%
19-21	76.8%	23.2%
22-24	72.8%	27.2%
25-34	74.1%	25.9%
35-44	67.3%	32.7%
45-54	56.5%	43.5%
55-64	25.0%	75.0%

Table 6. 36 Age and walking away from a group to make a call

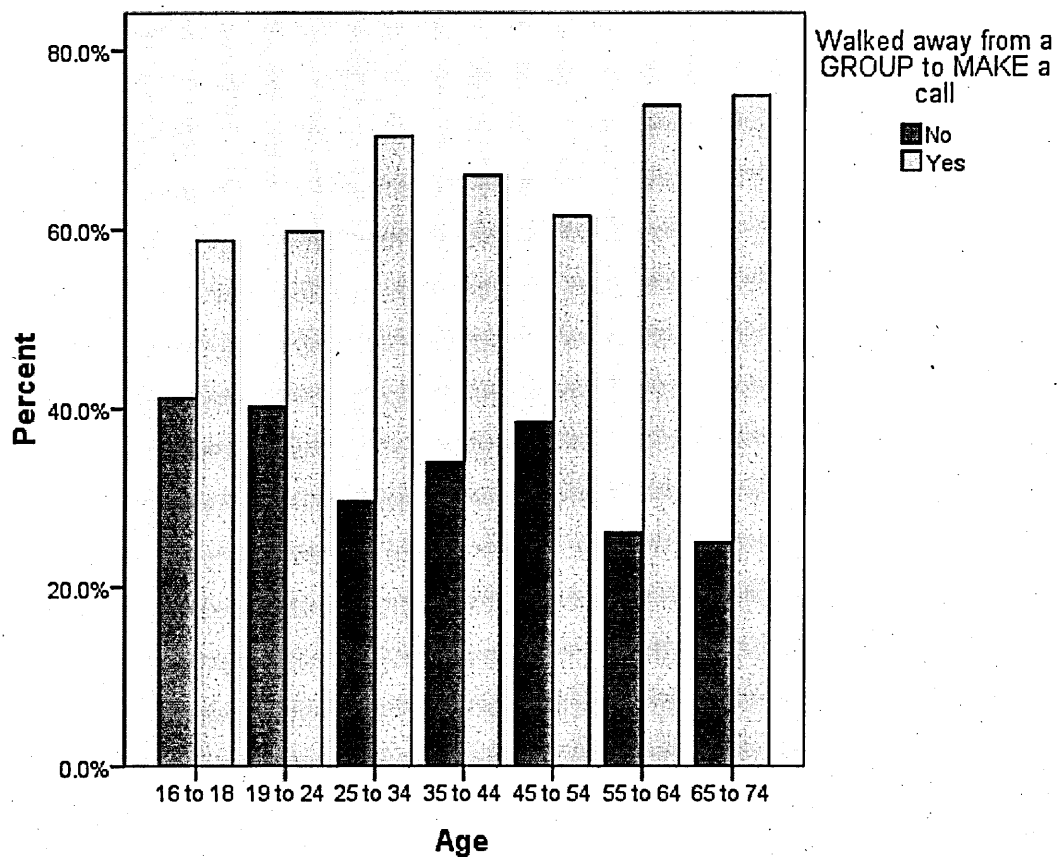


Figure 6.14 Age and walking away from a group to make a call

6.4.6 Summary

This section has shown that there are several management strategies for public mobile phone use. More high users and younger people have used three-way talk when using their phone to call when in a group and more people in the younger age categories have used three-way talk when with one other person.

There are gender differences for rejecting incoming depending upon circumstance: more women would reject a call in a quiet environment and during a serious conversation. More women than men would also reject an incoming call in the following places: a restaurant; a cinema; and a theatre. More men than women would reject a call in a noisy environment.

When considering flight as a management strategy, the results revealed that more women than men have walked away from a group to answer a call and more people in the older age groups have walked away from a group to make a call. Whilst more people in the older categories have walked away from one person to answer a call and have also walked away from one person to make a call. This implies that there are some existing norms relating to etiquette that have been adapted to public mobile phone use by people in the older age groups.

6.5 Social norms and acceptance of public mobile phone use

Ling (1997), Katz (2004), Love and Perry (2004) have highlighted that there are issues of acceptances in relation to mobile phone use in public. The following section addresses issues relating to the social norms and acceptances of mobile phone use in public.

6.5.1 Have you ever listened to or overheard a mobile phone conversation in public?

The Fisher test for age ($P < 0.738$) and for user type ($P < 0.115$) are not significant. This is because a person's own mobile phone use does not directly impact on what they can or cannot hear in public through other people's phone use. The results indicate that people in all of the age categories have overheard mobile phone conversations in public. This suggests that generally people are subjected to other people's mobile phone calls whilst in the public domain and that private conversations are present in public. This result supports Love and Perry's (2004) study which found that by-standers perform civil inattention but can recall the entire content of a conversation.

The Fisher Test for gender is significant ($P < .008$).

	Yes	No
Men	82.7%	12.8%
Women	92.9%	7.1%

Table 6.37 gender and overhearing conversations

More women than men admit to listening or over hearing a public mobile phone conversation.

Section 5.5.1.6 shows that sometimes 'loud talk' occurs in public places and during these incidences people may not be able to help but overhear the conversation.

6.5.2 Generally do you feel embarrassed by hearing other people's mobile phone conversations?

The Chi Square test for user type was not significant ($P < .898$). The level of mobile phone use does not impact on how people feel about other people's phone use in public.

The Chi Square test for age was significant ($P < .000$).

Age	Always	Sometimes	Don't Know	Rarely	Never
16-18	2.1%	35.5%	4.3%	35.5%	22.7%
19-21	3.1%	25.3%	5.8%	31.4%	34.5%
22-24	5.3%	36.0%	10.5%	27.2%	21.1%
25-34	8.3%	33.3%	8.3%	29.6%	20.4%
35-44	10.0%	50.0%	8.0%	20.0%	12.0%
45-54	17.4%	52.2%	4.3%	21.7%	4.3%
55-64	25.0%	25.0%	0.0%	0.0%	50.0%

Table 6.38 Age and embarrassment at other people's mobile phone conversations

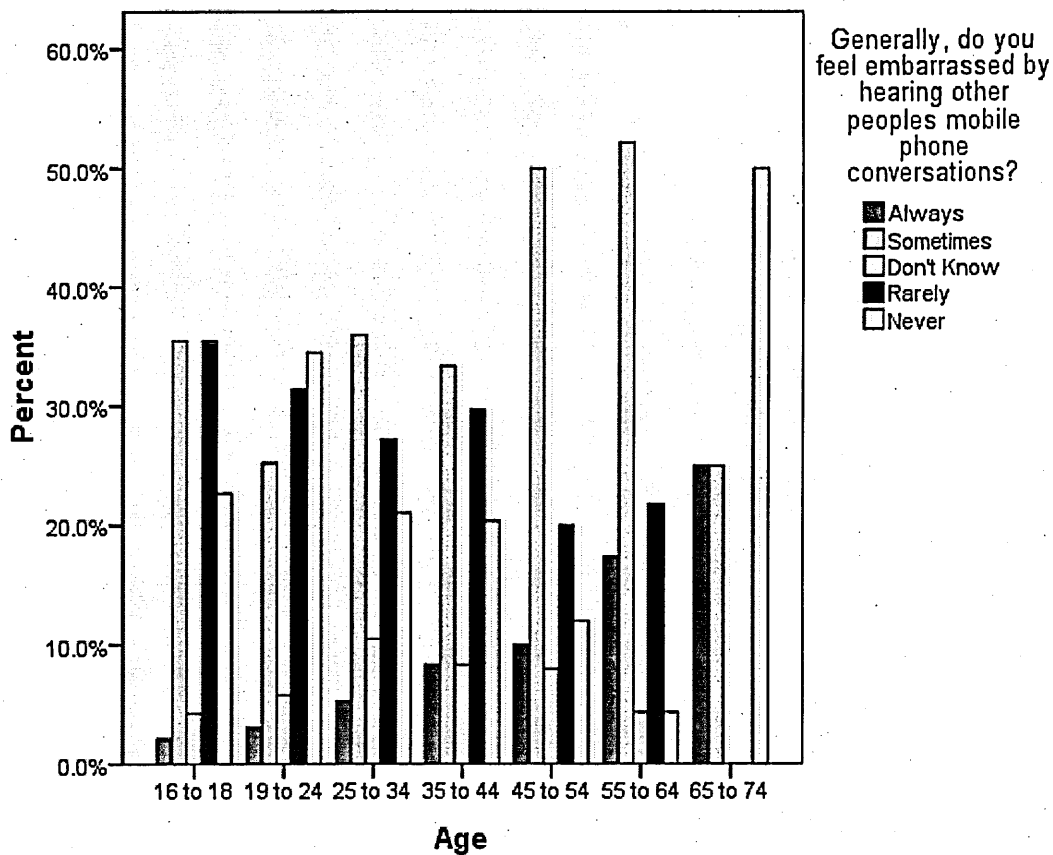


Figure 6.15 A graph to show age and embarrassment by other's mobile phone conversations

50.0% of people in the 55 - 64 age category 'sometimes' or 'always' feel embarrassed by hearing other people's mobile phone conversations. This compares with 37.6% for people in the 16 - 18 year old category. This result supports Love and Perry's (2004) study which concluded that people feel embarrassed by being subjected to other people's mobile phone conversations. This is because people don't want to be perceived as eavesdropping upon another person's conversation. In cases where they are subjected to another person's remote communication in public, by-standers will perform civil inattention to ensure that they look as though they are not over hearing someone else's conversation (Love and Perry 2004). Listening to a private conversation has been traditionally considered as being intrusive, rude and 'nosey' and performing civil inattention was a social norm adopted to deal with this type of interaction management. This existing social norm has been adapted to fit common interactions concerning mobile phone use in public: people perform civil inattention when they are within earshot of a mobile phone user.

The results indicate that younger people feel less embarrassed by other's mobile phone conversations implying that overhearing mobile phone conversations is becoming more socially acceptable or perhaps even that people are growing accustomed to only hearing one side of a conversation (Katz 2004).

6.5.3 Generally, do you mind if people can overhear your mobile phone conversation when in public?

The Chi Square test for user type was not significant ($P < .376$). However the result for gender was significant ($P < .034$): more men than women always or sometimes mind if people can overhear their mobile conversation. On the other hand more men than women 'never' mind if they can be overheard.

	Always	Sometimes	Don't Know	Rarely	Never
Men	18.9%	49.2%	3.7%	19.2%	9.1%
Women	13.9%	53.9%	3.1%	24.2%	4.9%

Table 6.39 Gender and overhearing mobile phone conversations

Section 5.8.2 shows that people send text message as an alternative method of communication because they are less intrusive towards the co-local environment and interactions (Retti 2006).

The result for age was also significant ($P < .000$).

	Always	Sometimes	Don't Know	Rarely	Never
16-18	8.5%	54.2%	4.9%	25.4%	7.0%
19-21	13.7%	55.1%	2.7%	22.3%	6.2%
22-24	13.3%	51.3%	1.8%	25.7%	8.0%
25-34	22.2%	56.1%	3.7%	20.4%	7.4%
35-44	30.0%	50.0%	6.0%	12.0%	2.0%
45-54	34.8%	34.8%	4.3%	21.7%	4.3%
55-64	50.0%	25.0%	0.0%	0.0%	25.0%

Table 6.40 Age and overhearing mobile phone conversations

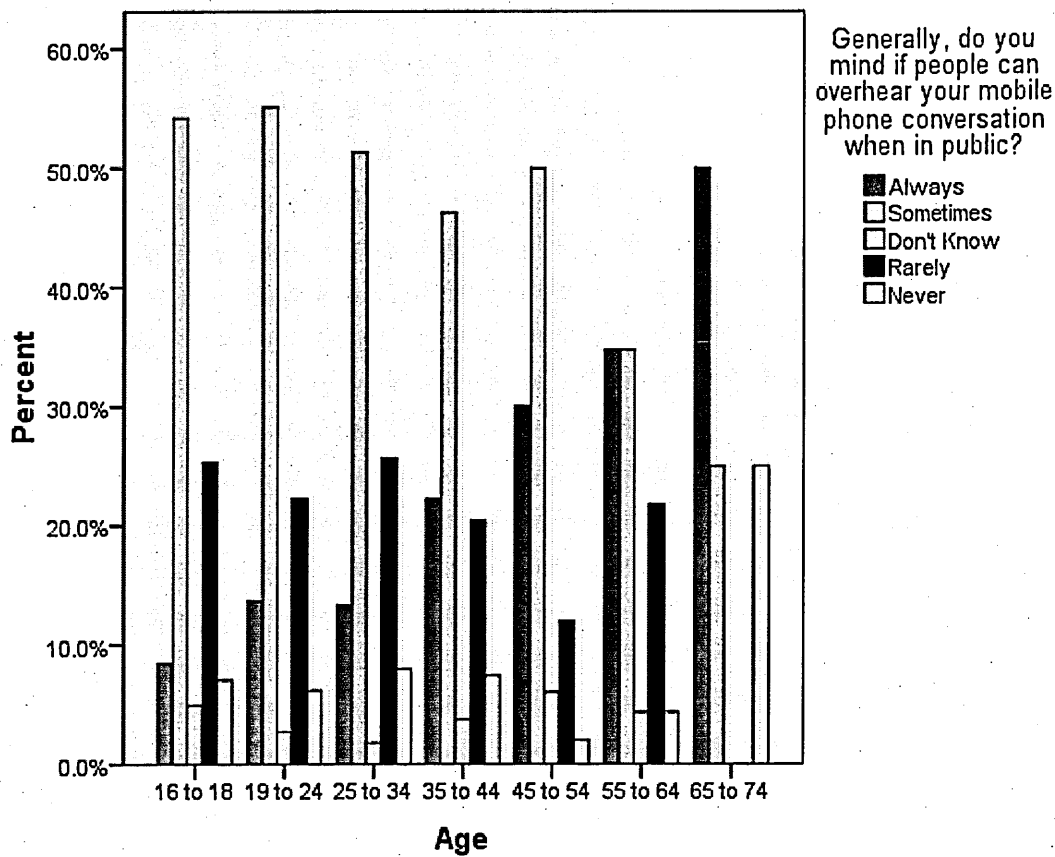


Figure 6.16 A graph to show age and overhearing mobile phone conversations

The results for age indicate that more people in the younger age categories 'rarely' or 'never' mind if someone can overhear their mobile phone conversation. Younger people may be generally less concerned about being overheard because when they are in public a certain level of animosity is maintained. If a phone user is on the move in public then the context of the conversation is not revealed. As Persson (2001) points out, phone users have got nothing to lose by revealing secrets in public as they are surrounded by strangers who they are unlikely to see again.

The results also show that large percentage of people across all of the age categories 'sometimes' mind if others can overhear their conversation. This implies that people still require a certain level of privacy within the public sphere and using SMS provides this.

6.5.4 In your opinion is it generally acceptable to use mobile phones in public?

A large number of both high and standard users believe it is generally acceptable to use mobile phones in public but more high users believe public phone use is acceptable. The Fisher test result for user type was significant ($P < .041$). This data implies that public mobile phone use has become socially acceptable.

	Yes	No
Standard user	90.3%	9.7%
High user	94.6%	5.4%

Table 6.41 User type and phone use acceptable in public

The acceptance of the mobile phone may be due to its ubiquity (Persson 2001). As people are exposed to mobile phone use it becomes socially acceptable (Katz 2004). This shows that in a short period of communication history; mobile phone use has been adopted and use of the device in public has quickly become socially acceptable.

The results for age show that the Chi Square test was significant ($P < .026$).

Age	Yes	No
16-18	97.7%	2.3%
19-21	94.8%	5.2%
22-24	91.6%	8.4%
25-34	87.8%	12.2%
35-44	79.2%	20.8%
45-54	72.7%	27.3%
55-64	66.7%	33.3%

Table 6.42 Age and phone use acceptable in public

More people in the younger age categories agree that public mobile phone use is generally acceptable and this may be because the use of mobile phone is prolific in younger age groups. The advantages of what the technology can offer people in terms of connectivity availability and

communication, lead them to believe it's more acceptable since they themselves benefit from being connected and in contact with others.

6.5.5 Do you ever get annoyed when other people use their mobile phones in public?

60.1% of standard users sometimes or always get annoyed by other people's mobile phone use in public, whilst for high users the percentage is 45.5%. What's more 54.4% of high users and 39.9% of standard users rarely or never get annoyed. The Chi Square test for user type was significant ($P < .001$). This result suggests that with frequency of use, comes acceptance of other people's use.

	Always	Sometimes	Rarely	Never
Standard user	3.7%	56.4%	26.0%	13.9%
High user	1.1%	44.4%	35.6%	18.8%

Table 6.43 User type and annoyed by other people's mobile phone use

Katz (2004) suggests that the irritation that results in public mobile phone use changes so quickly that the disturbance may not necessarily stay as long as the technology develops socially. High users may accept other people's phone use because they themselves use their phone frequently. It is inherently pleasurable to contact others using a mobile phone and humans are hard wired to seek social contact. Therefore people's motivations for using the mobile phone in public may be greater than the annoyance it possibly creates for others (Katz 2004).

The Chi Square test for age showed a significant result ($P < .000$). The results for age show that more people in the younger age categories 'rarely' or 'never' feel annoyed at other people's phone use.

Age	Always	Sometimes	Rarely	Never
16-18	0%	39.4%	33.3%	27.3%
19-21	2.2%	50.2%	32.5%	15.1%
22-24	1.9%	54.2%	32.7%	11.2%

25-34	6.1%	60.2%	19.4%	14.3%
35-44	8.3%	66.7%	20.8%	4.2%
45-54	4.5%	72.7%	13.6%	9.1%
55-64	0.0%	100.0%	0.0%	0.0%

Table 6.44 Age and annoyance by other people's mobile phone use

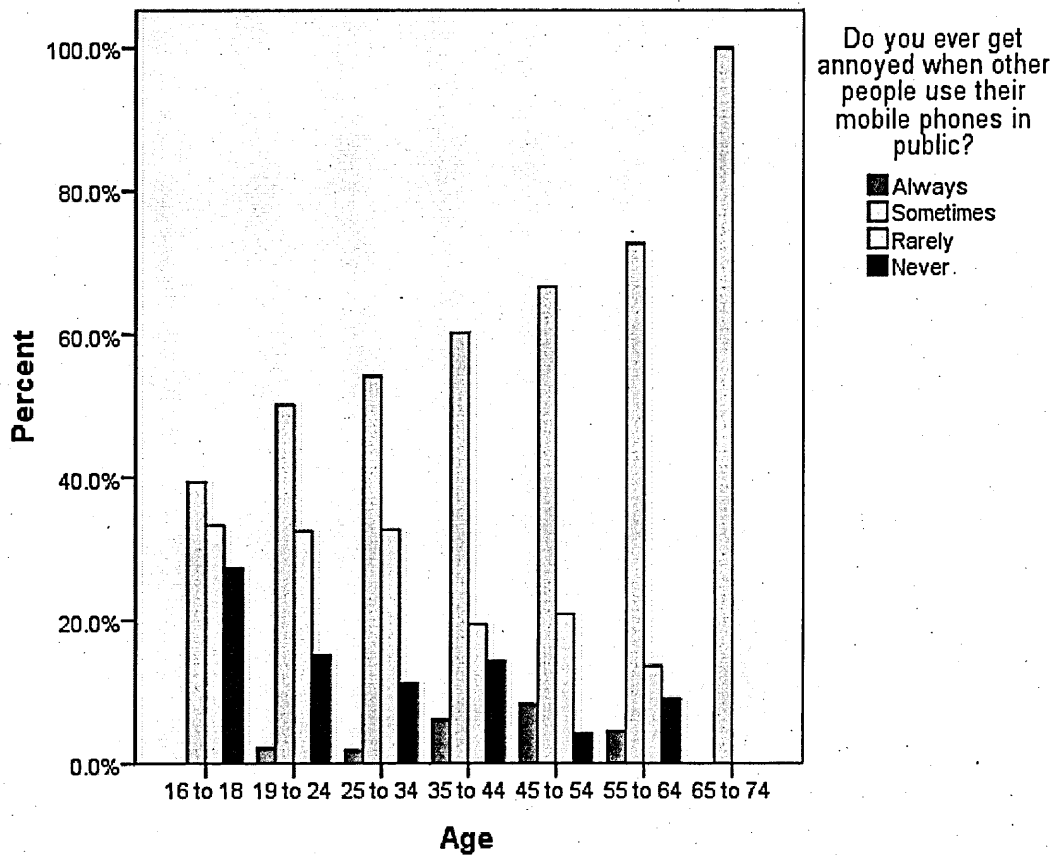


Figure 6.17 A graph to show age and annoyance of other people's mobile phone use

The table for age and annoyance shows that higher percentages of people over twenty-five sometimes feel annoyed at other people's phone use. This may be due to the fact that older age groups have had to adopt the mobile phone technology and learn to socially accept the device, whereas the younger age groups may not remember life without them. The 'net generation' (Oblinger and Lombardi 2008) are often more familiar with the technology, with multitasking, and managing their remote and co-local communication in a variety of locations. Therefore the

interactions presented by other people's mobile phone use may be an inherent part of being in public and so are not perceived as annoying.

6.5.6 Please indicate which of the following actions you think you would find annoying about other people's mobile phone use in public?

This question enabled multiple responses and each response will be analysed separately.

6.5.6.1 When a person texts whilst talking to others

The Fisher test result for user type was significant ($P < 0.000$). This indicates that more of the high users feel less annoyed when a person texts whilst talking to others. This may be because texting can be a side involvement; it's more discrete and is not as intrusive during other communication (Retti 2006). The co-local communication remains the phone user's main involvement.

	Not Annoyed	Annoyed
Standard User	70.3%	29.7%
High User	85.2%	14.8%

Table 6.45 User type and texting whilst talking to others

The Chi Square result for age was significant ($P < 0.000$).

Age	Not Annoyed	Annoyed
16-18	86.5%	13.5%
19-21	79.1%	20.1%
22-24	83.2%	16.8%
25-34	65.2%	34.8%
35-44	50.0%	50.0%
45-54	47.8%	52.2%
55-64	25.0%	75.0%

Table 6.46 Age and texting whilst talking to others

Younger age groups are not annoyed when people text whilst talking to others. This could be due to several reasons: the data in section 6.2 showed that younger people send and receive more texts than people in the older age categories; as texting becomes more prolific people's

tolerance towards the use of the technology increases; people gain pleasure from sending and receiving texts so they understand and empathise towards other people's phone use.

6.5.6.2 When a person texts during a serious conversation

The Fisher tests for user type ($P < .131$) and age ($P < .388$) were not significant, however the result for gender was significant ($P < .000$). More women feel annoyed when a person texts during a serious conversation. Perhaps women feel that the side involvement (texting) undermines the seriousness of the conversation. The act of texting implies that the phone user's full focus is not focussed on the conversation when they are also communicating with a remote contact. During serious conversations, texting may also be considered as rude, or impolite since the phone user may appear to be disinterested (Kleinman 2004).

	Not Annoyed	Annoyed
Men	36.9%	63.1%
Women	25.1%	74.9%

Table 6.47 Gender and texting during a serious conversation

6.5.6.3 When a person speaks to both you and a person on the end of a phone

Although the results suggest that more people are not annoyed by three-way talk, more standard users than high users are annoyed by three-way talk. The Fisher test result was significant ($P < .012$).

	Not Annoyed	Annoyed
Standard User	71.0%	29.0%
High User	79.0%	21.0%

Table 6.48 User type and sharing a phone conversation

The Chi Square test for age ($P > .041$) was significant. People may not be as annoyed by this because they practise these kinds of interactions when managing remote and co-local interactions simultaneously.

	Not annoyed	Annoyed
16-18	79.7%	20.3%

19-21	74.6%	25.4%
22-24	80.0%	20.0%
25-34	67.0%	33.0%
35-44	65.4%	34.6%
45-54	60.9%	39.1%
55-64	50.0%	50.0%

Table 6.49 Age and annoyed at splitting a conversation

Three-way talk (Humphreys 2005) seems to be common place in younger age groups (see section 5.3 and 6.4) and so younger people do not find this characteristic of phone use annoying: three-way talk has become a socially acceptable management strategy and norm of phone use in younger people.

6.5.6.4 When a person uses their phone to text when in your company

The Fisher test for user-type ($P < .000$) was significant: 81.3% of high users are not annoyed and may have more empathy towards the use of the device by others.

	Not Annoyed	Annoyed
Standard User	81.3%	18.7%
High User	91.1%	8.9%

Table 6.50 User type and texting when in company

The Chi Square test ($P < .000$) was significant: the results for age indicate that younger people are less annoyed by someone texting whilst in their company. This again may be due to the higher number of texts they send and receive on an average day.

Age	Not Annoyed	Annoyed
16-18	95.9%	4.1%
19-21	88.1%	11.9%
22-24	84.8%	15.2%
25-34	75.0%	25.0%
35-44	71.2%	28.8%

45-54	65.2%	34.8%
55-64	50.0%	50.0%

Table 6.51 Age and texting when in company

Sending text messages is a less intrusive form of managing remote and co-local communication at once. The co-local interaction is still often the main involvement whilst sending the text message is the side involvement (Goffman 1963). The co-local interaction often still takes precedence which means sending a text is less likely to interrupt the flow of the communication.

6.5.6.5 When a person uses their phone to call when in your company

The results in table 6.52 show that more standard users get annoyed (the Fisher test for user-type ($P < 0.007$) was significant).

	Not Annoyed	Annoyed
Standard User	81.3%	18.7%
High User	88.5%	11.5%

Table 6.52 User type and annoyed by calling when in company

The Chi Square test for age ($P < 0.004$) was also significant. The results for age show that generally people are not annoyed by others who are using their phones to call when in their company. People are becoming familiar with the management strategies needed to perform mobile phone use in public, as the acceptance of the technology during everyday interactions increases.

Age	Not Annoyed	Annoyed
16-18	90.5%	9.5%
19-21	86.5%	13.5%
22-24	84.8%	15.2%
25-34	75.0%	25.0%
35-44	78.8%	21.2%
45-54	73.9%	26.1%
55-64	50.0%	50.0%

Table 6.53 Age and annoyed by calling when in company

6.5.6.6 When a person talks too loudly on their phone when in your company

The results indicate that more people find 'loud talk' annoying than the other attributes of public mobile phone use. The Fisher Test result for user type is significant ($P < 0.000$) and more standard users than high users find people talking too loudly on the phone annoying.

	Not Annoyed	Annoyed
Standard User	28.0%	72.0%
High User	40.7%	59.3%

Table 6.54 User type and annoyed at talking too loudly on the phone

This result relates to public etiquette. Generally it is not acceptable to talk loudly in public spaces because the noise encroaches on other people's personal space and some people find this rude. Existing social norms therefore seem to be applicable to mobile phone use. Ling (1997) highlights that 'loud talk' can violate territories, and makes it difficult to maintain face. While non-mobile users find others talking loud on the phone annoying because they are engaged in acts of unreciprocated communication (Katz 2004).

The Chi Square result for age is significant ($P < 0.041$). People in the older age groups find 'loud talk' annoying.

Age	Not Annoyed	Annoyed
16-18	39.2%	60.8%
19-21	34.1%	65.9%
22-24	29.6%	70.4%
25-34	34.8%	65.2%
35-44	21.2%	78.8%
45-54	8.7%	91.3%
55-64	25.0%	75.0%

Table 6.55 Age and annoyance at Loud talk

6.5.7 Do you think that people should use any etiquette rules when using a mobile phone in public?

More of the participants in the older age groups believe there should be some etiquette rules when using a mobile phone in public: the Chi Square test for age, ($P < .000$) was significant. People in the older age groups may have a different set of patterns of mobile phone use in public and this has an impact on their perceptions about its use.

Age	Yes	No
16-18	67.4%	32.6%
19-21	73.8%	26.2%
22-24	81.3%	18.7%
25-34	87.8%	12.2%
35-44	91.5%	8.5%
45-54	95.5%	4.5%
55-64	100.0%	0.0%

Table 6.56 Age and etiquette when using a mobile phone

The Fisher test result for user type ($P < 0.009$) was significant. Generally more people agree that there should be some etiquette when using a mobile phone in public. This may be from existing public social norms. Also, a lack of tolerance towards others use of the phone results in people believing others should be more aware of how their own use effects others.

	Yes	No
Standard User	80.9%	19.1%
High User	72.4%	27.6%

Table 6.57 User type and etiquette when using a mobile phone

6.5.8 Generally would you consider it rude to use your phone whilst in the company of others?

High numbers from both user types generally do not consider using a phone in the company of others to be rude. The Chi Square test for user type indicated a significant result ($P < 0.000$): however more standard users (39.5%) than high users (23.0%) consider it to be rude. Perhaps

they are less sympathetic towards phone use since they themselves do not use the phone as frequently in public.

	Yes	No
Standard user	39.5%	60.5%
High user	23.0%	77.0%

Table 6.58 User type and phone use rude whilst in company

The Chi Square test for age was significant ($P < 0.000$).

Age	Yes	No
16-18	28.8%	71.2%
19-21	32.7%	67.3%
22-24	46.9%	53.1%
25-34	63.8%	36.2%
35-44	59.1%	40.9%
45-54	66.7%	33.3%
55-64	33.5%	66.5%

Table 6.59 Age and phone use rude whilst in company

More people in the older age groups consider phone use in the company of others rude. This again indicates that people have different levels of social acceptance towards the phone use in public according to their age. The observation data in Chapter Five shows that people perform 'dual-front interaction' (Humphreys 2005) as a method for compensating for using their phone to call when with others (see section 5.3.1.2).

6.5.9 Generally would you consider it rude if someone else was using their phone in the presence of your company?

More people would not consider it rude if someone else was using their phone in the presence of their company. The Fisher test results for user type was significant ($P < .000$). High users seem to have more acceptance of the device's use as fewer people in this category consider it to be rude.

	Yes	No
Standard user	39.5%	60.5%
High user	23.0%	77.0%

Table 6.60 User type and phone use rude in company

The Chi Square test for age was a significant result ($P < .000$). More people in the older age groups believe that generally it is rude for other people to use their phone when in their company. This also shows that the norms of mobile phone use differ with age. This could be due to existing norms of politeness and etiquette: people in the older categories have a different set of social norms to people in younger age groups.

Age	Yes	No
16-18	19.7%	80.3%
19-21	28.0%	72.0%
22-24	30.8%	69.2%
25-34	41.8%	58.2%
35-44	57.4%	42.6%
45-54	59.1%	40.9%
55-64	66.7%	33.3%

Table 6.61 Age and phone use rude in company

6.5.10 Have you ever checked your phone for messages or missed calls even though the ring tone is turned on and it hasn't sounded?

A high percentage of both standard and high users have checked their phone for messages even though they know it hasn't sounded. This indicates that phone users have a sense of being connected to a remote network of contacts, a sense of the device's presence, and also that they want to be a recipient of text messages.

The Fisher test for user type was significant ($P < .046$) and more high users admit to doing this action.

	Yes	No
Standard user	80.7%	19.3%
High user	86.6%	13.4%

Table 6.62 User type and checked phone even though it's not sounded

The Chi Square test was significant for age ($P < .015$).

	Yes	No
16-18	90.2%	9.8%
19-21	84.1%	15.9%
22-24	84.1%	15.9%
25-34	75.5%	24.5%
35-44	85.1%	14.9%
45-54	63.6%	36.4%
55-64	66.7%	33.7%

Table 6.63 Age and checked phone even though it's not sounded

More people in the younger categories admit to checking their phone even though it has not sounded. Perhaps people are waiting to receive a text message or are feeling excited or happy, or intrigued at the prospect of a text message and this causes them to check their phone even though it has not sounded.

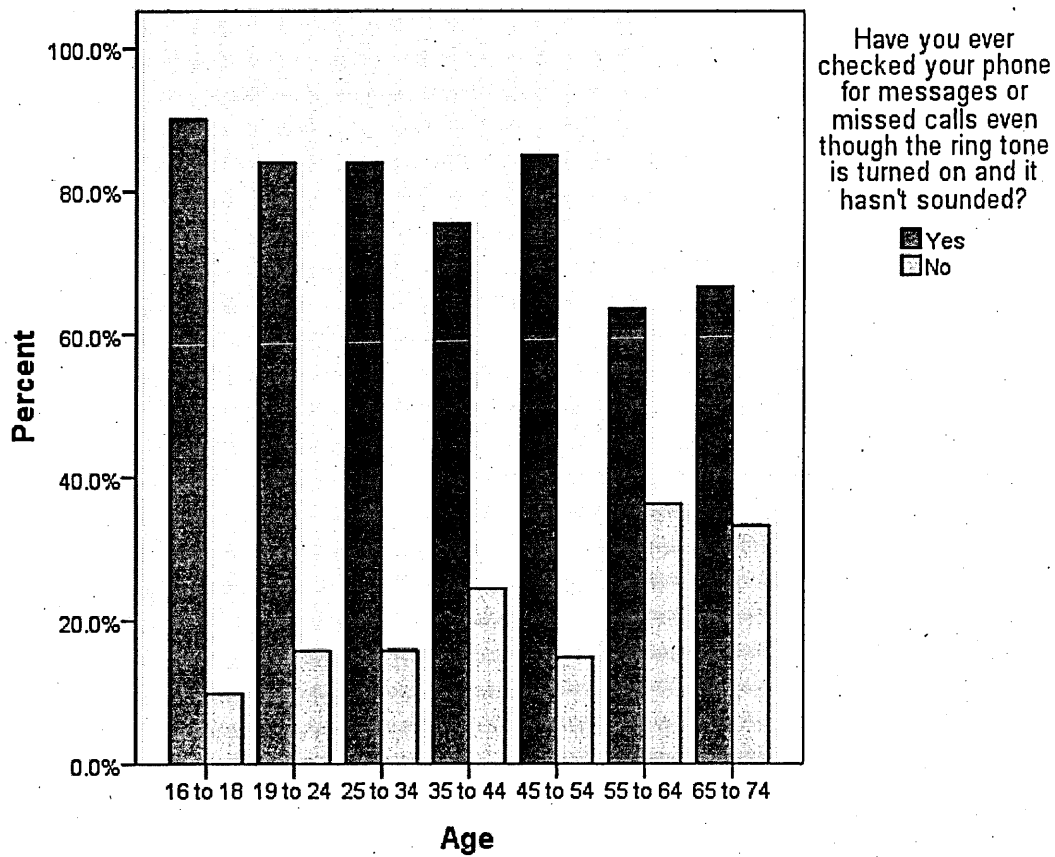


Figure 6.18 Age and checked phone even though it's not sounded

The Chi Square test for gender ($P < .012$) was also significant.

	Yes	No
Men	78.4%	21.6%
Women	85.8%	14.2%

Table 6.64 Gender and checked phone even though it's not sounded

The results show that more women admit that they have checked their phone even though it has not sounded. This may be because they keep their phones in their handbags and previously they have missed a call or text message. It also shows that they are aware of the connectivity that the phone provides – and the potential for communication with a remote other is possible. Checking a phone even though it hasn't sounded helps the phone owner to perform civil inattention (Goffman 1963, Fox 2001). The observations also found that women can be seen checking their

bags and looking at their phones screen - people may be more aware of being in constant connectivity than they realise (see section 5.5.13).

6.5.11 Do you turn off your phone when you go to sleep?

Hoflich (2006) describes 'reachability syndrome' and this result shows that many of the respondents do not turn their phones off - even at night. The Chi Square test for user type ($P < 0.035$) was a significant result. 49.5% of standard users and 59.8% of high users never turn off their phone when they go to sleep.

	Always	Sometimes	Rarely	Never
Standard User	16.7%	14.2%	19.5%	49.5%
High User	10.3%	12.3%	17.6%	58.9%

Table 6.65 User type and turn off phone

The Chi Square test for age was ($P < 0.000$) significant. More people in the young age categories 'rarely' or 'never' switch their phones off when they go to bed. This result enforces the fact that constant connectivity is important for young phone users.

Age	Always	Sometimes	Rarely	Never
16-18	7.6%	11.4%	14.4%	66.7%
19-21	10.0%	14.8%	23.6%	51.7%
22-24	11.2%	12.1%	23.4%	53.3%
25-34	22.4%	16.3%	16.3%	44.9%
35-44	34.0%	12.8%	8.5%	44.7%
45-54	36.4%	0.0%	9.1%	54.5%
55-64	66.7%	33.3%	0.0%	0.0%

Table 6.66 Age and turned phone off

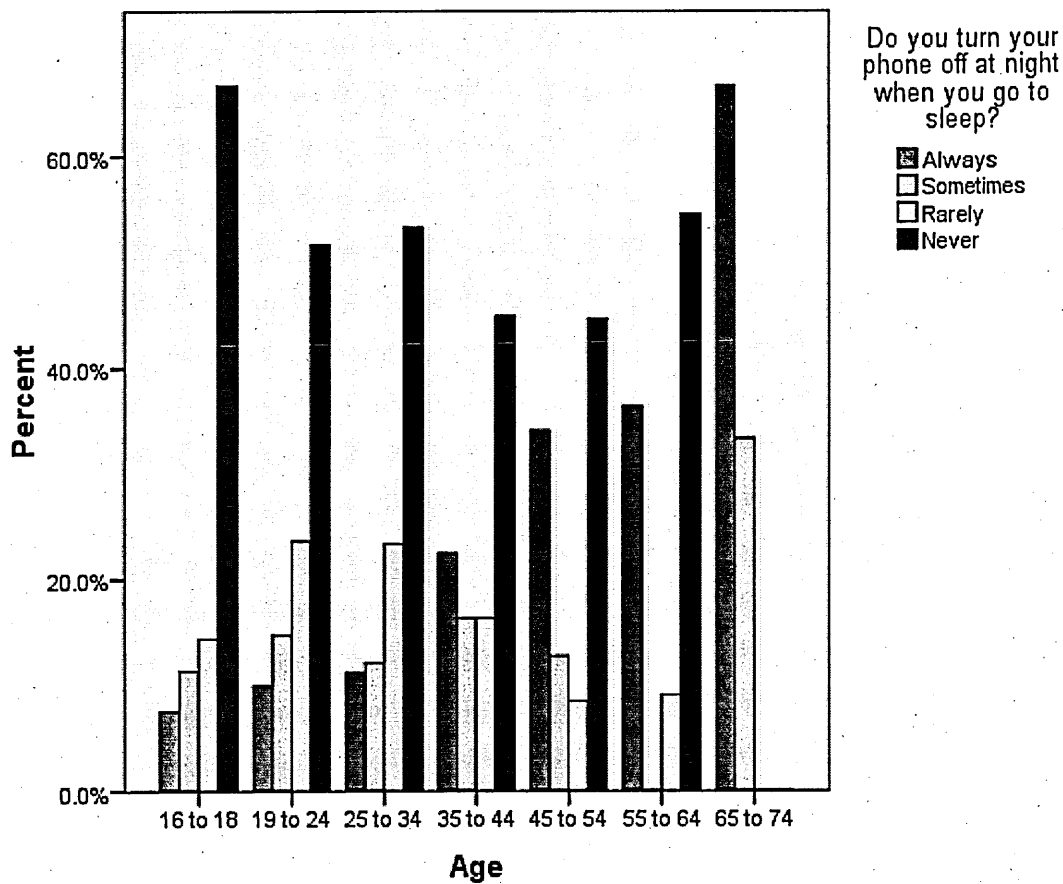


Figure 6.19 Age and turned phone off

The connectivity people feel continues throughout the night as people don't want to miss any communication and this in turn creates a feeling of security (Hoflich 2006). The interview data in Chapter Seven (section 7.2) reveals that the phone is used as an alarm clock which is why it is switched on all night. This result also shows that younger people have a greater dependency on being constantly connected.

6.5.12 Do you believe that everyone should own a mobile phone?

More high users believe everyone should own a mobile phone since they use it more often and are more dependent upon it: the Fisher test for user type was significant ($P < 0.000$).

	Yes	No
Standard user	40.9%	59.1%
High user	55.6%	44.4%

Table 6.67 User type everyone should own a mobile phone

The Chi Square test for age was significant ($P < 0.000$).

Age	Yes	No
16-18	59.8%	40.2%
19-21	50.6%	49.4%
22-24	38.3%	61.7%
25-34	34.7%	65.3%
35-44	38.3%	61.7%
45-54	27.3%	72.7%
55-64	0.0%	100.0%

Table 6.68 Age and everyone should own a mobile phone

Younger people's perception of technology differs to that of the people in the older categories: they may not even remember life before the device became prolific! Young people also hold value in the device and are aware of what it can offer people in terms of communication. Since it is a commodity for most people in the younger categories they may feel it is a necessity for other people.

6.5.13 Summary

This section has shown that there are distinct differences relating to age and acceptance of public mobile phone use. More people in the older age groups sometimes or always feel embarrassed by overhearing other people's conversation and this supports Love and Perry's (2004) study. More people in the younger age groups 'rarely' or 'never' mind if people can overhear their mobile phone conversation when in public and this supports Lasen's (2002) study.

Generally large percentages of people agree that it is acceptable to use mobile phones in public - however more people in the young age categories agree. The advantages of what the technology can offer the user in terms of connectivity; communication and availability may lead them to believe that use of the technology is acceptable in public.

Acceptance of the technology may be related to annoyance of the technology. Frequency of use may also affect acceptance and annoyance since more standard users feel more annoyed than high users at various attributes of public phone use. Although there are less people who are by attributes relating to interaction management strategies.

More people in the older age categories believe that people should use etiquette rules when using their phones in public. Generally people do not find phone use by others rude showing that public mobile phone use is an accepted social norm.

More high users and young people have checked their phones for texts or missed calls even though they know it has not sounded showing that people are aware of the device presence during everyday interactions.

More people in the young age groups and high users do not turn their phones off when they go to sleep showing the importance of the device in terms of constant connectivity.

More people in the younger age groups believe that everyone should own a mobile phone - implying that they are able to project the benefits of owning a mobile phone onto others.

6.6 Conclusion

This chapter has presented an analysis of the data obtained from the survey for Study One. Study One aimed to gain an insight into people's opinion's of public mobile phone use and this chapter has shown that there are several key issues which can be drawn from the data:

- There are distinct differences in relation to user type and patterns of public mobile phone use. User type also has an impact upon people's opinions of public phone use: high use may be linked to familiarity with the device and acceptance of the device by others in public.
- Age has an impact upon patterns of public phone use and also opinions of public phone use. Participants in the younger age categories are more likely to use their phones when with others in public.

- Public phone use is not affected by gender: there are few gender differences with the results. Those results that do differ for gender, relate to patterns of use and mobile phone use in public places.

Section 6.1 addressed the data concerning general phone use. According to the results for general phone use in public, women admit to sending and receiving more text messages than men. High percentages of younger people send and receive more text messages than participants in the older age categories. The results also show that younger people make more phone calls than people in the older age categories.

For phone use specifically in public, younger people answer and make more calls. There is also a small difference between making and receiving calls in public: more people answer the phone than make calls. It is perhaps more socially acceptable to answer a ringing phone – since people always answer a ringing phone – even if it interrupts important communication (Geser 2004). The 'remote contact' often does not know the whereabouts of the phone user (Harper 2004) and so people may have more empathy towards a ringing phone; it is not the fault of the phone user if their phone rings. On the other hand, if a phone user makes a call in public they are purposefully choosing to interact with a remote contact and therefore surrounding by-standers may not be as sympathetic towards the interruption (Geser 2004).

More people in the younger age groups would always or sometimes answer or make a call when in a group. Younger people may be less concerned about being overheard, more familiar managing remote and co-local interaction simultaneously, and it may also be easier to manage face as there may be fewer roles to perform.

Generally the results found that people are more likely to answer calls when in groups or with one other person than make calls. When making calls the phone user has more control over the management of face, and the remote and co-local - and is choosing to prioritise the remote communication over the co-local communication. Answering a call means that the interruption

is involuntary and phone users may have to use interaction management strategies to ensure their face, role, and co-local interactions are not compromised.

There are also several management strategies for public mobile phone use. More high users and younger people have used three-way talk when using their phone to call when in a group and more people in the younger age categories have used three-way talk when with one other person.

There are gender differences for rejecting incoming depending upon circumstance: more women would reject a call in a quiet environment and during a serious conversation. More women than men would also reject an incoming call in the following places: a restaurant; a cinema; and a theatre. More men than women would reject a call in a noisy environment. When considering flight as a management strategy, the results revealed that more women than men have walked away from a group to answer a call.

More people in the older age groups have walked away from a group to make a call. Whilst more people in the older categories have walked away from one person to answer a call and have also walked away from one person to make a call. This implies that there are some existing norms relating to etiquette that have been adapted to public mobile phone use by people in the older age groups.

There are distinct differences relating to age and acceptance of public mobile phone use. More people in the older age groups sometimes or always feel embarrassed by overhearing other people's conversation and this supports Love and Perry's (2004) study. More people in the younger age groups 'rarely' or 'never' mind if people can overhear their mobile phone conversation when in public and this supports Lasen's (2002) study. Generally large percentages of people agree that it is acceptable to use mobile phones in public - however more people in the young age categories agree. The advantages of what the technology can offer the user in terms of connectivity; communication and availability may lead them to believe that use of the technology is acceptable in public.

Acceptance of the technology may be related to annoyance of the technology. Frequency of use may also affect acceptance and annoyance since more standard users feel more annoyed than high users at various attributes of public phone use. Although interestingly there are less people who are annoyed by attributes relating to interaction management strategies. More people in the older age categories believe that people should use etiquette rules when using their phones in public. Generally people do not find phone use by others rude showing that public mobile phone use is an accepted social norm.

Study One is concerned with how people manage their phone interactions in public and also about people's opinion of public phone use. This chapter has presented data and shows patterns of public phone use, and also presents opinions concerning public phone. The key issues from the data will be further discussed in Chapter Nine.

7 Data Analysis - mobile phones in private interactions

But it is to say that what people are doing when they use their GSM devices needs to be understood not solely in terms of that contact itself, but in terms of how that contact operates as one of the tools of making, sustaining, and invigorating social relations.

When people communicate with each other over the mobile, they are not simply solving the problem of space (and to a lesser degree time) as if social relations could consist of merely talk (or text). Rather they are working at those social relations and making that contact fit into larger schemes of social practices (Harper in Nyiri 2003 p.202).

7.1 Interviews

A key activity in the 18 - 30 year old age group is the management of personal relationships via the mobile phone. In this particular context, the management of face is important. Traditionally face-to-face interactions were considered essential for managing personal relationships; however the introduction of ICTs has provided people with different mediums to perform these types of interactions e.g. online dating. It is therefore important to dedicate research to this developing area.

Eleven interviews were conducted within this study. The following chapter will present and analyse six key themes within the data:

- Attachment to the phone
- Managing socio-emotional content
- Dealing with 'errors' in interaction
- Text messages in relationships
- Emotional reactions to mobile phone use
- Mobile phones and dating.

Some of the themes above are strongly connected to the management of face, and how people do the work of face and relationship management via their mobile phone. Therefore some of the literature in Chapter Two is relevant to this analysis, and Goffman's (1959, 1963) concepts of face management and impression management are especially applicable. The issue of emotion and the mobile phone was explored in Study One before the possibility of the telephone survey for Study Two. However the literature on emotion and the mobile phone can be applied to both the survey and interview data. Goffman's concepts of performance: impression management and face management will be considered within this analysis.

The examples provided in this chapter are from the interview transcripts which are available in Appendix Seven. The focus of the analysis is on the content of the participant's conversation. Therefore the interviews have been transcribed for their content and not for detailed conversation analysis. This chapter draws upon literature from Chapters Two and Three and the data will be used to support and validate the findings of Chapter Eight which presents the data gathered from a nationally representative survey (see Appendix 8).

The interviews asked about events and behaviours which, it was hoped, would provide insight into user's thoughts and emotions. To understand attachment, users were questioned on the loss of the phone. To understand use in relation to socio-emotional interaction, use when out socialising and drinking was explored. This also highlights a case where face has to be managed 'after the fact' as others hold evidence of the behaviour. Dealing with errors in interaction shows how people can use the phone to disguise purposeful SMS interactions and also how they manage genuine texting mishaps. Emotional reactions to the use of the mobile phone are then considered. How people use SMS to manage their relationships is explored and applied to how people use their mobile phone for dating.

7.2 Attachment to the phone

The participants were asked whether they thought they had an attachment to their phone. Some focussed on the device, some focussed on the content, whilst others focussed on the people and

relations accessed through it. Some participants perceived this question as being directly related to the device itself and immediately explained their dislike for their phone:

Example 1

- I: Not this one I hate this phone - coz my phone broke in Thailand
EL: Right
I: I stood on it so I don't like this phone - it were just a cheap one that I got
(see transcript 9 p.1).

Example 2

- F: Not at the minute because I hate my phone.
EL: (Pause) So (pause) why do you say you hate it first?
F: Because it's just (pause) rubbish. It really is awful. The only reason why I've got that is to be able to keep in touch with people but I really hate it (see transcript 6 p.1).

The examples above show that the participants were referring to the device itself. However when questioned further they agreed they liked and were attached to what the device could offer them in terms of communication and function.

Specifically several respondents said they were attached to the contents of the phone – the most important element being the contacts. This finding supports Vincent's (2005) research which suggests that it is the content that people are specifically attached to (see section 3.3).

Example 1

- D: Definitely I suppose it's to do with the contact numbers on it really because I think if I lost that then I'd just feel detached (see transcript 4 p.1).

Example 2

- B: Err (pause) people's phone numbers really and the ability to text them - not really ring so much
EL: Right
B: To be able to have that instant erm ability to contact someone (see transcript 2 p.1).

There is a perception that the device can be replaced easily either through upgrading the model or swapping it. This further supports the view that it's the contents of the phone that is important and also what the phone offers in terms of communication and connectivity (Vincent 2005) - the actual device is not as important.

Example 1

A: Err I'd say the content ...but it's definitely the content element (see transcript 1 p.1).

Example 2

E: I would think probably more the content but the device can just be replaced so I don't actually have a thing for the device - it's just what it does (see transcript 5 p.1).

Adding to the idea of an attachment is the fact that most of the participants do not turn their phones off – even at night. The two participants in Example 1 (below) had both explicitly said that were unenthusiastic about their phones (see transcript 11 p.1 & 2 in appendices 7) however they both proved that they had a level of attachment to the connectivity by not turning it off at night.

Example 1

EL: So do you guys turn your phones off at night?

M: No

L: No - nobody rings me at night unless they have to - anyone who does ring me it's quite important

EL: Right so you're both not really concerned about your phones but you don't turn them off?

M: No

L: No (see transcript 11 p. 3).

Example 2

H: Yes erm it's like my pet - it goes everywhere I do pretty much. It's very rare that it ever gets switched off (see transcript 8 p.1).

The participants who claimed not to like the device also admitted that they never turn their phone off. This indicates there is a certain sense of dependence on the constant connectivity.

The participants always want to be available for communication (Harper 2003).

Some participants even explained that they constantly use their phone's applications, such as its radio and alarm clocks.

Example 1

H: Yea I think the thought of missing a call or missing out on something that more why...coz it even comes in the shower with me in the bathroom so I

can listen to the radio. I put it on loud speaker and listen to the radio when I'm in the shower (see transcript 8 p.1).

Example 2

A: ...I physically couldn't do my job without my phone so it's very much part of my routine and to the extent where it's my alarm clock you know that's how much a part of my daily routine it is (see transcript 1 p.2).

This shows that the phone's other functions are integrated and utilised in every day life. As people become more dependent upon what the phone can do for them in terms of connectivity and functionality, the concept of attachment will become more familiar. The mobile's function and its contents seem to be important to the participants. This supports several existing research studies (Lasen 2004, Harper 2004 Vincent 2005).

7.2.1 Losing the mobile phone

Reactions to losing a mobile phone highlight both the attachment to the device and also the emotions associated with losing contacts, connectivity and the device's contents. Vincent (2005) highlights the fact that people value their phones so much that they go out without their phones for fear of losing it. Several of the participants in this study admitted that they had once lost their phone through different circumstances. Two of the participants even admitted that they became so upset at losing their phone that they cried. This finding supports Lasen's (2004) point: that people feel anger, sadness, annoyance and distress at the loss of their phone.

Example 1

G: ...I went to put it in my pocket somebody pinched it

EL: Yea?

G: And I was devastated - I burst out crying (laughs)

EL: Oh right

G: Yea I was devastated (see transcript 7 p.1).

Example 2

C: Oh my god so upset. I've lost it before and I was absolutely... I was so upset but I found it again but I was crying - that's how upset I was... I actually cried because I'd lost my phone (see transcript 3 p.1).

The distress these participants felt in losing their phones implies that what the phone can do for them is very important to them and that they have a strong emotional attachment to it.

Every participant interviewed explained that they had lost or broken a phone, leaving them without their mobile device. The following feelings were mentioned when they were asked to describe how they felt when they were left without a phone: upset; panic; devastation; stress. The various emotions described imply that there is a strong link between people, their mobile phone, and their emotional states and well being.

Example 1

H: It felt like (pause) it felt like I'd lost a limb or something. It was weird. (Pause) Coz it was only about a week or two weeks but still I felt like a cast away like I didn't know what was going on with anything coz nobody could tell me because I had no phone (see transcript 8 p.2).

Example 2

F: Oh definitely like when ya other phone broke it were like had all me messages all numbers - I didn't have no-ones number and it were just a nightmare (see transcript 6 p.1).

Even though people feel upset when losing their phones, they also adapt to living without a phone temporarily. Two of the participants said when first losing their phone they were upset, however after a couple of days they adjusted and became used to life without one.

Example 1

K: ...recently when I actually lost mine and err - well it only only about a week before I got a replacement but for the first day I was envious I had phone envy of anyone who had got their phone out I was like (breathe in) because it's just like if there's a lull in conversation or anything like that you just sort of check your phone but after sort of like the first day without it, nothing bothered me any more... like not having it and I wasn't worried people wouldn't be able to get hold of me or whatever because they know where I live if it was that urgent (see transcript 10 p.1).

Example 2

B: At first I would be quite panicky but I have lost my phone in the past or it's broken and at first it's a bit of a stressful feeling bit give it a couple of days and you just sort of get used to it...And you work out how to contact people in other ways (see transcript 3 p.1).

Loss of contacts, the ability to communicate via the phone, and connectivity, makes people feel like they are missing out and lonely (Hoflich 2006). Relationships management becomes

hindered and people feel frustrated by this - especially when they can't communicate thoughts and feelings straight away.

Further considering the idea of attachment, most of the participants say they cannot imagine their lives without a phone. Plant also found this result and says:

For all their reservations, the vast majority of the many contributors to this research found it impossible to imagine life without the mobile phone, and difficult to be without it (Plant 2001 p. 64).

Example 1

D: (Pause) erm (pause) I don't think so (pause) erm no I don't think I could now coz when I forget my phone when I've gone to work I do feel like something is missing...(see transcript 4 p.2).

Example 2

G: No I can't remember when I didn't have a phone like years ago like when I was fourteen and I used to phone my friend up an hour before arrange to meet up and then we'd just be there but like now I can't imagine doing that to somebody and having the anxiety about meeting them - are they late? Where are they? (See transcript 7 p.2).

Example 3

F: Oh no definitely everybody needs a phone I don't know how people cope without them ... I don't know how you can cope without one I really don't. I'd be absolutely mortified if I didn't have one (see transcript 6 p.6).

For most of the participants a mobile phone has become so integrated into their lives that it is hard for them to imagine what life would be like without one. This result support Vincent's (2005) work. People have an attachment to what the device can do for them in terms of constant connectivity and communication, rather than to the device itself. Most participants used negative emotions to describe how they felt about losing their phone. Two people admitted that they adapt to the lack of connectivity. Either way most of the participants have a strong attachment to what the device can do for them. Whilst the feeling of being constantly in touch makes people feel secure (Hoflich 2006), losing contact or even the thought of losing contact makes them feel distraught.

7.2.2 Summary

The participants in this study say that they are more attached to the mobile phones content i.e. its text messages and contact numbers than the actual device it's itself. It's what the device can do for them in terms of communication and connectivity which makes them feel a sense of attachment. This finding supports Vincent's (2005) study.

The phone is incorporated into people's lives so much that it becomes a multi-functional device – for example used as an alarm clock or radio. The participants admit that they rarely turn their phones off - even at night and this supports a high level of attachment. It also suggests there is a dependency on the device since people do not want to miss any potential communication (Hoflich 2006).

Losing the phone for some people means losing their text messages and the contacts on their phone, but most importantly it means losing connectivity to an invisible network. This loss causes people to feel distressed. Feelings of sadness, anger, and annoyance have been described by the participants. This further supports the fact that people feel attachment to their phones in terms of what they offer, since they feel various emotions when the connectivity is lost. It is important to mention that although people feel strong amounts of distress when losing their phone, after several days they adapt to life without the connectivity.

7.3 Socio-emotional texts

Hoflich (2006) says that the mobile phone allows people to pass on their moods straight away without any immediate consequence. Therefore it seemed relevant to explore mobile phone use when people are out socialising. The mobile phone allows for constant connectivity meaning that it is being used by people in different social contexts. A popular perception of drinking in the UK is that it assists the reserved nature of British people and helps to over-come ridged social norms. With the phone intrinsic to interaction, and people's inhibitions removed by alcohol the next section shows that drunken mobile phone use is a common occurrence for young people.

The survey in Study Two questions whether people text when they are drunk (see appendix 8). The results show that 68.7 % of 16-18 years olds and 70.2% of 19 - 24 year olds do text whilst drunk (see section 8.4) and 61.8% of high users 38.5% of standard users also admit to doing this, and this prompted some ad lib questions within the interviews. To date, there does not appear to be any academic studies which broach this subject.

Most of the participants admitted to sending text messages whilst drunk (see section 8.4). Participants have described feeling regret and embarrassment the next morning after sending drunken text messages the night before.

Example

K: I wake up with an impending sense of doom every time go out because I'm sure I will have done something. Like just the other day I left someone a ten minute voicemail just rambling on and she was just like - she text me the next day and said 'you're voicemail' and I was like 'what voicemail?'

EL: So they can get you in trouble when you're drunk?

K: It's not trouble more embarrassment (see transcript 11 p.12).

Loss of inhibition combined with access to the phone leads to people text things they wouldn't normally say to people face-to-face.

Example 1

J: They can - completely get you in trouble - you wake up and think oh I could just cringe 'did I send that text message last night?' I've done it a few times I think because you lose your...

K: Inhibitions

J: And everything seems like a good idea doesn't it? I've been in situations where I've been on the cusp of going out with somebody but not and then it seemed like a good idea to send like a really affectionate text message and then I woke up the next day and was like 'why did I do that?' (Laughs)... (see transcript 11 p.12).

Example 2

B: I suppose it's my own lack of self control more than anything but (pause) I suppose you lose your inhibitions and you wanna tell people what you think and feel

EL: But you don't phone them?

B: No

EL: You text them

B: Yea because I know phoning them would be stupid (laughs) (see transcript 2 p.3).

Sending text messages when drunk assists the sender in managing face (Goffman 1963) since they do not have to manage the other person's immediate co-local reaction. However the text message may not assist in managing a person's impression since the impression the sender gives whilst drunk may differ or even contradict the more familiar impression they usually give.

One participant even admitted to leaving their phone at home when going out on a night out - not to prevent them from losing it (as Vincent 2005 suggests) but to prevent them from sending drunken texts! This shows a conscious level of impression and face management. The phone owner pre-empts the potential contradiction of face that sending text messages could cause whilst drunk. This also demonstrates how the phone functions as a tool for face and impression management in a much more dynamic way than landline or email for example.

Example

A: Now I've (pause) always been quite good with this and erm generally don't send drunken text messages however that's because I've learnt my lesson (laughs) yea texting when drunk is dangerous to the extent for a while I didn't used to take my phone out if I knew I was going out on a big session (pause)

EL: Because it can cause trouble?

A: It can cause a lot of trouble... (See transcript 1 p.11).

Two participants admitted to temporarily deleting certain contacts they thought they might text whilst drunk. This prevented them from feeling embarrassed the next day and perhaps stopped them from disclosing feelings and aspects of self.

Example 1

B: Yea I'm one of the worse drunken texters that probably exists

EL: Oh right okay

B: It's like I tell myself not to do it when I go out - I go out I'm alright - after a few I'm thinking actually that wouldn't be so bad - then I know it's still gonna be awful but it doesn't matter because I want to do it so I do it anyway. Sometimes I have been known to delete people's numbers before I go out (see transcript 2 p. 3).

Example 2

I: I've deleted people's numbers from my phone to stop me texting them when I'm drunk (see transcript 9 p.11).

Removing contacts from the phone, prevents the sender from communicating with the people in question when in a vulnerable position, and thus saves face. Not having access to the remote contact is a barrier to communication, but it is one that ensures the phone user is consistent in their behaviour. By not sending drunken text messages the phone user does not have to compensate for their behaviour the next day.

Some of the participants said they text 'nice' things whilst drunk or received 'nice' messages from drunken friends. This is another example of people's moods and emotions being passed on instantly (Hoflich 2006).

Example 1

A: It can cause a lot of trouble. But ya know some people send lovely text messages when they're drunk. I've got one erm and I saved it and a very dear friend sent it to me she was on her holiday and she was drunk and it told me I was her bestest friend and it was a lovely text and I still had it until I gave my phone away obviously. So some drunken texts can be nice ones (see transcript 1 p.11).

Example 2

EL: Okay have you ever sent drunken text messages?

F: Oh god yea (laughs)....

EL: Does it get you in trouble ever?

F: No because it's usually nice things that I'm saying to them (see transcript 6 p.9).

Some participants explained that they or their friends are more likely to text people they are attracted to when drunk. The loss of inhibitions due to alcohol and instant access to people via the phone can result in people's current emotions being communicated. The loss of inhibitions also means that the phone user's consideration towards their own face management is reduced.

Example

EL: What kind of people do they try to text? Like people that they like and they're dating and...

H: Yea those sort of people that like (pause) one that when they're sober they try to be like really cool with them and try to be like really like aloof and like do

you know what I mean? But like once they're drunk they're like 'I love them and I want to tell them' and your just like 'no don't' 'but I just want to ring him and tell him how much I love him' and your like 'no please don't' (pause) (see transcript 8 p.11).

The mobile phone provides people with a channel for communicating information about their emotional states. People are more likely to take risks when using their phone whilst drunk since there are no immediate consequences: they don't have to manage the potentially awkward situation that the same communication could cause face-to-face. The very nature of text messages allows people to manage face in a different way and if the response is not favourable they always have the excuse that they were drunk.

Some participants said they confiscate their friends phones to stop them sending drunken text messages when on a night out.

Example 1

I: ... In fact I've had to take people's phones off them before to stop them from doing stuff! (see transcript 9 p. 11).

Example 2

EL: ...So (Pause) have you ever sent text messages after a drunken night out?

H: Erm (pause) I don't as much as the rest of my friends do

EL: Right

H: There's been so many times where I've had to confiscate my friend's phones and hide them from that person so they wouldn't get them (see transcript 8 p. 11).

People stated that they have a method of monitoring the text messages that they sent the night before by checking their 'sent items' box. Although one participant (Example 2 below) said she actually deleted the text messages from her sent items whilst drunk to prevent her own embarrassment the next day, saving herself from the embarrassment of reading the text messages when sober. By deleting the messages the sender is denying responsibility for their content and can blame the alcohol for their existence.

Example 1

EL: So have you sent any text messages after a drunken night out?

I: Many many many (laughs) text messages yes

EL: Is it something that you're known to kind of do?

I: Not any more but a couple of years ago and I did do it but I don't know anyone who hasn't to be honest

EL: Right okay so it's quite a common thing?

I: And now you're phones automatically saves messages that you've sent so you can really embarrass yourself the next day (laughs) and just remember what you did (laughs) just stupid-ness that you send when you're drunk - you think 'oh I'll just send that message'... (See transcript 9 p.11).

Example 2

H: But now I'm just a bit more clever

EL: Yea

H: Coz now when I'm drunk I'll just delete the sent items so I wake up in the morning I'll have no idea what I sent and I'll just get a reply back just goin 'what ya talking about?' (Laughs)... (See transcript 8 p.12).

Example 3

K: I do - but I'm just glad my phone holds my sent items so I can actually check what I've sent the next day - honestly I'm terrible for it - I text and most of the time they are not even legible - there just (laughs) yea all the time (see transcript 10 p.12).

The 'sent items' function acts as a diary since it provides a record of the (drunken) communication. The phone user (in a more sober state!) can review the SMS communication they made when drunk and then decide how to further manage face and compensate for the SMS content - usually by apologising.

7.3.1 Summary

It is clear from the interviews that as mobile phone use whilst drunk exists, it opens a window on how face relations and emotions are expressed and managed. People feel like they lose their inhibitions when drunk. This, combined with the constant connectivity that the phone provides, and the advantages of sending text messages, (see section 7.5) makes it easier for people to text things they wouldn't normally say. People are more likely to take risks i.e. by expressing feelings, since there are no immediate face-to-face consequences to their actions. By sending text messages, rather than calling, people gain a level of face saving. However the messages sent have consequences and the phone maintains a record of messages. Since there are consequences to sending text messages and a certain level of face management is required in doing so, people feel embarrassed when they view the record of their actions. Often people will

try and compensate the next day to attempt to manage their impressions and often they will use alcohol as an excuse and apologise.

7.4 Texting mishaps?

The following section will address some of the ways people manipulate mobile phone functions to manage face. It will also show that people can make mistakes when sending text messages. It has become apparent from the interviews that texting 'mishaps' can occur – some accidentally and some on purpose. Whilst some participants agreed that they had sent text messages to the wrong people accidentally, others admitted they had done so on purpose.

7.4.1 Texting a person by mistake: sending a text message about the person in question *to the person*.

Several participants had examples of texting a person by mistake and most of the participants had heard about people doing this by mistake. Often the text which is sent is supposed to be for someone else but is written about the person who receives it. The accidental text message can also be for someone else entirely as Example 2 below explains.

Example 1

L: Yea I've done it (text) the other way and that was really bad because it's one of those messages that you write and you're really really pissed off at the time and you write it and you write it really harshly and you're like bang and you send it and you see the name of the person that you're talking about disappear as it says it's sending and then suddenly it dawns on you the first thing you do is check you're sent items and your like 'Oh Bollocks' (laughs)

EL: Guilt?

L: And then you suddenly write 'busted' to them and then yea that's happened twice to me and then you think well maybe it might help in a way (see transcript 11 p.10).

Example 2

H: Yea (pause) There was somebody who I used to live with in halls and he was cheating on his girlfriend (pause) ...He sent a message to this girl that he was seeing that wasn't his girlfriend saying how erm how great she was in bed and how his girlfriend wasn't a patch on her and stuff and he accidentally sent it (pause) not just to his girlfriend but to like everybody on his phone book!

EL: Oh no!

H: So like his Mum got it! His Dad got it! His girlfriend's Mum got it! His girlfriend got it and everything - and he wouldn't come out of his room for like a

week coz like he he was so mortified... when it slowly dawned on him he just looked like he was gonna be sick' (see transcript 8 p.13).

Example 3

M: No - completely unrelated to being drunk but it's quite embarrassing to my friend - he sent a picture of himself to his girlfriend but actually sent it to everyone in his phone book and when I say himself - it wasn't himself it was part of his anatomy (laughs)... he came down stairs and said 'if you all got a picture message from me - please ignore it' (see transcript 11 p.10).

When the text message has been sent to the wrong person accidentally, the sender's management of impression is affected and their face is threatened since they often disclose information that the receiver would not normally be subjected to. Temporarily, the sender is left suspended, wondering how best to manage the consequences of the text message. Then they must decide how best to resolve the mishap and compensate for their behaviour in order to restore the balance of their impression, and face. Often people compensate by sending an apologetic text message.

Some of the participants have been recipients of accidental text messages.

Example 1

A: ...On a couple of occasions I've had text messages about me as opposed to to me.

EL: Right

A: Erm (pause) and I've simply on both occasions sent the text message back and added 'not sure this was for me'

EL: Umm

A: Which then ends in a barrage of apologies - again over text erm occasionally and this is only two or three times in my life I've sent a text message to somebody in error but luckily for me never anything particularly bad (see transcript 1 p.12).

Example 2

L: Yea I've received a couple of them - it's quite funny because you have to take it half heartedly because you understand that everyone talks about other people and then if you happen to know then you're like well I know now (laughs) (see transcript 11 p.10).

Two of the participants said they a sent text to the wrong person by mistake and the text contained insults about the person who received it.

Example 1

- K: Generally it results in a lot of anger because when you're texting someone about someone it's normally derogatory - even on the other sense - you don't want them to know obviously and you don't want people to know that you're talking about them to someone else (see transcript 10 p.13).

Example 2

- B: Yea and that is an awful feeling once you know you've done it because there is no turning back
- EL: And what do you do to compensate once you've done it?
- B: It's very difficult to get that one back you're just like 'ah' (laughs) erm the situation I'm thinking about was quite a long time ago and we were in my bedroom and there were three of us and I sent a message to this other girl saying this other girl was getting on my nerves but I sent it to the girl so for some reason I don't know if she was at work but she was like 'what's this?' so we said that girl A had sent it off my phone to be funny so that's how we covered that one (laughs) (see transcript 2 p. 14).

Two participants said they think texting the wrong person accidentally happens because the person they are writing the text about is at the forefront of their mind so they automatically send it to the person they are thinking about.

Example 1

- M: I've had Uni groups when I've been ill ...I'd had text messages saying 'I don't believe he's ill - he's just faking it' but it was only really quite close mates and they were joking around but they've sent it to me because they were thinking about me (see transcript 11 p.10).

Example 2

- I: I've sent a message to my friends which I didn't mean to send - I meant to send it to another friend talking about her (laughs)
- EL: And what were the consequences?
- I: Nothing coz she's stupid and she didn't realise she just sent me a message back saying 'I don't think you meant to send that to me' and never mentioned it again. But it wasn't being really horrible - I was just generally talking about her - which I shouldn't have done
- EL: Yea
- I: Coz I had her name in my head I went straight for her name in my phone book and sent it to her (see transcript 9 p. 11).

Reid and Reid (2004) suggest that texting may offer 'texters' more control over their interactions with others by affording them visual anonymity and asynchronous communication. However

the data suggests that mistakes can still be made. The information from the interviews implies that texting mistakes can happen; often when the sender's mind is thinking about something or someone else and not concentrating on who will receive it. Perhaps this happens because sending text messages can either be a sender's primary or secondary involvement (Goffman 1963 - see section 2.3.6). When the sending of a text becomes a secondary involvement and the sender's full attention is not focused on the task in hand, mistakes are made. The sender must then decide how best to manage their face, and the mistake, and often send an apologetic text message (one participant made the excuse that the text was sent as a joke!).

This implies that although the immediate face-to-face consequences of the communication need not be managed - a high level of face management is still applicable since the context, tone and content are subject to face management and can be easily misinterpreted (see section 7.6); they are just different signifiers / indicators of communication. People making mistakes have to compensate for their error, and may have to work harder than usual to restore the relationship before the mistake was made. Instances where the wrong person has been sent a text by mistake, the relationship must be carefully managed (often through texts) and the face involved for both parties must be restored.

7.4.2 Pretending to text a person accidentally

Participants admitted to, or had heard about, sending text messages to a specific person pretending that the message is not intended for them. This method is employed either to initiate communication with the recipient or to tell the recipient something without directly addressing them.

Example

- G: No I have sent texts to people like that before to see if they were still mad with me like if we've had an argument and that's been done to me
- EL: So like you've text that person
- G: I've text them saying 'oh yea yea that's good' - like one you'd randomly send to your friend on about a random subject like 'glad your feeling well' and sent it to that person and then they send one back saying 'why did you send me that?' and then you send one back saying 'oh god I was supposed to

send that to blah blah' just to initiate the talking again (see transcript 7 p. 12).

This function of text messaging allows the sender to gage whether they can continue communicating (via text message) with the recipient. The sender is maintaining face since they are not directly approaching the recipient and have an excuse for the communication – a mistake. If the other person does not respond favourably, the sender can gage the situation and manage it accordingly.

Two of the female participants stated that they have sent intentional 'accidental' text messages if they wanted to contact an ex-boyfriend or someone they are attracted to. Again this type of communication assists the sender in saving face, since they are able to hide behind the 'mistake'.

Example 1

B: Although I have done that - not to a one date but when I'd just split up with someone actually and you do really wanna speak to someone but you don't wanna make contact so you send the message as though it's to someone else and your having a really good time and then you instantly text them and say 'sorry I didn't mean that for you - are you alright?'

EL: Argh right so you send a fake text message to initiate...

B: Yea (pause) I've sent a lot of fake text messages... It's probably normally in that context to a boy (laughs) (see transcript 2 p.5).

Example 2

H: It was like a message that I'd written as though it was meant to go to my best girl friend about my new boyfriend that I accidentally on purpose sent to my ex boyfriend (see transcript 8 p.13).

Several of the participants had heard of using this approach via text message, but didn't approve of it and haven't used it themselves. These participants believe the method is transparent and the intention is obvious.

Example 1

F: No and I don't understand why people do this coz it's just a mind f*ck. It really is. I just don't know why people do that kind of thing.

EL: So you have heard of people doing that?

F: Oh definitely yea..... You can just tell! This is why I don't understand why

people do it. Because people do it all the time and you can just so tell that it was meant for that person and they're like 'oh sorry that really wasn't meant for you' but it were (see transcript 6 p.10).

Example 2

J: Oh god no - but I've had that done and it's obvious - yea I've had that done where somebody's wanted to talk to me about something but they didn't want to just talk to me about it so they've sent me a message which was quite in-depth as if it was intended for someone else but it wasn't. I've had that... (See transcript 10 p.13).

Example 3

EL: So you never pretended it wasn't meant for them?

E: No that's a lot of messing around - that sounds far too complicated. I'd be more direct... (laughs) (see transcript 5 p. 8).

Sending a text message to someone *accidentally on purpose* is often employed to get a message across that they feel they cannot say face-to-face. Several participants said they have done this if they want to let a friend they can't approach know something important. Two of the participants agreed they sent this type of text message to get a point across more easily. Reid and Reid (2004) believe that text messages provide an opportunity for intimate personal contact whilst at the same time offer the detachment necessary to manage self presentation and involvement. By sending the text message the sender and recipient do not have to manage non-verbal communication, as this assists both parties in managing face.

Example 1

L: I think once I actually wrote a text that was half about the person and purposely sent it to them because I knew I had to tell them something but they weren't the sort of person you could tell them directly so I made it look like a mistake (see transcript 11 p.11).

Example 2

A: However I've also on occasion intentionally sent a text message about somebody to that person in order to facilitate something or other...So let's say I've got a friend called Bill. I've sent Bill a text message about Bill on purpose erm not negative not like slagging Bill off but maybe feelings I have towards Bill or concern I have about Bill so that Bill knows about it and hopefully will sort it out. Which is a bit crafty but ya know - it works. Sometimes it works and sometimes it doesn't (see transcript 1 p.12).

The phone has been used to manipulate communication as people are using it in ways to manage and save face. It is perhaps the disadvantages of text messages: the lack of non-verbal cues and the fact that they can be so misconstrued (see section 7.6) that helps people to send text messages accidentally on purpose. Paradoxically it may also be the positive elements of text messaging that make people do this: they can hide behind their own feelings and save face.

People can send texts 'accidentally on purpose' because genuine mistakes do occur. The method of sending one accidentally on purpose acts as a realistic cover up which excuses the text being sent, whilst either initiating communication or getting a message across covertly.

Sending a text message 'accidently on purpose' assists both the sender and receiver in their face management and relationship management as there are no immediate consequences to the action. The receiver is not obliged to respond immediately and so can take time to decide how best to manage the information in the content of the text. The sender does not have to immediately deal with the consequences of sending the information to the recipient and so can gain a certain amount of detachment from the content of the message. These examples show that using the mobile phone to text can be used to build and maintain relationships even where that relationship is currently under threat.

7.4.3 Summary

The participants in this study admitted that text messages can be sent to the wrong person. A text can be written about a person and then accidentally sent to that person and people suggest this happens because they are at the forefront of the senders thoughts. This may happen because the text message is a secondary involvement rather than a primary involvement so the sender is not fully concentrating on the CMC. If the sender realises their error or it is pointed out to them, they must then make a judgement on how best to manage the situation, their, face and the relationship with the recipient.

People may also send a text message 'accidentally on purpose'. This is often employed to initiate communication with the recipient or to inform the recipient of a message without directly addressing them. There is a level of face management involved in this method since the sender is able to deceptively hide behind 'the accident'. Some of the participants said that it is a useful method of providing people with information that they perhaps wouldn't reveal in face-to-face interactions, other people said that the intention in these sorts of texts is obvious. Either way it is clear that users have developed methods for the management of relationships through a meta-understanding of SMS use.

7.5 The good: How SMS are used to support and maintain relationships

Hoflich (2006) in writing for Vodafone's Receiver online magazine considers the mobile phone as possibly *the* technological communication medium for relationships. Hoflich highlights the spectrum of relationships as being from friendships to temporary liaisons and from partnership to marriage. Hoflich says:

'Especially where close relationships are concerned, the mobile phone is a medium for relationships from beginning to end – from the first point of contact with the exchange of telephone numbers and the spelling of the first text message, through to breaking up by mobile phone and especially by text' (Hoflich, 2006 p. 2).

This concept is relevant to the following section. The interview data to an extent supports Hoflich's interpretation of mobile phone and relationships. The advantages of using text messages in relationships are discussed in this section. Several of the participants highlighted the advantages of using text messages over calling when considering relationships and dating. Participants described text messages as faceless, non-committal, and informal. These descriptions are used in Rettie's (2006) and Plant's (2001) studies.

Example 1

K: ... but in a text message you can just like text and it's...non committal (see transcript 10 p.8).

Example 2

M: And it's just it's quite well it's not personal and it's not impersonal - you can send someone a text message and it kind of just - it's not like you're asking someone out for a drink or something... It's a bit easier to talk to someone sort of at a distance as opposed to face-to-face (see transcript 11 p.4).

Example 3

L: Coz you cut down nine tenths of communication which is body language which a lot of people find hard to get across to someone and you can hide behind feelings and stuff (see transcript 11 p.6).

Example 4

A: Erm well I think that it's two fold - I think that particularly in the early days of a relationship mobile phones allow you to say things that you'd never dream of saying to somebody's face because there is an element of being braver because it's a text ...and you can say stuff that you wouldn't necessarily say and I think that it facilitates the speed at which relationships go at as well ...definitely from personal experiences in the last couple of years I've had relationships that have erm evolved a lot quicker than they would have done purely down to the level of contact over text message (see transcript 1 p.3).

The examples above suggest that some people are consciously aware of the lack of non-verbal cues in text messages. The lack of cues allows a certain amount of distance between the texters and this allows them to manage face (Plant 2001).

Some participants explained that they can say things in text messages that they wouldn't say in face-to-face communication. This is also examined through the survey in Study Two (see appendix 8): *'My mobile phone allows me to text things I wouldn't normally say if I was face-to-face with a person.'* The results suggest that more of the people in the younger age categories agree (see section 8.4.1).

Example 1

F: ... coz you can say things on a text message that you wouldn't actually say when your talking to them (see transcript 6 p.3).

Example 2

C: Erm (pause) I like to say things that I might not necessarily say on a call. I'd say them in a text message because it's a bit less personal I suppose - I don't know - I can be a bit more braver in a text message (laughs) (see transcript 3 p.4).

Several of the participants mentioned that a text message can let people know that other people are thinking about them. Rettie's (2006) work also suggests this (see section 3.2).

Example 1

K: Yea it's just I think it just shows that you've actually considered and thought about them (see transcript 10 p.5).

Example 2

H: Yea it just sort of keeps things sort of goin and let them know that you still think about them sort of thing (see transcript 8 p.10).

Example 3

E: Sort of reassurance so they know 'I am thinking about you' (see transcript 5 p.9).

Example 4

G: Erm I think 'argh they're thinking about me' you know? (See transcript 7 p.6).

Reid and Reid's (2004) work highlights that text messages are sent to signify 'thinking of you' messages. The act of sending a text for this reason, allows the sender and recipient to feel close even when they are distant. It also allows people to feel a sense of constant connectivity (Hoflich, 2006).

Text messages are often chosen over phone calls to avoid 'awkward silences'. This is because text messages are non-committal and there is no set time the receiver should respond by.

Example 1

B: Although even if I wasn't pay as you go I'd still text because phone calls can be so much more awkward than text messages. And some people are just awful on the phone and text messages just kinda get over that barrier

EL: Right why?

B: Because you don't have to have that flow of conversation they're just short sharp three sentence comments instead of the open spaces of horrible nothingness (see transcript 2 p.9).

Example 2

K: ...coz I mean if you talk n the phone you're guaranteed to get those awkward silences (see transcript 10 p.7).

Example 3

- I: Yea because you avoid the awkward silences whereas with a text message you can sit for an hour is you want to think about what you're gonna write (see transcript 9 p.3).

Example 4

- A: Well I think in past I've spoke to people on the phone and put the phone down and just felt like Oh god you know I wish I hadn't phoned them (laughs) either because their not particularly good on the phone because some people aren't are they? So (pause) they can be kinda flat which leaves you kinda flat and also awkward silences on the phone

EL: Umm

- A: If you run out of things to say well that never happens in a text message because well it's silent anyway (laughs) really (see transcript 1 p.5).

These examples show that sending and receiving text messages further assists the management of face by allowing the sender to carefully select the message they want to convey. Texters have the time to think about the exact content of the message since there is no predefined amount of time a text message must be reciprocated by. However the lack of non-verbal cues means that other cues are read, and so a time delay in the reciprocated text may be perceived differently from a quick response. These cues further assist people in conducting the exact impression they want to portray. Text messages also eliminate synchronous communication and thus they eliminate 'awkward' interactions (Lasen 2004). The examples below show that people are aware of the advantages that sending and receiving text messages over calling.

Example 1

- A: Yea (laughs) and as well it's very predefined the amount of time it takes to send and receive a text and you're not under any obligation to answer that question there and then. But if you phone somebody you've no idea how long you're gonna be on the telephone if they ask you a question you can't just choose to answer it and answer it at nine o clock in the evening you have to answer it there and then so (pause) it does censor what's said I think well certainly the sender censors what's said (see transcript 1 p.10).

Example 2

- H: Erm (pause) I think with a phone call once you've said it's out there and you can't change it because the other person's already heard it but with text

messaging you can delete it and then you can start again and you can really think about what words you're putting in it (see transcript 8 p.5).

Example 3

C: Because you've got a bit more time to think about what you want to say whereas I think sometimes on a phone you just are a bit worried that you might sound stupid or you won't be able to talk about stuff but if you've got a bit of time in between text messages then you can think about what you want to say and make it sound good (see transcript 3 p.4).

Allowing the time to carefully select the information conveyed in the text message, allows the sender to manage the impression they wish to portray to the recipient. Whilst people say they find managing communication without using body language easier there is still a level of face management required to portray the self within the content of the text message. For instance people must still set a tone to their text. Due to the ambiguous nature of text messages recipients look for cues within the content. For example short one word answers may imply that a person is in a bad mood whereas playful one line messages with 'smilie' emoticons imply a good or humorous mood.

One participant explained that it is easy to refer back to text messages and re-read the content and information provided within it. This implies the text message can act as a record. Taylor and Harper (2003) make a similar suggestion in their research (see section 3.2).

Example

A: ...And I also like the aspect of text messaging where you can re-read which is something that I do a lot in any text – business, personal, whatever, is I'll go back and refer to it again either for information or just as a reminder of what was said and obviously you can't replay a conversation (see transcript 1 p.5).

Some participants said that sending and receiving text messages can help form greater bonds than if no text messages were sent at all (presumably because some contact, is better than none).

Example 1

I: A couple of years ago I wouldn't have said it makes any difference but now that everyone is in different cities at University I think without text messages we'd have drifted apart a lot more and we probably wouldn't have known what was going on with each other where as just sending a text message saying 'Hiya what have you been up to?' it keeps you in touch without having to

be on the phone to them all the time when you can't afford to be you know - making phone calls (see transcript 9 p.8).

Example 2

E: To me it makes a difference because it means having contact with somebody or that person rather so it's (pause) if you like someone then any kind of contact is better than none I think so even if I text is just 'morning' it's something (see transcript 5 p.7).

Example 3

K: Yea same yea I think they make life so much easier just to keep in contact and you know retain friendships really because like when people do go to different ends of the country and things like that the only way is via talking to them on the phone (see transcript 10 p.5).

Harper (2003) also points out that mutual dependency gained through sending and receiving text messages is responsible for binding people together. Whilst Taylor and Harper (2003) suggest that sending and receiving text messages can strengthen the bond within relationships through reciprocity and the social action of sending and receiving text messages re-enforces relationships.

Rettie (2006) mentions that text message are used by younger people for economic reasons. The participants in this study also mentioned that text messages are a cheaper form of contact for pay-as-you-go users.

Example 1

M: I think that's mainly the primary thing with me if I'm gonna text someone saying something it's gotta be - in my mind it's gotta be worth the money of actually sending a text message (see transcript 11 p.3).

Example 2

I: I mean we're all in the same situation - we're all on pay as you go mobiles coz none of us can afford contracts so I mean we've not got the money to be phoning each other (see transcript 9 p.8).

Example 3

F: These days because I'm on pay as you go I just text because it's cheaper to text than it is to call I very rarely call people because in fact I don't call anyone because it's like it cost far too much money (see transcript 6 p.11).

Example 4

- K: Yea they annoy me those kind of calls. I'm very much confined by my contract like my minutes and my texts - if I'm sort of approaching - low text messages but I tell people 'I've got two text messages to last another two weeks so you wont get any texts back if you text me' (see transcript 10 p.7).

Text messages provide people with a cheaper alternative to calling, which is a contributing factor to its success, and an advantage for mobile phone users (Rettie 2006). However people may also choose texting over calling as it gives people a sense of connectedness and strengthens bonds in relationships (Harper 2003, Hoflich 2006). Perhaps as well as the economic advantages texting offers 'texters' a special kind of communicative relationship for which calls are no substitute (Reid and Reid 2004). Sending text messages can be an important part of building and maintaining relationships and are proven to be effective for both relationship and face management.

7.6 The Bad: How SMS use can hinder relationships

According to the participants, the contents of text messages can be 'misconstrued' and are often open to misinterpretation. This is due to the lack of non-verbal cues: the participants say this because they can't read the body language of the sender and there is no tone of voice to interpret, so it is often not clear exactly what a sender's text message means. The context of text messages can be misinterpreted and therefore the sender must be careful about what they write, and recipients must be careful in reading their interpretation of the message. Jones (2004) specifically suggests that CMC calls for a different set of cues. This also proves that the sending and receiving of text messages can involve high levels of face management since one's impression is exclusively portrayed through the content of the message.

Example 1

- L: It's also quite frustrating though because of course when you don't really know somebody you've no idea what the text message actually means...You interpret it in a completely different way and then sometimes when you actually meet the person it can be quite weird because they they've read all your text messages from different perspective to what you actually meant (see transcript 11 p.4).

Example 2

A: ...But I think as well it's quite easy to misunderstand a text message depending on your own mind frame. Somebody could send you a text and then you might interpret it as something that its not and that can cause problems (see transcript 1 p.3).

Example 3

E: Yea and also text (pause) I mean there's a world of difference between having a text conversation and a phone conversation because you can still pick up people's tone of voice or the way they say it - the intonation in their words whereas texting is usually fairly abrupt. Okay you get LOL or exclamation marks or happy - there are various punctuation bits you can put in but it's generally fairly flat (see transcript 5 p.6).

Example 4

G: Sometimes it depends how the text is worded because sometimes you can take it the wrong way and feel more angry at something they've said by text rather than if they said it face-to-face because you can't actually work out how it's been said by text (see transcript 7 p.9).

Example 5

K: I think you read into it much more because you're searching for some sort of 'what do you mean by that?'

J: There is no tone of voice to indicate what they mean so you have to work it out yourself (see transcript 10 p.11).

So text messages can be easily misunderstood. The receiver may often have to read in between the lines or send a message to clarify what the sender means. But as mentioned in section 7.4.2 above people use this ambiguity to their advantage, and send deliberately opaque or mistaken messages.

As there are no non-verbal cues to consider, texting recipients have come to rely upon a different set of cues, for example the level of interest the texter has in the communication (Jones 2004). For instance, if a person responds quickly, this signifies that they are interested in the communication and that the text message is their primary involvement, since they acted upon the response straight away. A longer gap in the response signifies that the user is otherwise engaged in other activities and the response is not as much of a priority. This is quite ironic since section 7.6 suggests there is no specific time that a text message should be responded by, however the following examples suggests that the time scale, and the number of text messages

sent does indicate a level of interest. The number of text messages sent to a person can have several implications: too many texts sent imply the sender is overly keen and in the words of a participant a 'stalker' (see transcript 9 p.6). Whilst too few text messages imply the sender is not interested, a delayed response or none response can be a way of communicating in a negative way since it gives the impression of disinterest.

Example 1

- G: I wouldn't send them a text - say if they hadn't replied for two hours I wouldn't send them another text because I think that's kinda like pushing them but if once I'm in a secure relationship if they don't text I'm like 'oi you are you gonna text me back?' but at the start I wouldn't do that because that seems like I'm checking up on them ...Same as like if I were to send a lot of texts that would feel like I were a stalker like too intense as well (see transcript 7 p.5).

Example 2

- EL: Yea so in some cases can be used to control a situation in a way or control you know whether or not your interested in some cases
- A: Yea definitely in most cases I would say it's definitely used that way and erm its quite cruel in some respects if somebody's text you and you don't respond you ...but erm it's definitely delayed response or none response is definitely a way of communicating with people in probably a fairly negative way (see transcript 1 p. 6).

Example 3

- I: Stalker! (Laughs)I'd be a bit - it would annoy me - I've had it before where someone has just text and text and text and I've just been like oh for god's sake just leave me alone - not even like a boyfriend - just a friend - texting every five minutes - it's just annoying - you're phone beeping all the time - it does get annoying when you've - it's annoying when it doesn't beep but it's equally annoying if it's beeping constantly (see transcript 9 p.6).

A set of norms seem to have been established whereby there are implications for the number of texts a person can send, and in the response time of the recipient. If too many text messages are sent to one person this can imply the sender is checking up on the recipient. This can be damaging as the receiver can feel as though they are being monitored by the sender.

Example

- G: Erm I mean say if you've got somebody who's too intense and wanting to know where you are then that way they can hinder... (See transcript 7 p.10).

This for some people, the phone is perceived as a check up tool. The sending and receiving of text messages can be damaging if there is a level of mistrust in the relationship.

Example 1

- G: Also the fact (pause) in some ways it's got a lot to answer for because when they're getting texts at night or anything your thinking - why are they getting texts so you do get quite anxious with things like that - you know 'why's somebody texting you at this time?' but erm you know in other ways it's helped the relationship but it can hinder it as well (see transcript 7 p.3).

Example 2

- K: It's like the sort of trust issue if you're not sure what they might be doing or anything like that then you give them a ring or you text them and like I don't know..
J: It's a check up tool
K: Yea it's the check up tool and it they can be quite damaging if you like over do that - do you know what I mean (see transcript 10 p.6).

Plants (2001) study found that mobile phones can be used as a means of checking up - recipients confessed to checking their partners' mobiles for suspicious messages and calls, whilst one participant in particular ended her relationship because her partner was calling to check upon her too frequently.

Some participants admitted to arguing over text messages and described it as being very frustrating because the text messages limit what can be said. Using text messages to argue assists the recipient's situation to an extent: they are able to construct their message without interruption; say things they may not normally say when face-to-face; and due to the lack of non-verbal cues are able to manage their face and impression in what can be stressful interaction. On the other hand often being able to refer back to 'nasty' text messages can be more hurtful than if someone says the same words. Also the lack of response from a person can indicate that they are not interested in the communication and acts as a form of control.

Example 1

A:and arguing over a text message is lethal
(Laughs)

A: I think

EL: Is that something you've done before now?

A: Yes definitely. Not in the current relationship but definitely in the last one and it definitely contributed to the anguish and the err...(see transcript 1 p.3).

Example 2

H: Yea yea yea but I think that's because it's the one thing that's in your hand. But when your arguing over text message it's so much easier to say what you think because you're not bothered about what the other person's gonna do or say because you can't see them (see transcript 8 p.8).

Example 3

G: ...But even though a text is bad as well because you can re-read that anger. ..you've got a record it seems like taping somebody actually saying that so it can still hurt if you've got that text it still hurts (see transcript 7 p.9).

Section 7.8.2 shows some further examples of people using their phones to argue. The fact that people do argue via text message shows how integrated the phone has become in people's lives as a tool for relationship management. People perhaps argue via text message to avoid the confrontation that exists in face-to-face communication whilst using the asynchronous nature of text messaging to take the time to make their side of the argument clear. By having a text argument people are avoiding direct face management by shielding the anger and frustration they are feeling towards the recipient.

7.7 The Ugly: Ending a relationship via text message

The ubiquity of mobile phones extends to ending a relationship via a text message. Most of the participants agreed that when ending long-term relationships, sending a text message is an inappropriate method of communication. Participants describe it as 'rude' or 'unacceptable'. This implies that there is a level of etiquette which is adhered to when it comes to relationship management and specifically that ending a relationship via text message is not acceptable. Whilst mobile phones can be used for relationship management, a commonly agreed norm is

that they should not be used for ending relationships. This demonstrates that there are some etiquette rules for using mobiles in relationship management.

Example 1

F: I think it's the rudest thing anyone could ever do. If people cannot speak face-to-face if you're gonna end a relationship then there's summat wrong. If you end a relationships via text then ya just rude (see transcript 6 p.8).

Example 2

C: ...I would never do that because I don't think it's fair on somebody to do it via a text (see transcript 3 p.7).

Example 3

J: Unacceptable

K: Oh no there's no back bone in that

J: Completely unacceptable (see transcript 10 p.11).

On the other hand all the participants did know someone, if not themselves, who has been 'dumped' by text message. Upon further investigation around this topic it appeared that the people ending relationships had often been on a small number of dates and were not in serious relationships.

The only time it is deemed acceptable to send a text message of disinterest is if the relationship has consisted of a few dates only. Several of the participants said they would send a text message advising they did not want to go out on another date if they were not interested in developing the relationship. By sending a text message both parties save face since they avoid each other's reaction. The awkwardness which may have resulted from a face-to-face interaction is also avoided.

Example 1

G: No no no no I think after a few dates if you're still you haven't got as far as a proper relationship then that's still acceptable for texts to end it off and say your busy ya know (see transcript 7 p.8).

Example 2

H: Err not really like a proper relationship but somebody who'd been on a date with someone a couple of times and just said 'look I'm not really that bothered about going out again' (see transcript 8 p.8).

Example 3

C: Erm I'd always text somebody back even if it even if I decided I wasn't interested if they text me then I would text them back just something like 'oh I'm not really interested' or something but I'd never just not text somebody (pause) (see transcript 3 p.5).

Example 4

B: Yea I probably would actually. I probably would say something like 'I don't fancy going out' or something or 'I can't make that maybe another time' and that I would hope that would give the impression I wasn't interested (see transcript 2 p.6).

Example 5

E: Erm (pause) well I've had one night stands where I've said actually 'no I'm not that interested sorry' which is about as far as I would go in ending a relationship via a text (see transcript 5 p.6).

The sender only has to send the text message once to convey the message of disinterest and the receiver is left to decide how best to manage their own face with regard to the sender (Goffman 1963). The sender does not have to give a full explanation and the receiver avoids embarrassment. A phone call of this nature could consist of 'awkward silences' (see section 7.6). The level of face management is still high as the phrasing of the text is still taken into consideration. However if the sender expects not to see the other person again, there is more likely to be a lack of obligation towards their feelings.

7.7.1 Summary

There are both positive and negative sides to using text messages to manage and maintain relationships. Whilst the advantages of text messages are listed as faceless, noncommittal, and informal, the disadvantages are that they can be easily misconstrued and open to misinterpretation (Hoflich 2006, Rettie 2006).

The examples in this study suggest that people are consciously aware of the lack of non-verbal cues in text messages. The lack of cues allows people to manage face since some people said that they would text things that they wouldn't normally say face-to-face. Text messages can be

sent as 'thinking of you' signifiers (Rettie 2006) and allow people to feel close even when they are distant (Arnold 2003). People often choose text messages to avoid the 'awkward silences' which can exist in phone communication. Text messages also allow people to take the time to carefully select the message that they want to convey - thus managing their impression and face (Reid and Reid 2004). Even though there is no body language to manage, there is still a level of face management required in order to portray the self within the content of the text message. A text message acts as a record, is a cheaper alternative to calling, and helps to form greater bonds than if no text messages were sent at all (Harper 2003).

On the other hand, according to this study, text messages can be easily misconstrued and are often open to misinterpretation, since there are no non-verbal cues to observe. Senders must be careful about the content of their messages, whilst recipients must be careful in reading their interpretation of them. There can be a level of ambiguity in the content of a text message so recipients may often have to read in between the lines. As there are no non-verbal cues, texters have come to rely on a different set of cues. If too many text messages are sent to one person without a reply, this implies that they are very keen on the person they are texting. Whilst too few text messages implies the sender is not interested, a delayed response or non-response can be a way of communicating in a negative way since it gives the impression of disinterest. The cues become a loose form of etiquette for mobile phone users managing their relationship via text messages.

Many of the participants had heard of, knew someone, or had themselves been 'dumped' by text message. This was attributed to the fact that texts are faceless, but was generally considered as rude and unacceptable. On further investigation it was found that the relationships were not considered to be serious. The only time it was deemed acceptable to end a relationship via a text message was if it consisted of a few dates. In doing this the sender avoids the embarrassment of having to explain their disinterest and the recipient avoids the embarrassment of rejection: both parties are saving face since neither party has to directly disclose their true feelings. The data provides further evidence to suggest that norms of use in text messaging have been established -

especially for relationship management. The set of cues which are used as a substitute for the lack of non-verbal cues have become a form of etiquette for text messaging in relationship management.

7.8 Emotional reactions to mobile phone use

Vincent (2005) and Lasen's (2004) research (see section 3.3) have discussed aspects of emotion and the mobile phone. This topic is explored in the surveys for both Study One and Study Two. The results for Study One suggest that more high users feel excited stressed or annoyed through using their phones. Whilst the results from Study Two indicate that more of the high users than standard users admit to feeling the follow emotions: excitement; happiness; pleasure; content; stress anxiety sadness and annoyance (see section 8.2). Most of the people questioned in the interviews believe that the emotion from sending and receiving text messages differs from the emotion felt during face-to-face communication. Even so, several of the participants described both positive and negative emotions in relation to their mobile phone use and these will be presented in the following section.

7.8.1 Positive emotion

The participants mentioned that there are positive emotions which can be felt when sending and receiving text messages. According to one participant various emotions can occur at once when sending and receiving text messages to a new or potential date. A mixture of emotions are described by the participant in the example below - ones of excitement and anticipation, and also fear and concern at what the content of the text message might say:

Example

- A: Err definitely because when you start seeing someone and you get a text message it's always first it's the anticipation of whether it's them or not and then when it is them it's erm obviously you're quite happy that it is them but then a fleeting element of concern because you've not read it yet and then it's either happy sad mad whatever the content is erm definitely have sort of emotional feelings when receiving text messages on any level to be honest (see transcript 1 p.8).

Other participants mentioned feeling excited when first meeting someone new. Excitement is mentioned in Lasen's 2004 study. In Chapter Eight, the data reveals that 72.3% of 16 - 18

year olds, 77.6% of 19 - 24 year olds and 66.0% of 25 - 34 year olds feel excited during or after using their mobile phone (see section 8.2.1).

Example 1

I: I remember getting excited when he text me (see transcript 9 p.5).

Example 2

C: Yea especially at the beginning of a relationship or something when someone it makes you feel a lot more excited then as it goes along you just sort of expect it anyway so it's not quite as... (see transcript 3 p.5).

Example 3

B: Yea probably excitement just at first you know it is excitement (laughs) if you've just first met somebody and your phone goes it's quite exciting now to be honest and I don't know how many years we've had mobiles for but if my mobile goes I'm excited but if I know if it's someone I quite wanna hear from that's a lot more exciting (see transcript 2 p.10).

Most of the participants admitted to having felt some emotion when sending and receiving text messages. One participant explained this is because 'endorphins' are released and this represents how people can account for emotion.

Example

L: But the good thing about text message is that erm it kinda releases endorphins just for the fact that you don't really know what it means and you basically fantasise in your head what you want (see transcript 11 p.4).

Feeling excitement may be an added incentive for using the phone and staying constantly connected. People may be excited because someone wants to communicate and be in contact with them – they are needed and wanted (Arnold 2003). People enjoy an affective relationship with their phones (Lasen 2004) and this combined with the attachment they feel towards the device (Lasen 2004 Vincent 2005) and towards what the device can offer them in terms of communication means that they are an important tool for building and maintaining relationships.

7.8.2 Negative Emotion

Negative emotions were also described through sending and receiving text messages.

Participants specifically mentioned that they can feel a sense of anger towards the content of the text message, whilst a lack of a response can be annoying. The following examples support Taylor and Harper's (2003) study which found that people can become frustrated by others who do not reply:

Example 1

I: ...but it annoys me when people don't phone when they say they're going to or don't text me back...(see transcript 9 p. 7)

Example 2

I: I'd look forward to getting a text message back and it would annoy me if he didn't message me back... (see transcript 9 p.5)

Example 3

D: I think in some situations - but I couldn't say generally but I think for me - when people say their gonna text me and they don't - that's just my hang up because I really get annoyed with that. I mean it's good to get a nice text message but the emotions are worse when you get a bad text message if you know what I mean (see transcript 4 p.7).

The survey results in Study Two show that mobile phone users feel stress and anxiety during or after using a mobile phone. 75.9% of high users and 62.9% of standard users have felt stress whilst 48.7% of the standard users and 59.8% of high users admitted to feeling anxiety (see section 8.2.6). The interview data found that arguments via text message cause a feeling of anger and frustration to the point where the anger may be taken out on the device itself.

Example 1

H: Yea yea or there's been ones were like say if I was having an argument through text messages I'd just be like just be like 'uuurrrrggghhhh' like throw my phone like across the room so many times because its just annoyed me so much (see transcript 8 p.13).

Example 2

G: No but he has - he actually smashed his phone - the same time I chucked my phone coz we had a really bad argument he actually smashed his phone and all

the front broke off because he slammed it against a wall (laughs) (see transcript 7 p.7).

People describe a sense of frustration if the phone network or the device itself does not work properly and communication cannot be made (Harper 2004). The feelings described in the examples below are similar to those in section 7.2.1 where people describe the feelings they have when they have lost their phone and connectivity is also lost.

Example 1

B: (Breathe out) probably endless. Anything that annoys me I'll just be like (pow!) actually what annoys me is when you try to send a text message and it won't send (see transcript 2 p.11).

Example 2

L: Oh yea I've got very very frustrated with the phone erm this phone in particular (see transcript 11 p.9).

Example 3

F: ... I have hurt the phone a lot because it doesn't work but that's a different story ... Just whack it against a wall or summit when it doesn't work (see transcript 6 p.8).

Feeling angry has caused some of the participants to take their frustration out on their phone. Participants admit to throwing their phone – but only at the sofa or bed so it doesn't break. The moods people feel are passed on to the phone (Hoflich 2006); but some people's attachment to the device protects the phone from actually being damaged.

Example 1

C: Oh yea maybe I think I've slammed it down before but nothing too vicious as long as I don't break it (see transcript 3 p.7).

Example 2

B: Yea and chucking it on the bed - but always be very careful where you chuck it because you don't wanna break it coz then your without your mobile phone aren't you? So you've gotta be careful (see transcript 2 p.11).

Example 3

L: No no no no I've put the phone down and I'd get frustrated but I know that would just annoy me even more if I take it out on my phone physically (see transcript 11 p.9).

7.8.4 Summary

The participants admitted to feeling a range of emotions, when considering their own mobile phone use and a range of emotions are used by the participants to describe their phones. People say they feel excited when sending and receiving text messages - particularly when texting someone new. However people also say they feel anger – usually at the content of text messages. Some people feel frustration at the lack of response via text message. Frustration is also felt when the device itself does not work properly and the phone owner is unable to communicate. Damaging the phone itself shows the extent of this frustration, although some people know that this would mean the lost connectivity so do not take their feelings out on their phones.

7.9 Mobile phones and dating

Dating is a situation where face, impression management, and emotion combine. The following section discusses some of the patterns of mobile phone use when people are dating. The participants were specifically asked questions in relation to using their mobile phones for dating rather than just for relationship management. The mobile phone proves to be a key tool which has an established set of norms and etiquettes for initiating dates and managing the dating process. A key difference in the dating process is that people are often communicating with new people – and specifically with those who they may or may not be interested in romantically.

7.9.1 The waiting dating game

Some participants mentioned the fact that there are some pre-defined rules of dating. Several women participants for instance admitted to waiting for the man to send the first text and/or initiate the date first. This concept is deep rooted in an existing and somewhat traditional social norm: that a woman should wait for a man to initiate any signs of interest. These examples show that traditional social norms are still relevant to the new methods of communication. Whitty and Carr's (2006) work also found that despite the opportunity for gender roles to be transgressed in cyber space, men typically initiated contact with women (Whitty & Carr 2006).

Example 1

- B: Well I'd probably try my hardest to wait for them to text me first
EL: Right
B: But I don't know if that's a boy girl thing like little bit old fashioned you still expect them to (see transcript 2 p.5).

Example 2

- J: I generally wouldn't make a move I would wait for them because it's easier that way
K: Because it's a ladies prerogative eh?
J: Well no it's just because I used to be like that all the time and now I think I'm just fed up of it (see transcript 10 p.10).

Example 3

- G: Err but I've gave my number out freely before when I were dating but I usually give my number out coz then they'd have to call me first because I wouldn't call or initiate it first probably (see transcript 7 p.6).

Although an exception to this 'rule' would be if a person was drunk – then they may send a text first. This links to section 7.4 which shows it is clear that texting whilst drunk (when inhibitions are reduced) can mean a different set of rules are adopted.

Example 1

- H: I'd wait until they texted me..... Unless I'd gone out the next night and got drunk again then I might have texted them (see transcript 8 p.6).

Example 2

- EL: Right ok so you' probably wait to receive a text message before you made any contact
B: Yea - unless I was drunk (laughs) (see transcript 2 p.5).

Example 3

- D: It depends on how drunk I was that night (laughs) Say if I was sober - I wouldn't text the next day probably - it would be a couple of days later - and it definitely would be a text it wouldn't be a phone call
EL: So why would you wait a bit of time?
D: (Pause) I think that's just how it is - you don't want to seem too eager - maybe that's just me - maybe that's just a lad's point of view (pause) (see transcript 4 p.4).

The data indicates that there are several rules that come into play when people are dating.

Firstly, that text messaging is the most obvious choice of medium when initiating contact

with a potential date. The lack of both verbal and non-verbal cues in texting means that there are a different set of cues; for instance the length of time a person waits before sending a text message can indicate how interested they are whilst sending the first text message can also be an indication of interest. These cues must be carefully managed in order to manage face since people do not want to give off the impression that they are too keen.

Two of the participants mentioned that dating rules exist and appeared not to agree with them.

Example 1

I: ...I'm not one of these people who's like I must wait two days and then text him and he must then text me back... I just think after three days if he hasn't text you then he's not going to

EL: Right

I: Unless he's playing the same stupid game (see transcript 9 p.10).

Example 2

A: Having said that I know that's - there's all these stupid rules of dating where ya know 'treat em mean and keep em keen' and all that kinda rubbish and you shouldn't respond too quickly because it says this and it says that and says the other which I think is all utter rubbish so some people yea they would hold off responding and in that case it the content that's more important isn't it? (see transcript 1 p.6).

So the number of text messages sent, and when they are sent, are fairly important signifiers in the 'dating game'. Texting a person immediately after meeting them can indicate that a person is too keen; therefore some people wait a day or two before sending a message. Too many text messages sent to the same person can also have negative connotations. The example below implies that there are various implications for sending a text message to a potential date. It is clear that because there are no non-verbal cues people use the response time and quantity of text messages as cues for indicators of interest (Jones 2004).

Example

K: Yea but it also easier to destroy them because if you come across over keen even if you're not then the person might be like 'whoa' and if you sort of don't like put in enough effort or whatever just into after a first date or after meeting someone and getting on really well or getting someone's number in a club - if you like text them the next morning they might be like 'oh' it's a bit

keen' - or not reply or back off or delete but erm at the same time if you leave it a couple of days or just till the next day they might think 'oh they're not interested' (see transcript 10 p.7).

Despite the various implications sending and receiving text messages have, it was suggested by one participant that relationships can evolve a lot quicker when sending and receiving text messages and this can be due to the consistent level of contact over text message (Geser 2004).

Example 1

A: Erm but definitely from personal experiences in the last couple of years I've had relationships that have erm evolved a lot quicker than they would have done purely down to the level of contact over text message (see transcript1 p.3).

One participant described their phone as a 'tool to protect' since the mobile can be used to monitor how much information and emotion the other person is disclosing and providing into the interaction. Harper (2003) suggests that GSM devices provide a means of both demonstrating and testing out the trust that exists in relationships through meeting the obligations to reciprocate. Harper says:

The mutual dependence that derives from obligations, such as replying to text messages, binds people together, establishing and reinforcing the moral order of friendship and social intimacy' (Harper, 2003 p.23).

Example

A: Yes definitely and I think there's an element of how much you put yourself out there because I think particularly when you've first met someone it's very much about how erm you know your exposing yourself to being hurt or whatever or even just embarrassment but if it's done over text you can gage quite clearly how much they're putting in and how far their prepared to go. And I don't mean anything kinky by that I just mean sort of like with the level of information they're giving or emotion even that they're putting into it so it's easier so it's a bit of a tool to protect yourself really (see transcript 1 p.6).

This implies that a person can hide behind their phone since they can censor how much information they release to the other person and can gauge the level of interest the other

person has by the amount of contact they receive via text message. People are able to read the cues from the messages and act according to their interpretation. Gauging the level of interest through these interactions especially assists people in managing face since they do not have to directly declare their true feelings but can still gain indications of interest.

7.9.2 Initiating dates

The data from the survey in Study Two indicates that 64.9 % of high users and 45.3% of standard users agree that they have arranged 'dates' by using their mobile phone (see section 8.3.6). When initiating a date most participants in the interviews said they would rather send a text message than make a phone call. This according to two participants is because it is easier to ask someone out via text message than it is face-to-face. Both the sender and recipient are able to manage the request without the verbal and nonverbal cues. The requester is shielded from potential rejection and the recipient of the request is shielded from the obligation to agree (see section 7.6).

Example 1

F: So it's easier to say it by a text and if they still reject ya then you know it's not as bad and you can just ignore it and move on (laughs) (see transcript 6 p.4).

Example 2

H: Yea I think it is because well (pause) because boys seem a bit more shy don't they now like before they'd have just come up to you and go 'will ya go out with me?' but now they'll get ya number and they'll flirt with you that way and then they'll ask you out because they're too scared in case ya say no to their face (see transcript 8 p.3).

Example 3

D: Like I say I think it's just a safer option I mean if you - say if you arranged to meet a girl over text and they say no then you can always delete the message and just forget it. Whereas if you went up to a girl and you say 'do you want to go out with me for a few drinks' and they say 'no' then you've got a bit of an awkward an embarrassing situation really (see transcript 4 p.5).

Text messages seem to better facilitate the request for a date since the management of face is more easily conducted. Most of the participants said that it is easier to initiate relationships through sending and receiving text messages compared with face-to-face communication. Reid

and Reid (2004) suggest that this is because text messages offer the detachment necessary to manage self presentation (see section 3.2).

Some of the participants explained that before arranging to meet their date they would have 'texting conversations'. This is where continuous text messaging occurs over several hours.

Participants said they had texting conversations until their first date.

Example 1

- A: Yea we organised a date entirely from texting we hadn't spoken on the phone once. So the entire thing from I mean I asked him but he had asked me but I asked him directly and then right down to agreeing where we were going and what time we were meeting everything over text. So from me seeing him and swapping numbers to us meeting up which admittedly was only probably four days erm it was all text message but we must have exchanged 40 text messages (see transcript 1 p.4).

Example 2

- I: Yea well Danny did - he gave me his number and then he text me and then I text him and we texted for about a week - we never spoke a word to each other (see transcript 9 p.2).

Sometimes 'texting conversations' can make it easier when first meeting up because the dater's learn about each other from the texts they have sent. They can then talk about the texts they have sent when face-to-face. The prior communication conducted by text message can lead to a sense of familiarity.

Example 1

- F: ...It's still a bit nervous when you meet face-to-face but it definitely makes it easier if you've had a bit of contact before (see transcript 6 p.6).

Example 2

- C: Yea I've text someone for a bit and got to know them just through texting and then gone on a date with them... Yea definitely I felt like I knew them a bit better because I'd because I'd got a bit more information about them before I'd met them (see transcript 3 p.3).

Example 3

- B: No I don't actually because when you text someone and you meet them face to face it's just like a whole new ball game all over again. You're just like 'ooooh'

and your nervous aren't you. The only is you can mention things that you've said in text messages and use it as a conversation starter (see transcript 2 p.8).

The survey results also suggest that 63.4% of high users and 45.0% of standard users agreed to the following statement: my mobile phone allows me to text things I would not normally say if I was face-to-face with a person. Related to this, two participants in the interviews stated that they would be more inclined to flirt via text message.

Example 1

J: You can just totally flirt in a text message in a way that is so like there's no immediate consequence to your flirting - they either respond or they don't and that's why it's useful (see transcript 10 p.8).

Example 2

G: Not really I usually phone them up. Erm I've flirted with people at like the start with texts things that I wouldn't actually say sort of like 'oh god yea aren't you cute' I wouldn't say thing on the phone... (see transcript 7 p.3).

One participant said that greater bonds are formed through sending and receiving text messages because they help to create continuous communication which cannot be gained from face-to-face contact which supports Rettie (2006).

Example

B: Erm (pause) yea I think it does because face-to-face contact can't be kept up 24/7 whereas text messaging can (see transcript 2 p.7).

7.9.3 Developing relationships

Most of the participants agreed that the phone is an important tool in managing and maintaining and developing relationships (Reid and Reid 2004, Lasen 2004). The results from the survey in Study Two revealed that 49.1% of high users and 27.7% of standard users agreed that in the past they have used their mobile phone to initiate a relationship. The examples below show the importance of the phone as a tool for managing relationships.

Example 1

A:I mean I wouldn't be in the current relationship that I'm in if it hadn't been for the amount of texting we did initially because it was a friendship in the beginning (see transcript 1 p.4).

Example 2

D: I think its critical now really

EL: Critical?

D: Yea I think arranging social plans - I don't know if it's the same for you but me and my Uni mates we just have a lot of banter coz obviously lads don't text as much as girls - or you think - don't know if you've found something different - but yea when you go out on a night out if you can't ring people you can text people - and I think it's critical to keep in touch with people (see transcript 4 p.2).

Example 3

G: Yea in my last relationship it played a huge part erm only coz we kept in contact like - if he's been working and I was working - by text messaging each other and that kept that goin and if he was out he could text me discreetly erm which that played a huge part coz if he didn't I'd be like why's he not text then? (see transcript 7 p.3).

Sending and receiving text messages allows people to feel connected since they are exchanging communication. The act of gifting (Taylor and Harper 2003) which occurs helps people to form bonds which make them feel closer (Harper 2003; Geser 2004). This together with the excitement people feel when sending and receiving text messages means that phone communication is pleasurable for the user. They are gaining emotion, connectivity whilst developing contact with a potential date, and potentially new partner.

Although the phone has advantages and disadvantages when it comes to the initial stages of managing personal relationships; it cannot be the only mode of communication. Some participants believe that people should engage in verbal communication and face-to-face communication along side mediated interaction.

Example 1

G: Erm in ways yea but erm I think only really phones and texts should be used once you've started dating but before that it should be face-to-face or over the phone - you know being able to talk to somebody is quite important and keep that kinda physical or contact whether it's your voice or your face (see transcript 7 p.3).

Example 2

K: Yea sometimes it yea takes over and replaces conversation to an extent

J: Yea it does and I hate that I'd much rather just ya know - but then it's easier to say certain things via text (see transcript 10 p.5).

7.9.4 Meeting new people

Vincent (2005) suggests that people tend not to make new friends via the mobile phone (see section 3.3). This research suggests that people do use their phone when making new contacts, or to develop communication with new people. The norms of sending and receiving text messages apply. When some of the participants meet a new person they are interested in dating, they would usually send one or two text messages to initiate communication. But if they do not receive a reply, then they won't continue to call or text.

Example 1

F: I'd drop them a text but I wouldn't start phoning and badgering them because then you become a bunny boiler (laughs) (see transcript 6 p.5)

Example 2

C: (pause) erm (pause) I wouldn't do anything - I'd be annoyed at the time but I wouldn't carry on - if I didn't get anything back I wouldn't do anything - I'd just leave it (see transcript 3 p.5).

Participants said they would assume that the other person wasn't interested if they did not text back. This shows that the lack of response is taken to signify the other person is not interested.

Example 1

E: (pause) I mean I met someone at New Year that I quite liked and he didn't respond to my texts so I did phone and leave a message but then I gave up (see transcript 5 p.3).

Example 2

D: I don't know - I'd probably just leave it just not bother texting back

EL: So you wouldn't pursue any further?

D: No I can take a hint - if they're not texting me back (pause) (see transcript 4 p.4).

Example 3

B: No I don't think so. Not if they didn't reply because I'd just assume they weren't interested (see transcript 2 p.5).

Several participants admitted that if they didn't get a text message reply from a potential new date then they would make excuses for the other person's lack of contact; the person could have lost their phone; or their own phone may not be receiving texts (see Example 3 below).

Example 1

E: Coz initially I thought well he could have lost his phone

EL: Umm

E: But I rang it and it wasn't disconnected or... so I sort of thought ok this guy's still got his phone (see transcript 5 p.3).

Example 2

B: Obviously I'd go through the 'oh they must have lost their phone' thing (laughs) (see transcript 2 p.5).

Example 3

A: And something else I've done as well is if I'm expecting a text message and it's not arrived I'll turn my phone off and turn it back on coz ya know it might be my phone - my phone might be broken (laughs) And then I've even I'll get my friend to send me a text message ya know 'I'm not getting text messages - will you send me a text message' So you'll get a text message and their text message will come through and you'll be like oh right actually they're just not texting me - it's got nothing to do with my phone (laughs) (see transcript 1 p.9).

The examples imply that people are attempting to rationalise the rejection of not receiving a reply. This is a form of face management. Making excuses for a lack of contact helps people to shield themselves from rejection – they hope that it is a problem with the phone's function and not with themselves. In doing this they protect themselves from negative response. The lack of cues leaves them suspended until they decide that a non-response is a cue for disinterest.

On the other hand most of the participants said they would be 'put off' by someone who sent them several text messages without receiving a reply. Texting on multiple occasions without a response could lead people to think that the texter's behaviour was too keen. This relates to the norms of mobile phone use for managing relationships; certain cues have implications and people must be very careful about the cues they emit.

Example

D: (Pause) Erm (pause) ...but maybe that she's a little bit desperate (see transcript 4 p.4).

7.9.5 Summary

Participants mentioned that there are some predefined rules of dating - especially when using the mobile phone. For example several of female participants admitted to waiting for the male to initiate the communication showing that deep rooted existing norms and values are still applicable to mobile phone use today. An exception to the 'waiting game' is when a person is drunk. As previously mentioned - there are some signifiers which are taken into consideration when text messaging and this is due to the lack of non-verbal cues. The number of texts sent and when they are sent are important signifiers in the 'dating game'. For instance texting a person immediately after meeting them can indicate a person is too keen. But people can also protect themselves through using their phone as a part of the initial dating stage since they can monitor how much information and communication the other person is offering.

More of the participants said they would prefer to text over call when initiating a date. The requester is shielded from potential rejection and the recipient of the request is shielded from the obligation to accept a request. Rettie's (2006) research suggests it is less embarrassing to send a text message than it is to say something in person. This is because the recipients do not have to manage face-to-face interactions. Some participants even admitted that they had previously started texting conversations before going on an initial date and this can lead to a certain sense of familiarity. A greater bond can be formed since text messages help to create continuous communication (Rettie 2006).

When exchanging numbers with new people and initiating contact, several people said if they did not get a response, it would imply that the other person is not interested: the lack of response acts a signifier. Most people said they would be 'put off' by someone who sent them several text messages without receiving a reply since this would be perceived as desperate.

7.10 Conclusion

This chapter has presented six key themes within the data from eleven interviews. Goffman's (1959, 1963) concepts of face management and impression management can be applied to how people do the work of face and relationship management via their mobile phone.

The data concerning the attachment of the phone supports Vincent's (2005) research: the participants were more attached to the phone's content and what it can do for them in terms of communication than to the actual device itself. What the device can do in terms of communication and connectivity makes people feel a sense of attachment. Losing the phone means losing the phone's content and the connectivity it provides and this can cause people to feel distressed. The feelings of sadness, anger and annoyance described by the participants at the loss of their phone further supports the fact that people feel an attachment to their phones.

The constant connectivity people gain from their mobile phone means that they are communicating with others in different social contexts. In particular the research has shown that drunken mobile phone use is a common occurrence amongst young people. The constant connectivity, loss of inhibitions, and the advantages of sending text messages makes it easier for people to text things they wouldn't normally say. However people often end up having to compensate for their drunken phone use the next day by apologising if they are to restore the balance of their impression and their face.

The interview data also found that people manipulate the mobile phone's functions in order to manage face by pretending to text a person accidentally. Often people do this so that they can disclose information without it appearing intentional. If people send a text message accidentally and the sender realises their mistake, they must make a judgement on how best to manage the situation, their face, and the relationship with the recipient.

Harper (2003) says that texting is a social action that gives the participants a sense of something that is greater than themselves, and whilst this may be true (since people feel excited by the texting communication) it is simply another medium of communication which people have

adopted in order to develop and maintain relationships. Taylor and Harper (2003) suggest that mobile phones provide people with new ways to perform old rituals and the data in this study supports this claim. However it shows that existing social norms are adapted to private mobile phone use for the management of personal relationships.

As well as managing their communication face-to-face, people are choosing to manage some of their relationships via their mobile phone. Vincent (2005) suggests that the mobile phone has not replaced what people do but rather it has made life easier for them. The data in this study supports Vincent's point: text messages particularly allow people time to manage their impression and face. On the other hand, whilst it is easier to initiate communication via text messages (Rettie 2006), it is harder to interpret the content of people's messages. This is because there are no non-verbal cues in text messaging, so people must rely on a different set of cues and signifiers to interpret the meaning of the message. For instance the response time of a message becomes a signal: an immediate response can signify a level of interest whilst no reply or a late reply can signify the opposite.

The data presented in this chapter suggests that the mobile phone provides people with another method for managing their communication and relationships. A key difference in this method is with the set of cues that have been developed and are in use as signifiers which compensate for the lack of non-verbal cues. The participants in this research imply that they are aware that they must be careful about how they want to portray themselves in the content of the messages and this implies that text messaging is bound up in face management.

People are making and breaking relationships via their phones (Harper 2004, Hoflich 2006) and this study has found that people are using their mobile phones in various relationships contexts - even to the point where the mobile phone is a key tool for developing new relationships. The data in this chapter suggests that phones are an important element in building and maintaining groups and communities and this supports Harper (2003) Lasen (2004), Geser (2004), and Hoflich's (2006) work.

8 Data Analysis questionnaire mobile phones in private interactions

Mobile phones are not only an extension of the owner's presence, but they also allow the virtual presence of those linked to us by phone communication. Thus, they become an important element in the building and maintaining of groups and communities (Lasen 2004, p.1).

8.1 Introduction

This chapter will provide an analysis of the data collected from the survey for Study Two. Similarly to Chapter Six, the data analysis consists of Cross Tabulation and Chi Square tests. A cross tabulation analysis has been conducted on the data because it is the most effective on nominal data. It is also the main type of statistical analysis which can be performed on nominal data. Chi Square tests have also been carried out in order to identify significant results. Significant results are those shown with a result of $P < 0.50$ or below. Results reading over this number are not significant. Where there are two variables in the analysis, Fisher Tests will be conducted. These are the only tests which can be used to measure significance on two categorical variables. Where there are only two variables a Chi-Squared test is not suitable for the analysis, because the number of degrees of freedom is always one in a 2×2 contingency table. Significant Fisher test results will be presented in the following chapter where applicable. As mentioned in section 6.1 - this method of analysis was the only type available at the time of the study due to training related issues. Whilst it may be a limitation of the study, future analysis will be conducted using different statistical methods.

Each section will include an analysis (where necessary) of three categories: age, gender and user type. Specifically, user type has been defined between high and standard users. To do this, the distribution of responses to the level of mobile phone use questions was analysed and then, re-categorised into scores. The number of texts sent and received, and the number of telephone calls made and received, were split into categories. Of these categories, three scores were

calculated to provide a measure of text use, phone use and total phone use. Then the distribution of the total use was analysed. Any results which scored eight or under defined a standard user and results scoring nine or above defined a high user.

The participant's ages are split into eight categories: 16-18 years; 19-24 years; 25-34 years; 35-44 years; 45-54 years; 55-64 years 65-74 years and 75+years. Categorising age allows for comparisons to be made between younger and older age groups and also allows for the cross tabulations to be conducted. An analysis of gender is also relevant so that patterns between men and women's use can be defined. The results for each question will be presented according to whether they are significant in the Chi Square test.

This chapter is split into four sections: Section 8.1 presents data concerning emotion and the mobile phone; section 8.2 focuses on the questions relating to relationships and mobile phone use; Section 8.3 relates to socio-emotional contexts and the mobile phone whilst section 8.4 provides a conclusion.

This chapter will show that there are four key issues concerning people's use of the mobile phone for managing personal relationships:

- Mobile phones are affective devices for relationship management.
- Mobile phones are affective devices for mediating emotion therefore it is difficult for the user not to feel both positive and negative emotions before during or after using a mobile phone for communication.
- Face management is prevalent when people are using their phones to manage relationships.
- Etiquette and existing social norms also impact upon the mobile interactions in relationship management.

The full data set of cross tabulations and Chi Square tests for age, gender and user type can be found in the extended appendix (see attached).

8.2 Emotion and the mobile phone

Emotion and the mobile phone is a key topic for considering people's private use of the mobile phone. Lasen (2004) and Vincent (2005) in particular highlight that the mobile phone is strongly connected to emotion. The results in the following section look at the types of positive and negative emotion that people associate with their mobile phones.

According to Lasen (2004) mobile phones have become affective technologies. They are '*objects which mediate the expression, display, experience and communication of feelings and emotions*' (Lasen 2004 p.1). The data within the survey addresses the different types of emotions that phone users may feel whilst emotion and the mobile phone is discussed by participants within the interview data (see section 7.8). The participants were asked to define which emotions they had felt during or after using a mobile phone including four 'positive' emotions: excitement; happiness; pleasure; contentment; and four 'negative' emotions: stress; anxiety; sadness and annoyance. The following section will analyse each of the emotions in relation to the age, gender and user type categories where relevant.

8.2.1 Excitement

The Chi Square test indicates that there is a significant difference ($P < .000$) between men and women for feeling excitement during or after using the mobile phone. 60.1% of the men and 56.5% of the women questioned said they feel excited. This result indicates that more men admit to feeling excitement during or after using a mobile phone.

	Yes	No	Don't Know
Male	60.1%	35.1%	4.8%
Female	56.5%	39.2%	4.3%

Table 8.1 Gender and Excitement

The Chi Square test for age is significant ($P < .000$). Table 8.2 shows that more of the people in the younger age groups admit to feeling excited during or after using their phone. The

participants within the interviews said they especially feel excited when they are texting someone new or if they receive a text from someone they are waiting to hear from (see section 7.8.2).

	Yes	No	Don't Know
16-18 yrs	72.3%	22.3%	5.3%
19-24 yrs	77.6%	18.8%	3.7%
25-34 yrs	66.0%	28.7%	5.3%
35-44 yrs	53.4%	44.1%	2.5%
45-54 yrs	31.9%	61.3%	6.7%
55-64 yrs	28.6%	68.6%	2.9%
65-74yrs	12.8%	76.8%	10.3%
75 + yrs	10.0%	90.0%	0.0%

Table 8.2 Age and Excitement

51.0% of standard users and 71.6% of high users agreed to feeling excited and the Chi Square test is significant ($P < .000$). Feeling excitement may contribute and even motivate high use.

8.2.2 Happiness

In relation to feeling happy, the Chi Square test for gender is not significant ($P < .885$). There is little difference between men and women's experience of happiness when using their mobile phone, with 79.7% of men and 79.0% of women admitting that they do feel happy during or after using their phone.

However the Chi Square test for age is significant ($P < .000$) indicating that more people in the younger categories admit to feeling happiness during or after using their phones.

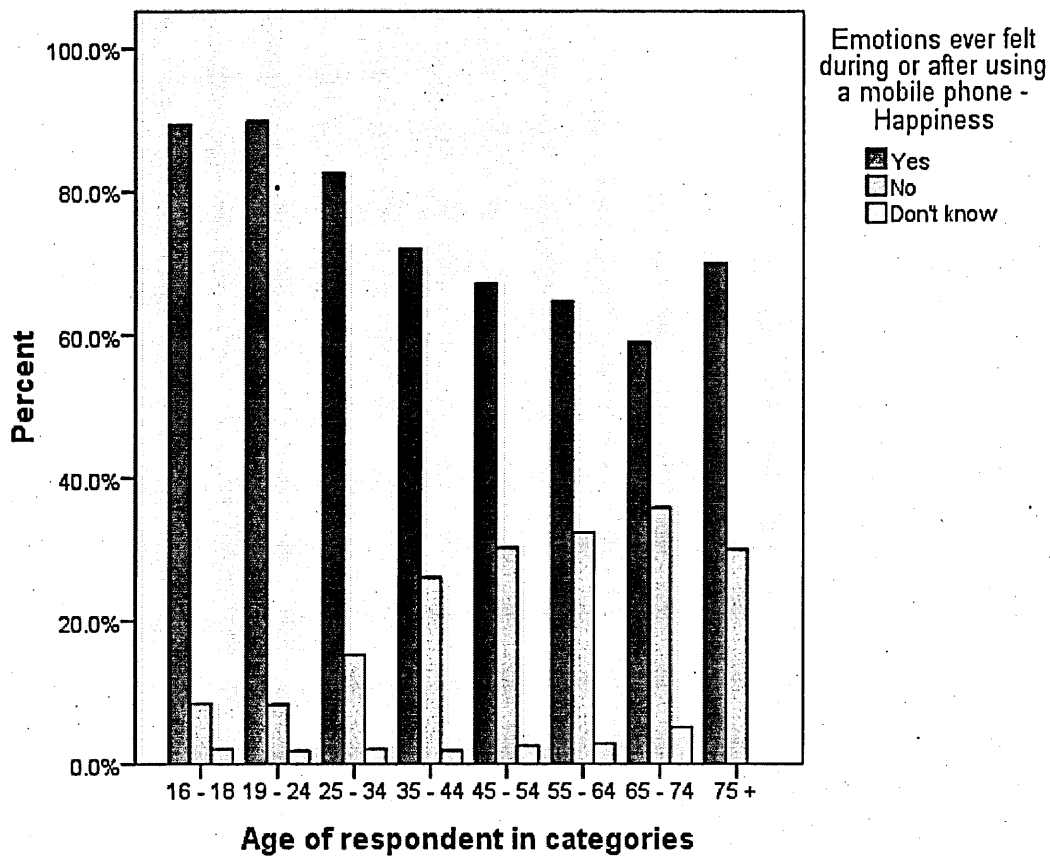


Figure 8.1 Age and Happiness

The results also indicate that 86.0% of high users compared with 75.7% of standard users feel happiness. The Chi Square test is significant ($P < .000$). The excitement and happiness people feel may be towards what the device can do for them in terms of contact but also in terms of mediated content (Vincent 2005). Also being in constant connectivity may make people feel happy.

8.2.3 Pleasure

Katz (2004) suggests it is inherently pleasurable to contact others using a mobile phone. The results for feeling pleasure during or after using a mobile phone, indicate are significant for age, and user type. There is no gender difference ($P < .822$) with 64.1% of the men and 65.1% of the women feeling pleasure.

The Chi Square test for age was significant ($P < .035$). More people in the 25 - 34 year old group and also 35 - 44 year old group admit to feeling pleasure. The age categories for 65- 74 and 75+ years show high percentages however there are less people over all in these categories.

	Yes	No	Don't Know
16-18 yrs	59.1%	32.3%	8.6%
19-24 yrs	68.0%	24.3%	7.7%
25-34 yrs	68.6%	25.0%	6.4%
35-44 yrs	66.5%	31.6%	1.9%
45-54 yrs	56.3%	40.3%	3.4%
55-64 yrs	56.3%	36.6%	7.0%
65-74yrs	69.2%	23.1%	7.7%
75 + yrs	80.0%	10.0%	1.0%

Table 8.3 Age and Pleasure

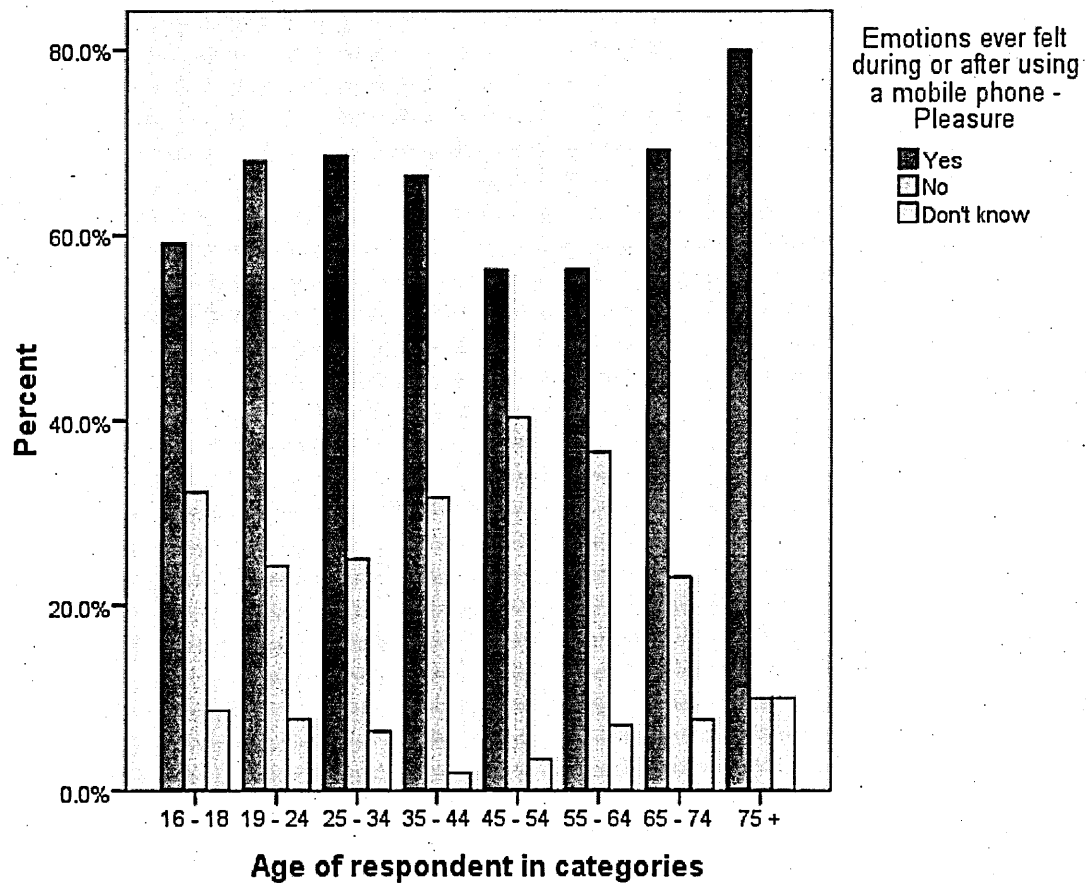


Figure 8.2 Age and Pleasure

In relation to user type, high users experience more pleasure than standard users with 70.3% of high users and 62.3% of standard users experiencing pleasure. The Chi Square test is also significant ($P < .016$).

	Yes	No	Don't Know
Standard User	62.3%	30.6%	7.1%
High User	70.3%	25.8%	3.9%

Table 8.4 User type and Pleasure

8.2.4 Contentment

There is no significant Chi Square result ($P < .269$) for contentment and gender. 60.6% of the men and 65.2% of the women admitted to feeling content.

The Chi Square test for age ($P < .002$) is significant. Table 8.5 shows that people in the younger age categories feel more contentment during or after using their mobile phones and the 19 - 24 year old category has the highest percentage of people who feel contentment (71.2%).

	Yes	No	Don't Know
16-18	66.3%	23.9%	9.8%
19-24	71.2%	19.6%	9.2%
25-34	61.6%	28.4%	10.0%
35-44	68.2%	27.4%	4.5%
45-54	51.3%	42.9%	5.9%
55-64	53.5%	35.2%	11.3%
65-74	51.3%	35.9%	12.8%
75+	50.0%	40.0%	10.0%

Table 8.5 Age and Contentment

The Chi Square test for user type was significant ($P < .000$). 72.3% of high users compared with 59.2% of standard users feel contentment.

Overall more people agree that they feel pleasure than contentment than the other emotions further supporting Katz (2004) argument - humans find communicating with others inherently pleasurable. This set of results indicates that generally more high users associate positive emotions during or after using their mobile phones. High users either perceive their mobile phone and its use more positively than standard users, or associate their phone use with the positive emotions. Feeling positive emotions towards what the phone can offer them in terms of

communication and connectivity may motivate the high users to keep using their phones - especially since they gain, pleasure, contentment, happiness and excitement from the mediation the device brings.

8.2.5 Stress

For young people, the phone may be used in a range different socio-emotional contexts e.g. arguments with friends or partners; or conversations for work purposes that cause them to feel stress. A significant Chi Square result ($P < .000$) was revealed in the analysis of age and stress. Whilst 72.3% of 16 - 18 year olds and 80.8% of 19 - 24 year olds feel stress during, or after using their mobile phone, only 17.9% of 65 - 74 year olds and 20.0% of 75+ year olds admit to feeling stress. More of the people in the younger age groups admit to feeling stress during or after using a mobile phone.

	Yes	No	Don't Know
16-18	72.3%	26.6%	1.1%
19-24	80.8%	16.7%	2.5%
25-34	71.6%	26.3%	2.1%
35-44	59.4%	38.1%	2.5%
45-54	65.8%	31.7%	2.5%
55-64	52.1%	45.1%	2.8%
65-74	17.9%	79.5%	2.6%
75+	20.0%	80.0%	0.0%

Table 8.6 Age and Stress

The results indicate that high users are more likely to feel stress. 75.9% of high users and 62.9% of standard users feel stress and the Chi Square test is significant ($P < .000$). High users communicate via the mobile phone in a range of socio-emotional contexts. Several factors may cause mobile phone user's to become stressed: the constant connectivity, technical problems resulting in a lack of connectivity; emotional content of a text message; and lack of non-verbal cues.

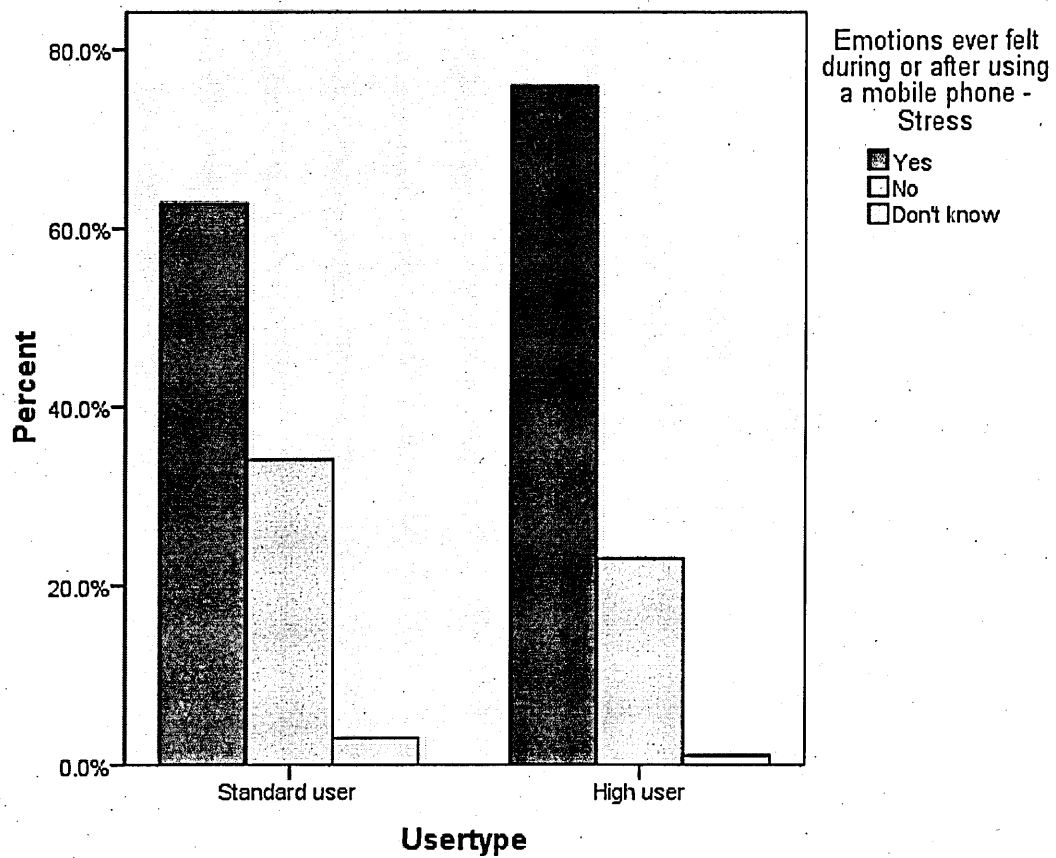


Figure 8.3 User type and Stress

There was no significant Chi Square result for gender and stress ($P < .297$) 70.3% of the men and 65.5% of the women admitted to feeling stress before or after using their mobile phone.

8.2.6 Anxiety

More men (55.5%) admit to feeling anxiety than women (50.1%) and the Chi Square test is significant ($P < .047$).

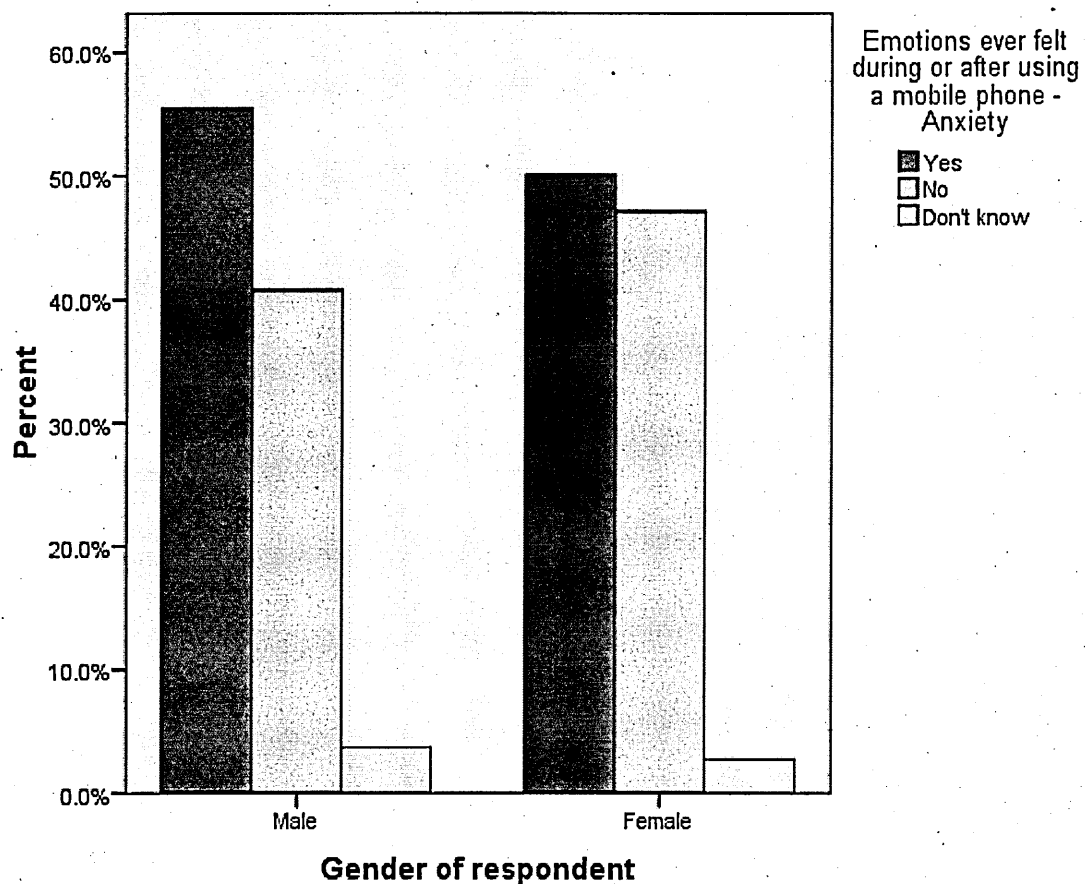


Figure 8.4 Gender and Anxiety

The Chi Square test for age and anxiety is also significant ($P < .000$). More of the people in the younger categories agreed to feeling anxiety: 63.4% of the 16 - 18 years olds and 55.3% of the 19 - 24 year olds compared with 17.9% of 65 - 74 year olds and 20.0% of 75+ year olds who admit to feeling anxiety during or after using their mobile phone. Socially co-ordinating and managing relationships via the mobile phone may cause young people to feel anxiety. Alternatively Study One's issues of managing the remote and co-local contacts simultaneously may cause users to feel anxiety.

	Yes	No	Don't Know
16-18	63.4%	34.4%	2.2%
19-24	55.3%	39.9%	4.8%
25-34	61.2%	35.6%	3.2%
35-44	50.3%	48.4%	1.2%

45-54	46.7%	51.7%	1.7%
55-64	39.4%	54.9%	5.6%
65-74	17.9%	79.5%	2.6%
75+	20.0%	80.0%	0.0%

Table 8.7 Age and Anxiety

Figure 8.5 shows the results for standard and high users in relation to anxiety. 48.7% of the standard users and 59.8% of high users admit to feeling anxiety. The Chi Square test for this result is significant ($P < .003$).

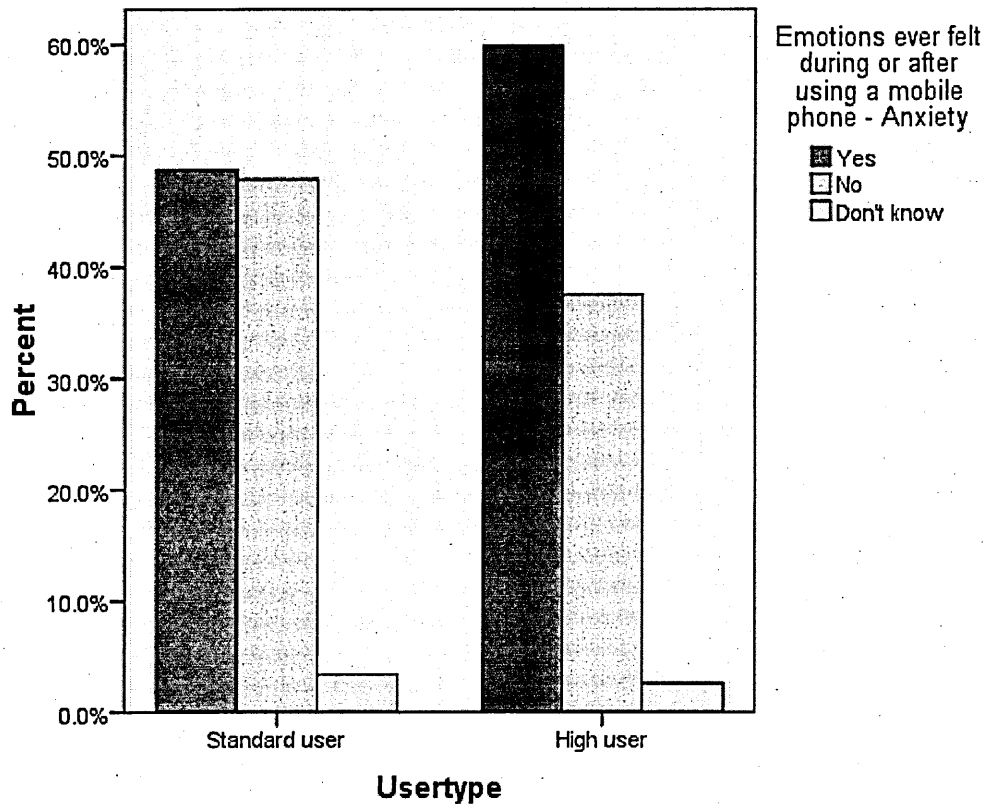


Figure 8.5 User type and Anxiety

The overall number of participants who associate their phone use with stress is higher than those who admitted to feeling anxiety: 62.9% of standard users felt stress compared with 48.7% of standard users for anxiety and 75.9% of high users feel stress compared with 59.8% of high users for anxiety. Anxiety may also rise from the issues of face management, or relationship management.

8.2.7 Sadness

More men than women admit to feeling sad: 54.4% of the men and 46.3% of the women questioned admitted to feeling sadness and the Chi Square test is significant ($P < .047$).

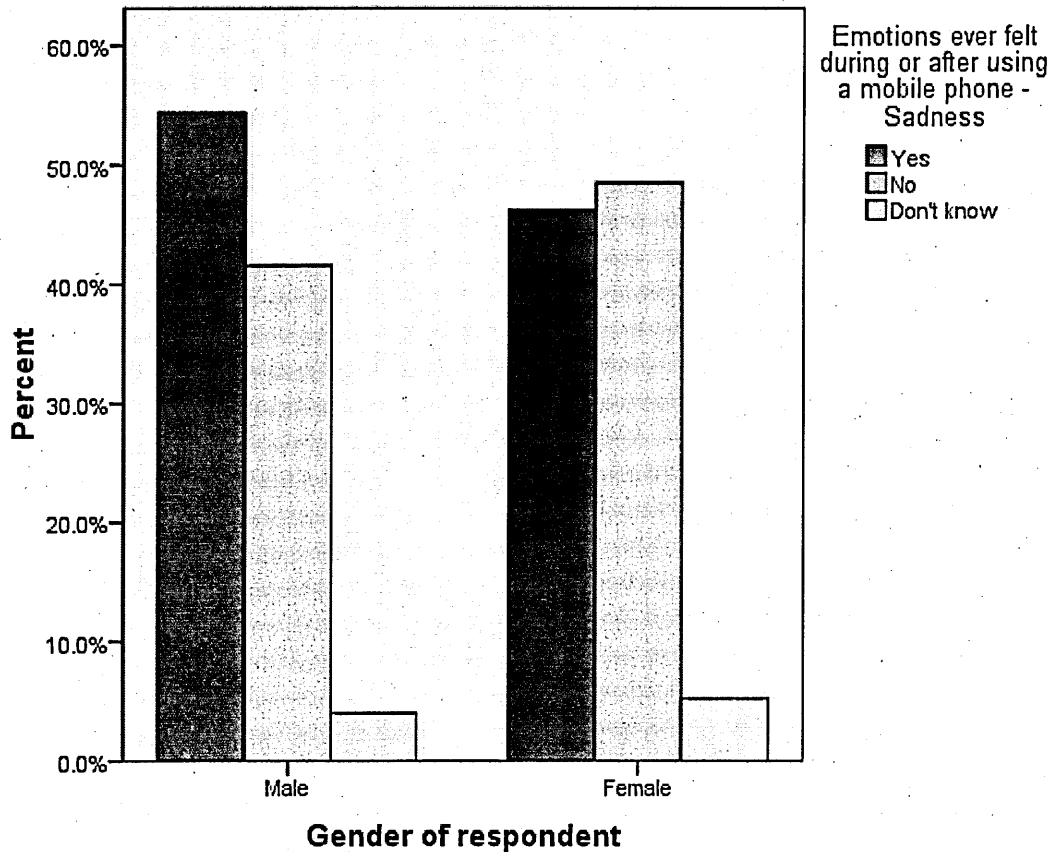


Figure 8.6 A graph to show Gender and Sadness

More of the participants in the younger age categories admitted to feeling sad compared with the older age categories. 61.7% of 19-24 year olds compared with 23.1% of 65-74 year olds feel sad. The Chi Square test is significant ($P < .000$).

	Yes	No	Don't Know
16-18	61.7%	33.0%	5.3%
19-24	63.9%	32.8%	3.3%
25-34	52.4%	41.2%	6.4%
35-44	41.1%	53.8%	5.1%
45-54	39.5%	55.5%	5.0%

55-64	22.9%	71.4%	5.7%
65-74	23.1%	74.4%	2.6%
75+	20.0%	80.0%	0.0%

Table 8.8 Age and Sadness

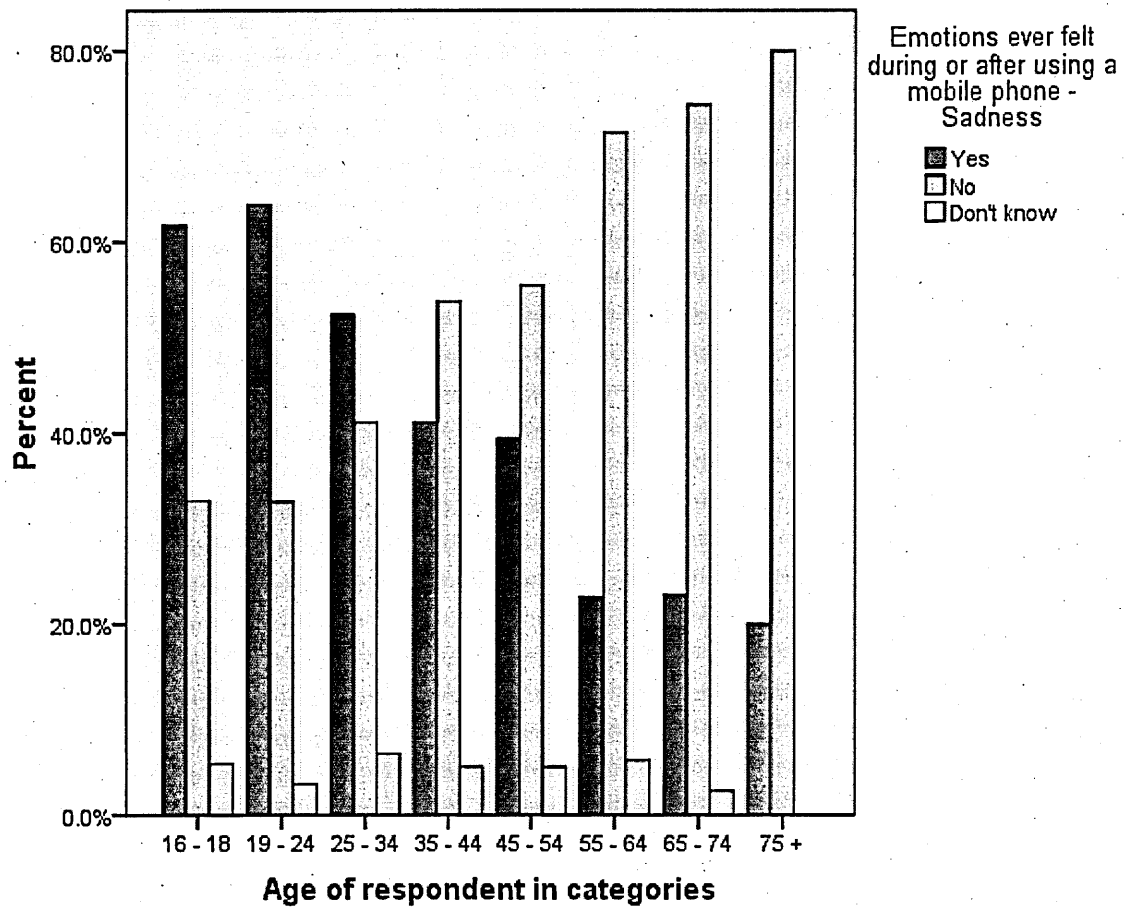


Figure 8.7 Age and Sadness

The results also indicate that 41.8% of standard users and 63.9% of high users admit to feeling sadness before or after using their mobile phone and the Chi Square test is significant ($P < .000$). Due to the familiarity of using the device for relationship management, high users may find it easier to convey their feelings via the phone. The management of relationships via the phone (see section 7.6) may also result in the phone user feeling sad e.g. when not receiving a response from a text message from a potential date.

8.2.8 Annoyance

The overall percentages for annoyance are higher than the other 'negative' emotions suggesting the participant's associate annoyance more readily with mobile phone use. Section 7.8.2 shows that the interview participants described a range of negative emotions and even described how they argued via SMS. The interview data shows several examples of people who described feeling annoyed by a lack of text message response or by having text message arguments. The results for gender show that there is no gender difference when it comes to feeling annoyance: the Chi Square test for gender is not significant ($P < .128$). 79.7% of the men and 74.3% of the women feel annoyed.

The Chi Square test for age is significant ($P < .000$): more people in the younger age categories feel annoyed during or after using their mobile phone. The data in Chapter Six suggests that people become annoyed when they have to wait for a text message response or even gain no response at all. Taylor and Harper (2003) suggest that the lack of reciprocation weakens the trust between two phone users and a non-response can lead to feeling rejected. Section 7.8.2 also highlights that people can feel annoyed when the network or device fails and this issue is highlighted in Harper's (2004) work.

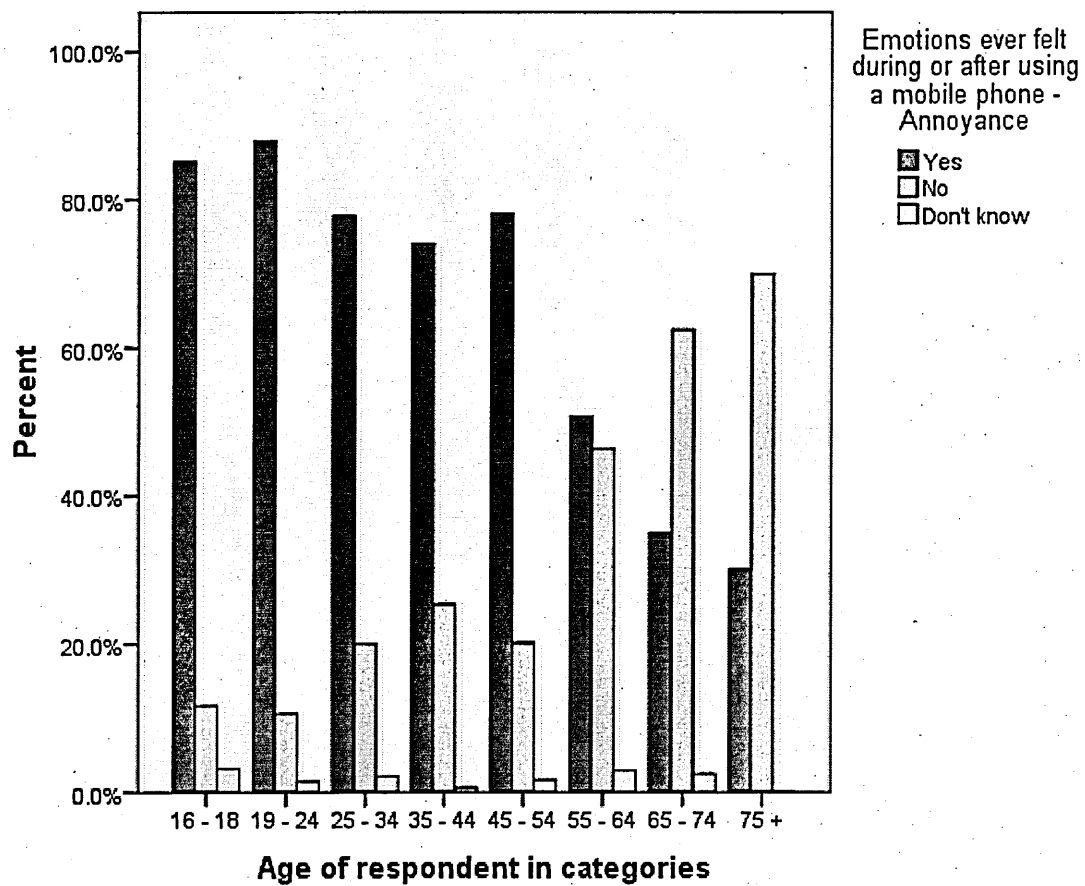


Figure 8.8 Age and Annoyance

71.0% of standard users and 86.2% of high users admit to experiencing annoyance. This indicates a significant Chi Square test result ($P < .000$).

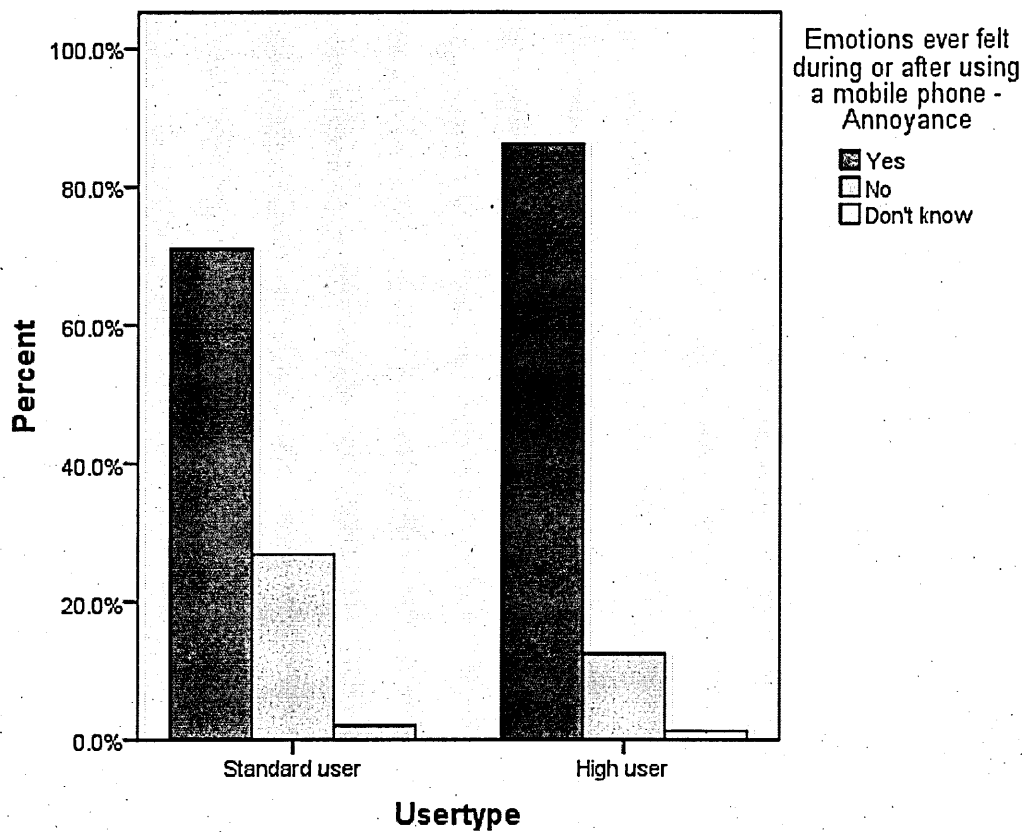


Figure 8.9 User type and Annoyance

Annoyance may be caused by being in constant connectivity (Arnold 2003, Geser 2004, Hoflich 2006). Arnold (2003) explains that although the mobile phone provides people with a sense of independence they are also tied to the demands of (remote) people wanting to be in contact. For high users being the recipient of frequent communication may be at times, annoying.

8.2.9 Summary

Overall, the results for the questions relating to emotion and the mobile phone show that the mobile phone is an affective device for mediating emotion. The results also indicate that more of the younger users and high users associate their mobile phone use with emotion. This supports the work of Lasen (2004) and Harper (2004) and Vincent (2005): that the mobile phone is closely connected to emotion.

The results for the positive emotions indicate that for age, there are higher percentages for feeling happiness followed by excitement, pleasure and contentment. The results for age and the

negative emotions indicate that the percentages were highest for annoyance, followed by stress anxiety and sadness.

The mobile phone is bound up in emotional value for the users and equally is an affective device for mediating emotion; therefore it is easy for people to associate their mobile phones with the various positive and negative emotions.

8.3 Relationships and the mobile phone

Using a mobile phone to manage relationships is a key issue within Study Two. The following section shows that the mobile phone can be used as a tool for relationship management. In doing so, the user is still performing a large amount of face management; it is just through a different communicative context. The previous section has shown that the mobile phone is an effective device for mediating emotions and this section builds upon this by showing general patterns of use. General questions about texting and phoning partners, as well as questions linking to the emotion of sending and receiving text messages and calls from partners are analysed.

73.6% of standard users and 65.9% of high users agreed that they were in a relationship at the time of participating in the survey. 64.7% of the men and 74.4% of the women within this survey are in relationships. The data also reveals that more people in the older age categories are in relationships.

	Yes	No
16-18	41.4%	58.6%
19-24	56.5%	43.5%
25-34	78.8%	21.2%
35-44	86.0%	14.0%
45-54	89.1%	10.9%
55-64	74.1%	25.9%
65-74	73.3%	26.7%
75+	58.3%	41.7%

Table 8.9 Age and Relationships

The people who agreed that they were in a relationship at the time of participating in the survey answered a set of questions linking to their mobile phone habits in relation to their relationship. For some of the questions - the participants were asked to agree or disagree with a set of statements - these results will also be presented and discussed below.

8.3.1 On an average day, how many times do you text your partner?

The results indicate that high users are more likely to send more texts to their partners. The Chi Square test for user type ($P < .000$) is significant. People who are in relationships who are also classed as high users may be continually texting and calling their partners throughout the day - rather than or as well as contacting a social network of friends (Reid and Reid 2004, Rettie 2006). The continuous contact intermittently throughout the day may give people a sense of constant connectivity, reassurance and security (Geser 2004, Hoflich 2006). Continuous contact allows people to be both independent and co-dependent simultaneously (Arnold 2003).

The results also indicate that younger people believe they send more texts to their partner on an average day. The Chi Square test for age is significant ($P < .000$).

	Less than one	1-2	3-4	5-6	7-8	9-10	Do not text
16-18	3.4%	13.8%	20.7%	27.6%	3.4%	31.0%	0.0%
19-24	8.4%	21.0%	27.3%	19.6%	7.0%	13.3%	3.5%
25-34	27.3%	40.0%	14.0%	8.0%	2.0%	2.7%	6.0%
35-44	38.2%	31.6%	7.4%	5.1%	0.7%	0.7%	16.2%
45-54	46.4%	17.5%	4.1%	5.2%	0.0%	0.0%	26.8%
55-64	46.6%	6.9%	0.0%	0.0%	0.0%	0.0%	46.6%
65-74	32.3%	9.7%	0.0%	0.0%	0.0%	0.0%	58.1%
75+	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	85.7%

Table 8.10 Age and texting partner

This result indicates that younger people in relationships believe that they are communicating with their partners more often than people in the older age groups. Since phone use is more prolific in young users this seems to be an obvious finding. However it implies that the norms linked to younger people's mobile phone use in relationships may differ. Some young phone

users are in continuous connectivity with their partner throughout the day - sending up to ten text messages per day. Younger phone users may gain a sense of reassurance from the continuous communication. They are able to feel socially connected even when they are physically apart (Arnold 2003). Further more young users may become dependent upon continuous communication to feel secure in their relationship.

There was no gender difference in relation to this question and the Chi Square test was not significant ($P < .610$).

8.3.2 On an average day, how many phone calls do you make to your partner?

The results for this question are similar to the results for the number of text messages sent.

Young people admit to calling their partners more often than people in the older age groups and the Chi Square test for age is significant ($P < .001$).

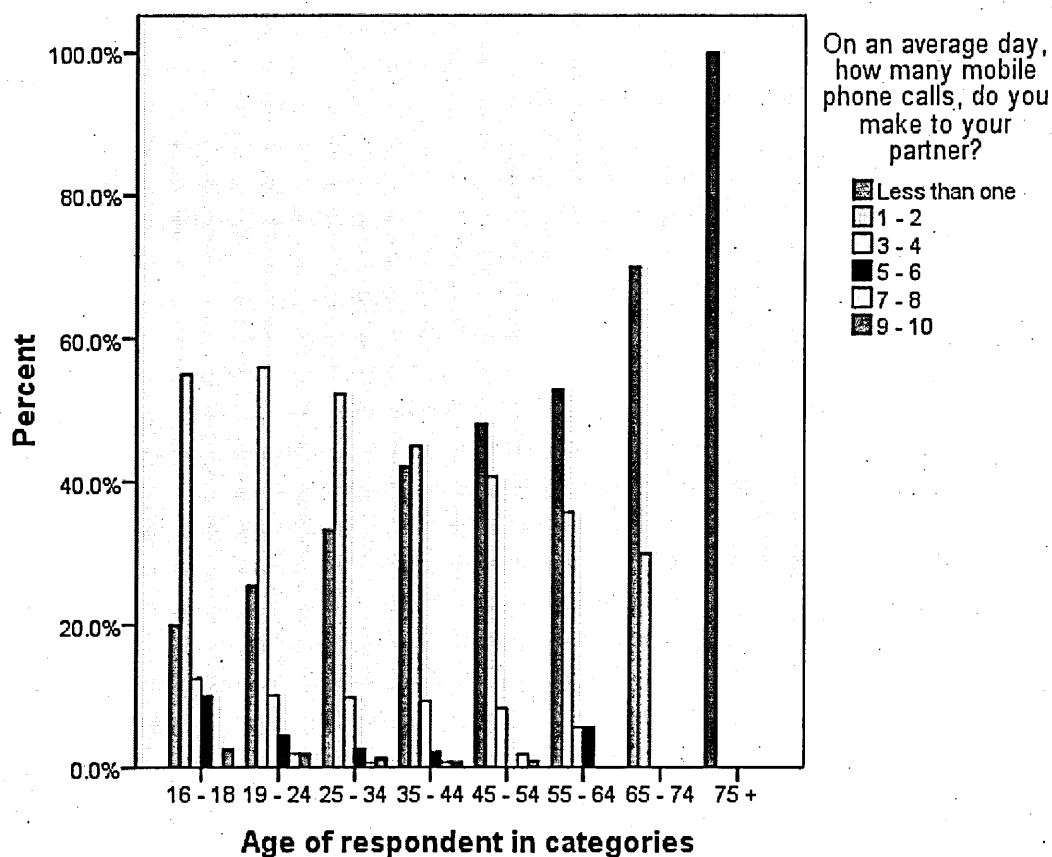


Figure 8.10 Age and average calls made to partner

The gender results for this question are not significant ($P < .393$). This implies that men and women make a similar number of calls to their partners on an average day.

High users call their partners more often than standard users; this result re-enforces the constant connectivity concept and the Chi Square test is significant ($P < .000$).

	Less than one	1-2	3-4	5-6	7-8	9-10
Standard User	47.7%	44.0%	5.9%	1.8%	.4%	.2%
High User	21.3%	53.1%	15.1%	5.4%	2.1%	2.9%

Table 8.11 User Type and calls made to partner

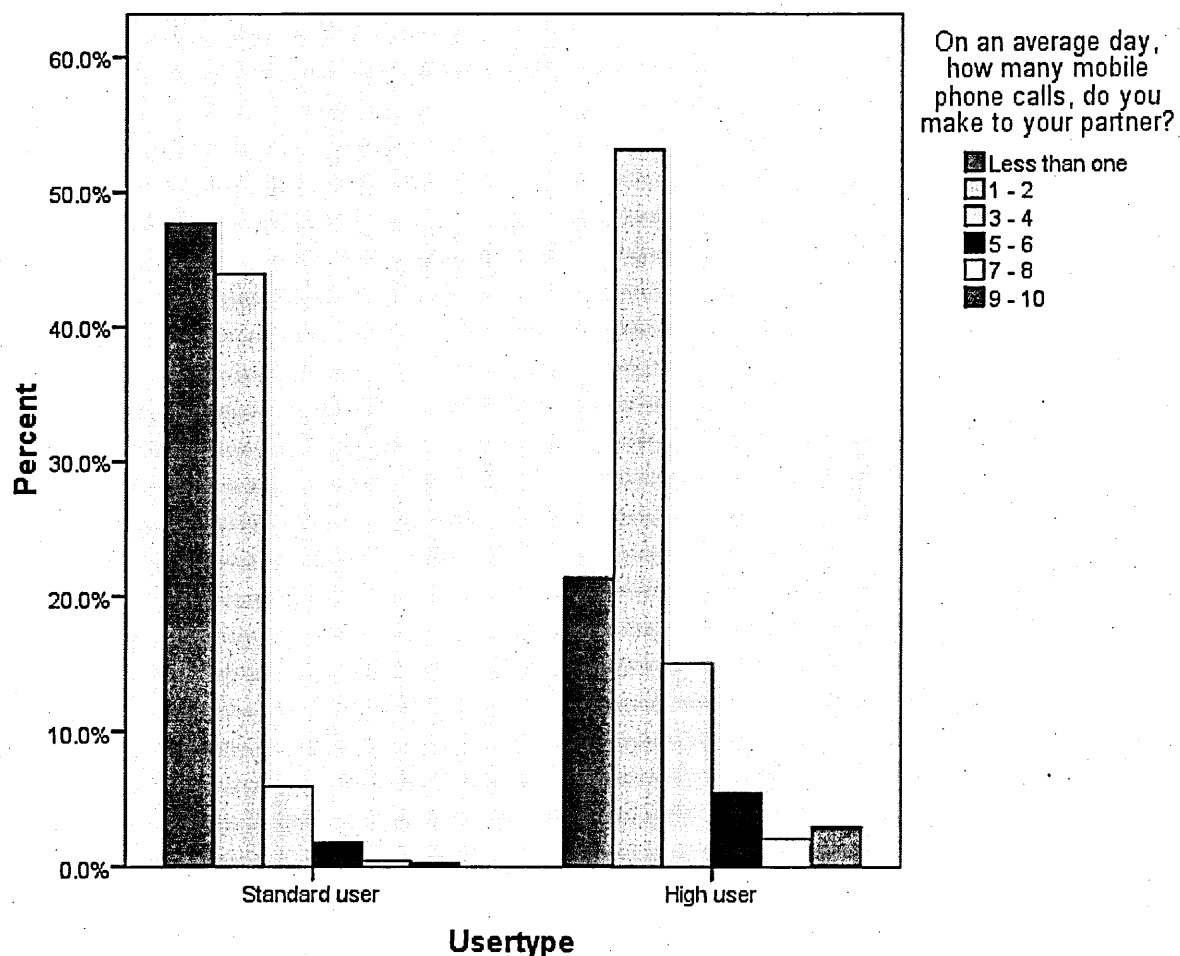


Figure 8.11 User type and average calls made to partner

8.3.3 Sending and receiving text messages to a partner / loved one has made me feel happy.

The participants were asked to agree or disagree with the statement above. The results indicate that 83.1% of the high users and 70.8% of the standard users agree and the Chi Square test is

significant ($P<.000$). High users gain a sense of happiness through contacting their partners. Feeling happy may be a key factor leading people to use their phone to contact their partner's more frequently and reasserts the fact that the mobile phone is an affective technology (Lasen 2004).

There is no significant gender difference for the Chi Square test ($P<.869$).

Table 8.12 below shows that more people in the younger age categories agreed that sending and receiving text messages to a partner / loved one has made them feel happy. The Chi Square test for this result is significant ($P<.000$).

	Agree (Yes)	Disagree (No)	N/A
16-18	91.9%	4.0%	4.0%
19-24	92.7%	4.5%	2.8%
25-34	87.4%	9.1%	3.5%
35-44	75.4%	11.1%	13.5%
45-54	51.2%	23.3%	25.6%
55-64	36.2%	21.2%	42.5%
65-74	31.1%	22.2%	46.7%
75+	16.7%	8.3%	75.0%

Table 8.12 Age and Happiness at SMS with partner

This result further supports Katz (2004): that communication is inherently pleasurable. Taylor and Harper's (2003) work is also relevant here since they suggest that the sending and receiving of text messages has a ritual nature. Social bonds can become stronger as exchanges take place on a daily basis. The 'gift' of texting results in feelings of pleasure and well-being for the recipients and the text message comes to mean more than merely a few words - it becomes an offering of the commitment to the relationship. Text messages, according to Rettie (2006) are an important source of emotional support within relationships, and developing and maintaining relationships makes people feel happy. This study shows this is especially the case for people in the younger age categories.

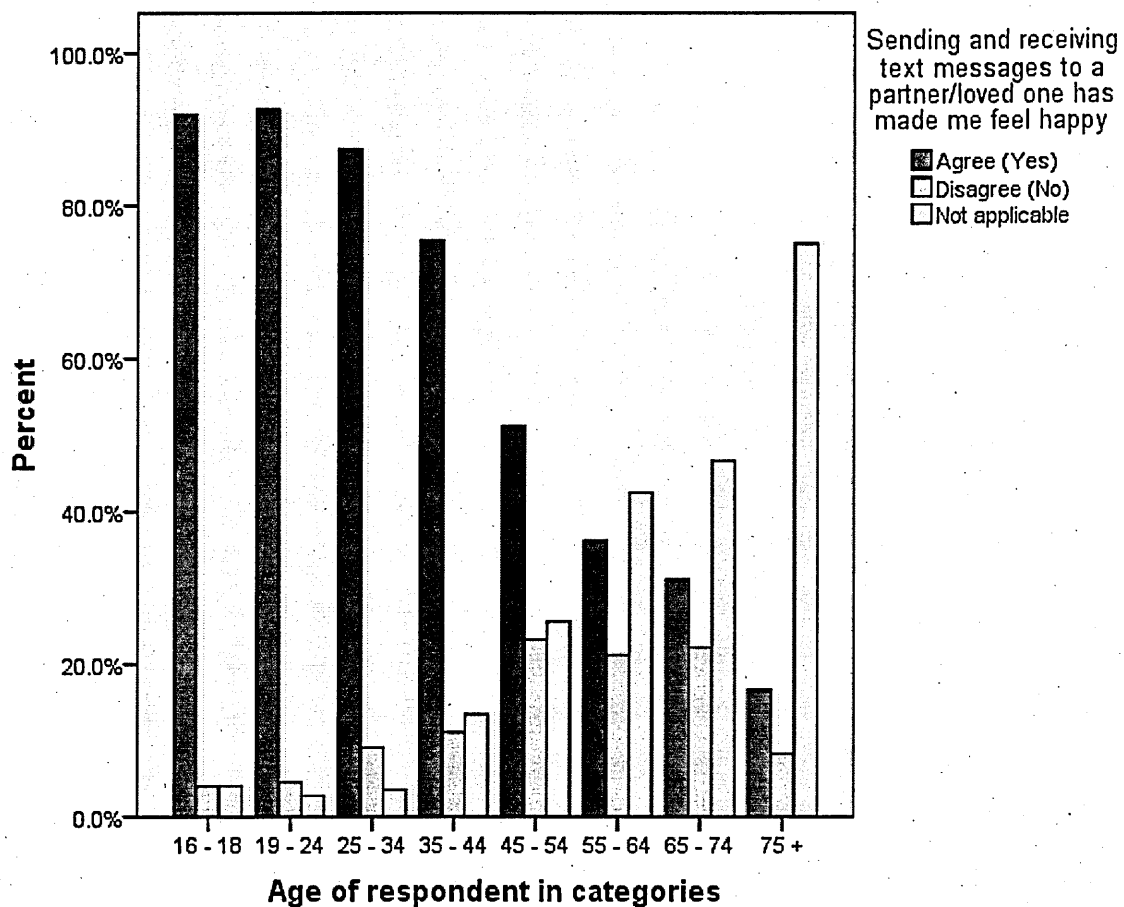


Figure 8.12 Age and Happiness at SMS with Partner

8.3.4 Sending and receiving text messages to a partner / loved one has made me feel excited.

The Chi Square test for user type ($P < .000$) is significant. More high users in section 8.2.1 admitted to feeling excitement during or after using a mobile phone so it is unsurprising that a larger number of high users (70%) compared with standard users (54.3%) feel excitement when sending and receiving text messages to a partner or loved one. The interview data (see section 7.8.1) found that people feel especially excited when texting a potential date or a new partner. Harper (2003) suggests that the action of sending and receiving text messages that gives the users a sense of something greater than themselves.

There is no gender difference in relation to this question: the Chi Square test ($P < .689$) is not significant. 61.6% of the men and 58.9% of the women agree they have felt excited.

The Chi Square test for age ($P < .000$) is significant: more of the people in the younger categories admit to feeling excited than people in the older age groups. 76.5% of 16 - 18 year olds and 83.2% of 19-24 year olds agreed to feeling excited. In comparison 19.8% of 55 - 64 year olds; 13.3% of 65 - 74 year olds and 8.3% of the 75+ year olds agreed. The graph below reflects this result.

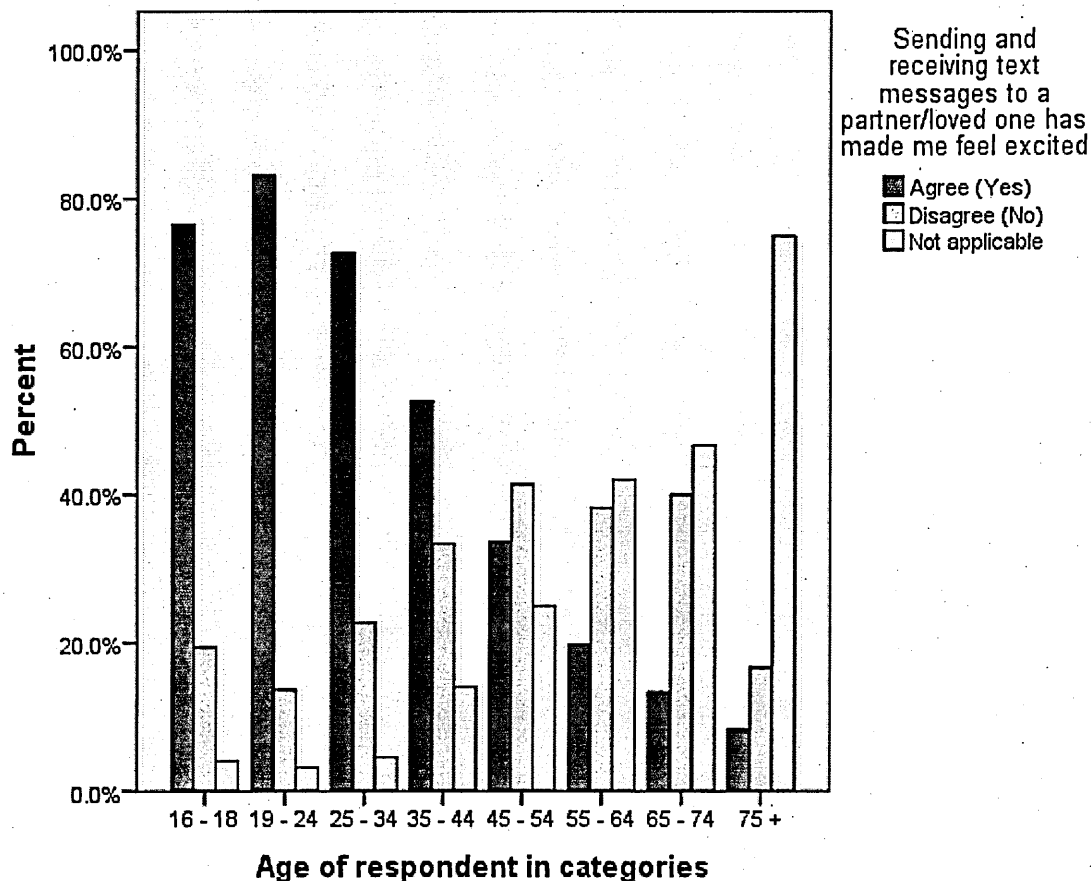


Figure 8. 13 Excitement at SMS with Partner

More people in the younger age categories admit to feeling excited. The issues highlighted for feeling excitement are similar to those of feeling happiness (see above). Giving and receiving text messages builds up a level of trust (Taylor and Harper 2003, Harper 2004). This combined with the fact that texting offers texters a special kind of communicative relationship for which calls are no substitute (Reid and Reid 2004) - results in people feeling excited. Furthermore the content of the message may also evoke excitement (Vincent 2005).

8.3.5 In the past I have used my mobile phone to initiate a relationship (e.g. through a text conversation).

Given that the patterns of phone use seem to differ for people in the younger categories it is unsurprising that more of the younger participants agreed with the statement above. Chi Square test is significant ($P < .000$).

	Agree (Yes)	Disagree (No)	N/A
16-18	60.6%	37.4%	2.0%
19-24	60.7%	32.8%	1.1%
25-34	36.9%	59.1%	4.0%
35-44	23.4%	57.9%	18.7%
45-54	11.6%	65.9%	22.5%
55-64	3.7%	46.9%	49.4%
65-74	.0%	28.9%	71.1%
75+	8.3%	8.3%	83.3%

Table 8.13 Age and initiating relationship via the phone

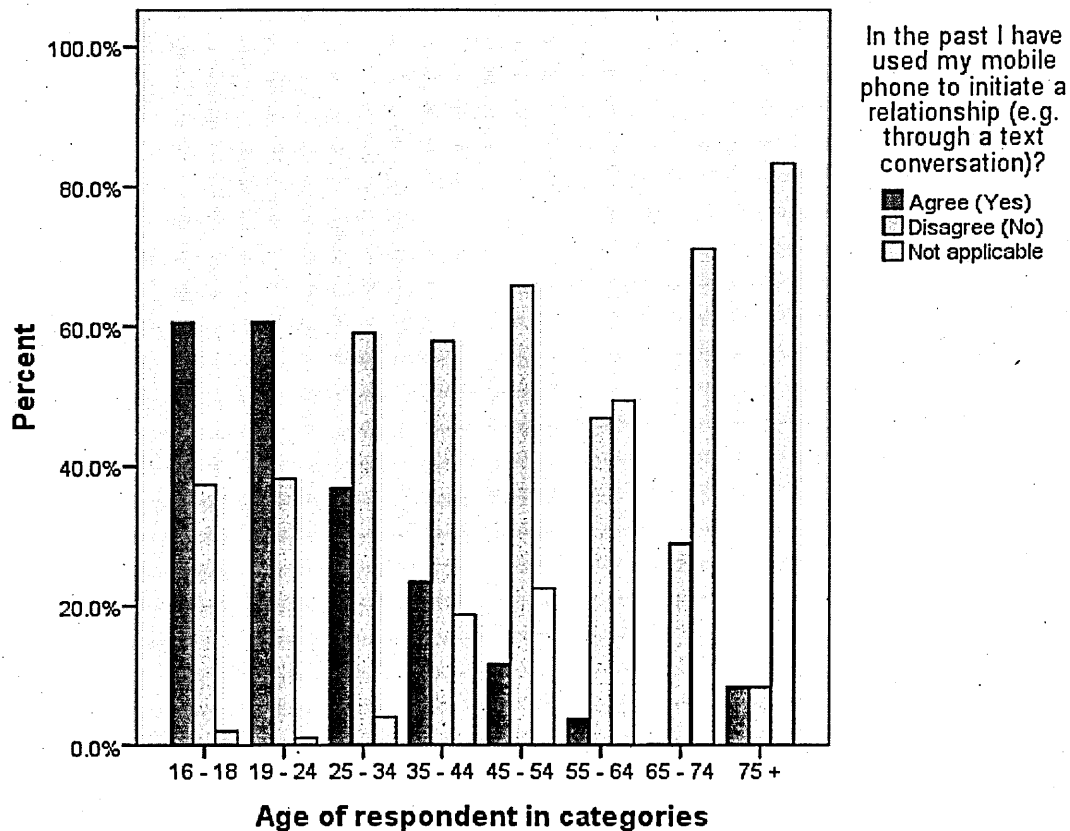


Figure 8.14 A graph to show age and using phone to initiate a relationship

Whilst Reid and Reid (2004) suggest that people use their phone to build and maintain relationships these results show fewer people actually initiate relationships via their mobile phone. Although the results (see table 8.13) suggest the phone is not heavily used for initiating relationships, it is perhaps those who are more familiar with the device for managing relationships who feel more comfortable mediating their thoughts and feelings via their mobile phone in order to initiate a relationship.

The Chi Square result for gender ($P < .468$) and is not significant. 37.8 % of men and 34.5% of women agree that they have used their mobile phones to initiate relationships.

There is a difference between the results for user types; 27.7% of standard users in comparison to 49.1% high users agreed that they have used their phone to initiate relationships (the Chi Square test $P < .000$ is significant). This result supports the argument that high users may have a different set of social norms when it comes to mobile phone use. The phone may have become a taken-for-granted method of communication for high users when managing their relationships. Texting may be the preferred medium for interaction by high users since they may find it easier to manage the issues of face.

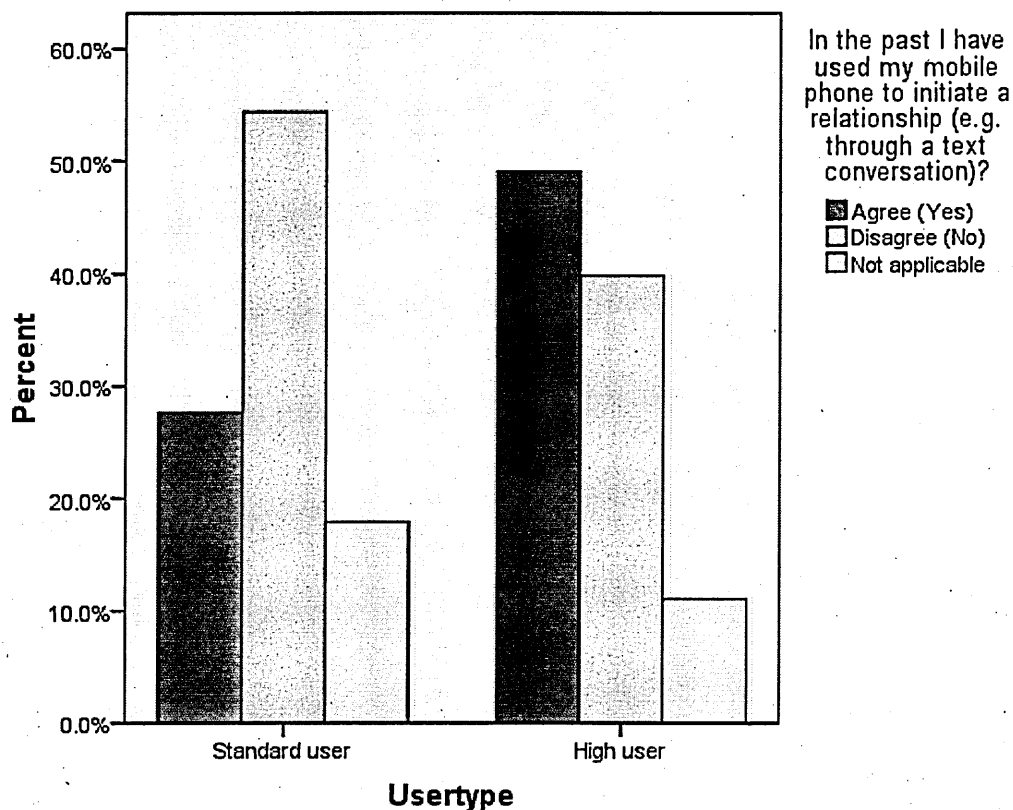


Figure 8.15 A graph to show user type and using phone to initiate a relationship

The high user's familiarity with the phone as a medium for communication may lead them to feel more comfortable initiating relationships via their mobile phone. Text messaging allows people time to consider the content of the message, and this helps to manage face (Lasen 2004).

8.3.6 In the past I have arranged 'dates' by using my mobile phone.

This question in hindsight is more applicable to the younger age categories and perhaps not applicable to those in long term relationships who have never used a phone to date. That said it is still interesting to see that people admit to using their phone to arrange dates - especially those in the younger age groups. Chi Square test for age is significant ($P < .000$).

	Agree (Yes)	Disagree (No)	N/A
16-18	75.8%	20.2%	4.0%
19-24	77.2%	21.8%	1.1%
25-34	56.6%	39.9%	3.5%
35-44	40.4%	42.1%	17.5%

45-54	34.9%	50.4%	14.7%
55-64	17.3%	42.0%	40.7%
65-74	8.9%	28.9%	62.2%
75+	8.3%	16.7%	75.0%

Table 8.14 Age and arranging dates via the phone

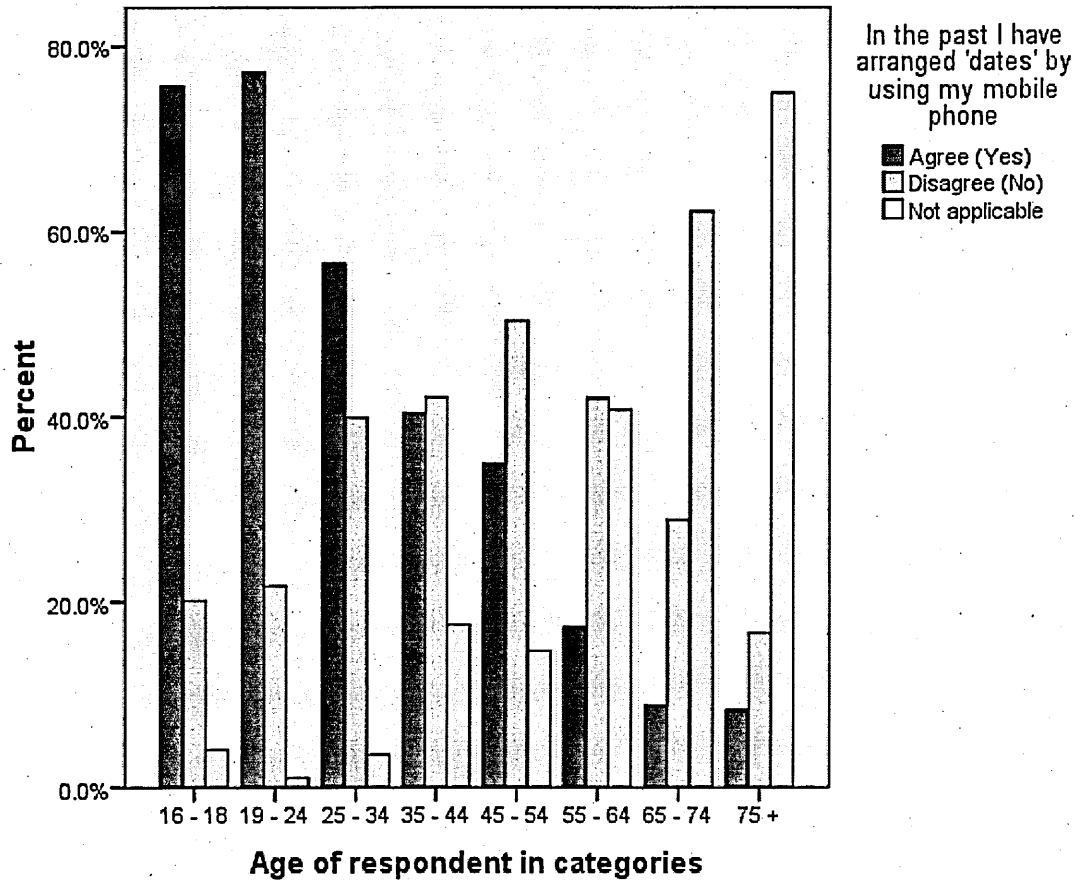


Figure 8.16 A graph to show age and arranging dates using a mobile phone

There is a significant difference in the Chi Square test for user type ($P < .000$). 64.9% of high users in comparison with 45.3% of standard users agree that in the past they have arranged 'dates' by using their mobile phone. This result suggests that high users utilise their mobile phones for a broader range of relationship contexts. This finding is closely linked to section 7.9.2 which highlights the fact that people would prefer to send text messages than to call to initiate a date. This is because the requester is shielded from potential rejection and the recipient of the request is shielded from the obligation to agree.

The Chi Square test for gender is not significant ($P < .737$). 53.5% of men and 52.7% of women agree.

8.3.7 Using my mobile phone to text allows me to develop relationships a lot easier when I first start dating.

A higher number of young people agree that texting on their mobile phones allows them to develop their relationships more easily when they first start dating. The Chi Square test for age is significant ($P < .000$).

	Agree (Yes)	Disagree (No)	N/A
16-18	71.7%	25.3%	3.0%
19-24	71.0%	25.5%	3.5%
25-34	45.5%	41.9%	12.6%
35-44	29.8%	40.4%	29.8%
45-54	11.6%	45.7%	42.6%
55-64	8.6%	28.4%	63.0%
65-74	.0%	11.1%	88.9%
75+	8.3%	.0%	91.7%

Table 8.15 Age and developing relationships via SMS

It may be more socially acceptable to send text messages as a part of the dating routine for young users who generally utilise the device daily. For young people the sending and receiving of text messages has a ritual nature. Social bonds become stronger as daily exchanges take place and text messages may come to represent an offering of the commitment to the relationship (Taylor and Harper 2003). The participants in the interview data also highlight that the advantages of text messages (see section 7.5) mean that sometimes sending text messages is easier than communicating face-to-face. Therefore text messaging may hold a different set of social norms for relationship management by younger people.

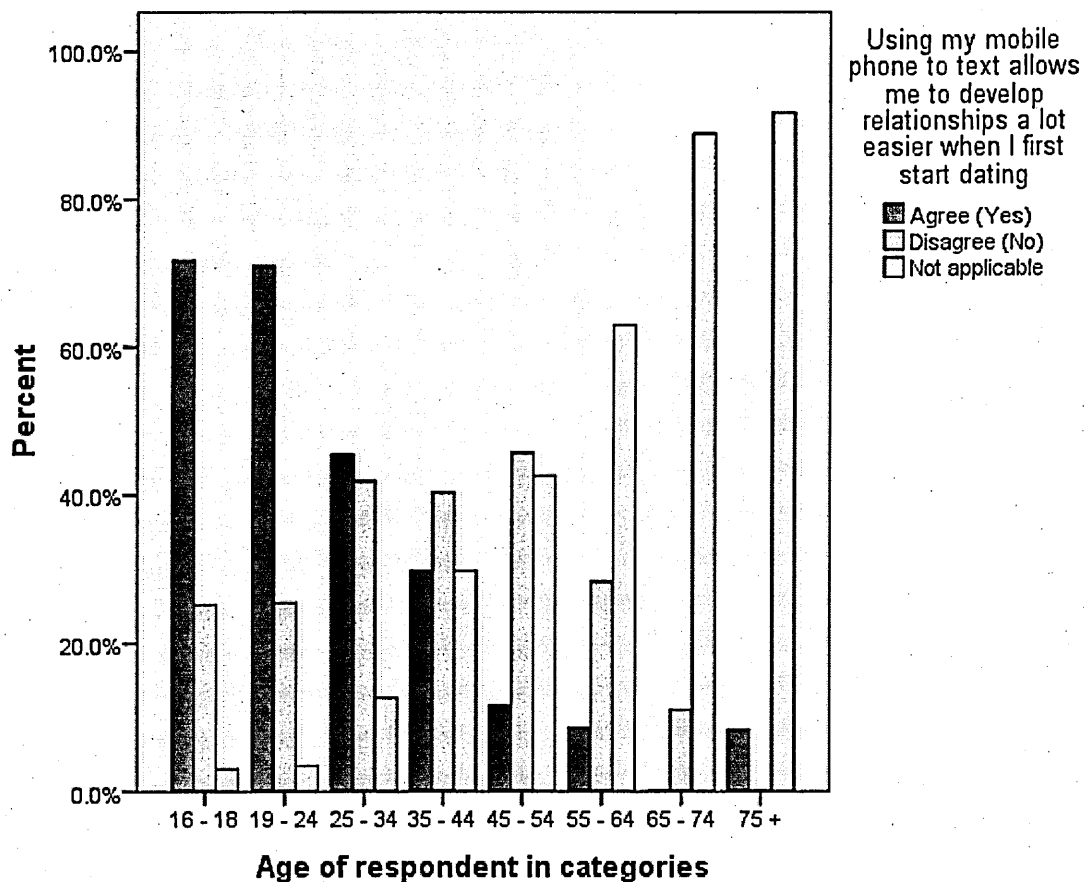


Figure 8.17 A graph to show age and phone allowing the development of relationships

The results also indicate that there is a significant difference between high and standard users: the Chi Square test is significant ($P < .000$). 34.4% of standard users compared to 56.6% of high users agree that using their phone to send and receive text messages allows them to develop relationships a lot easier when they first start dating. Text messages provide people with low key intermittent contact (Rettie 2006) - and a feeling of constant connectivity (Arnold 2003, Geser 2004, Hoflich 2006). With frequent use, high users may be more dependent upon using text messaging as a method of communication for managing personal relationships. This may be due to the familiarity with the medium of communication and the device. Furthermore text messages may offer the detachment necessary to manage self presentation and texters feel they develop deeper relationships with the person they have been texting most (Reid and Reid 2004 and Harper 2003).

Section 7.9.2 shows that that people feel 'texting conversations' lead to a sense of familiarity.

The Chi Square test results show that there is no significant gender difference ($P < .916$) with 45.9% of men and 40.7% of women agreeing. This result shows that texting is used as a method of communication for both young men and women's management of relationships, and face.

8.3.8 I or someone I know has had a friendship / relationship ended by text message in the past

The results for this question suggest that ending relationships via a text message may be a fairly common practise. It supports Harper (2004) and Hoflich's (2006) claim that people are making and breaking their relationships using their mobile phones.

The Chi Square test for age and this question is significant ($P < .000$). More people in the younger age categories agree with the above statement.

	Agree (Yes)	Disagree (No)	N/A
16-18	81.8%	16.2%	.0%
19-24	76.9%	21.7%	1.4%
25-34	56.9%	41.1%	2.0%
35-44	36.8%	57.3%	5.8%
45-54	25.0%	58.6%	16.4%
55-64	16.0%	50.6%	33.3%
65-74	13.3%	35.6%	51.1%
75+	8.3%	25.0%	66.7%

Table 8.16 Age and relationship ended by text

Some younger people may find it easier to manage face via a text message than performing the same message face-to-face. By sending a text the sender avoids the embarrassment of having to explain their disinterest face-to-face and the recipient avoids the embarrassment of rejection: both parties are saving face since neither party has to directly disclose their true feelings to one another. However there is still a level of face management required to ensure that the content of the text message is socially acceptable and appropriate.

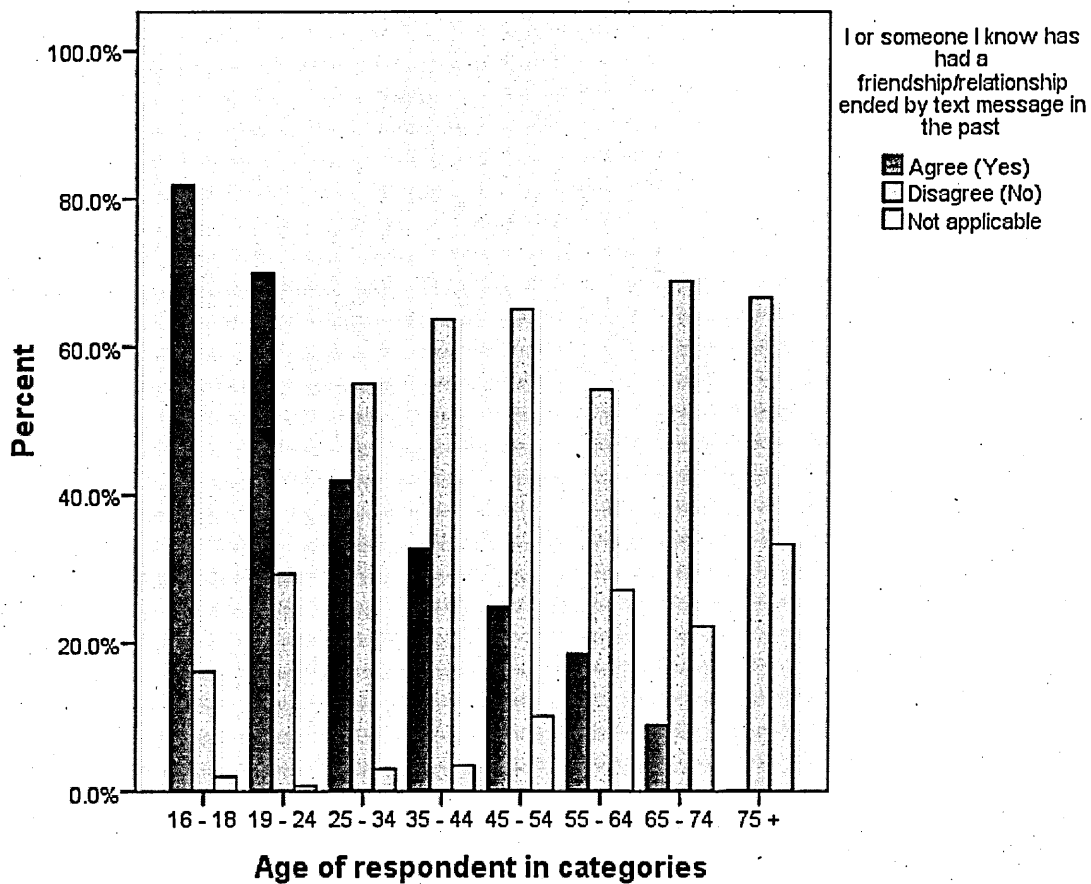


Figure 8.18 A graph to show age and ending relationships

However in relation to the user type 36.3% of standard users and 62.3% of high users agreed.

The Chi Square result is significant ($P < .000$).

The results for this question suggest that ending relationships via text message is a strategy used in relationship management by high users. However section 7.7 implies that ending a relationship via text message is rude and unacceptable. The only time it was deemed acceptable to end a relationship via text was if it consisted of a few dates only. This implies that there are socially acceptable rules of etiquette for using a mobile phone in relationship management.

There is no significant gender difference in the Chi Square results for this question ($P < .816$)

46.2% of men and 46.0% of women agree.

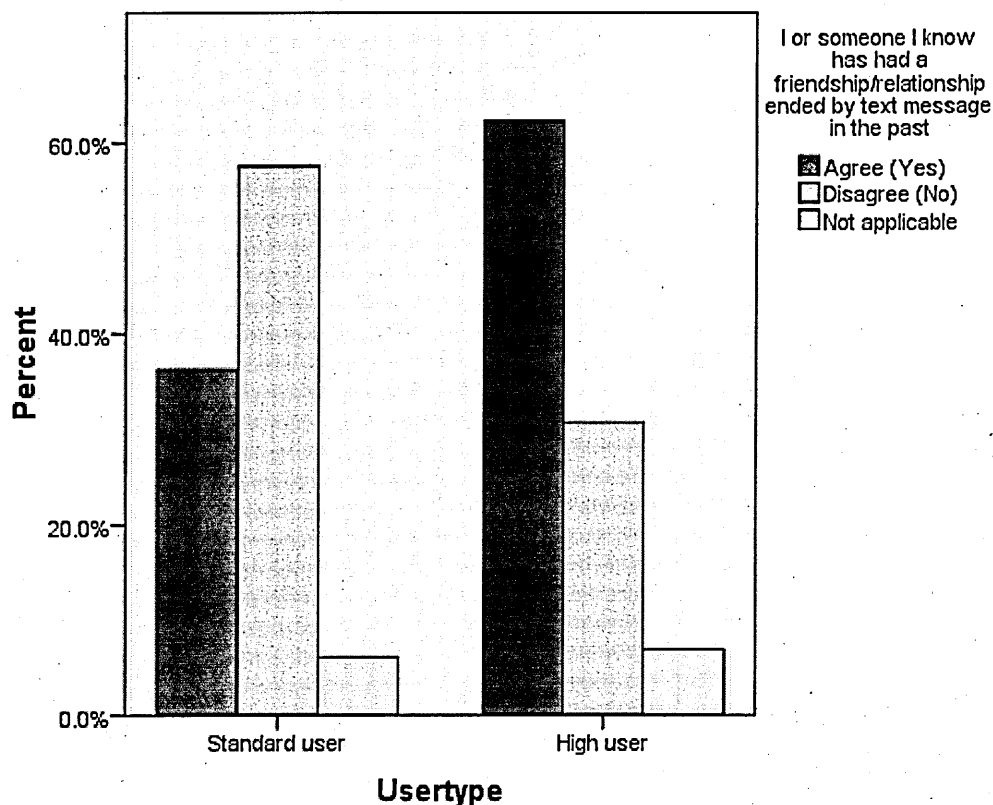


Figure 8.19 A graph to show user type and ending relationships

8.3.9 I have kept / saved text messages from a partner / loved one.

This question shows that the content of the phone is important to the users and that text messages can act as a record which can be referred to at any time (Taylor and Harper 2003).

The results indicate that the younger age groups have higher percentages of participants who agree that they have kept / saved text messages from a partner / loved one. Chi Square test for age is significant ($P < .000$).

	Agree (Yes)	Disagree (No)	N/A
16-18	77.8%	20.2%	2.0%
19-24	82.5%	16.5%	1.1%
25-34	70.1%	28.9%	1.0%
35-44	49.7%	45.6%	4.7%
45-54	39.5%	51.9%	8.5%
55-64	34.6%	34.6%	30.9%
65-74	11.1%	55.6%	33.3%

75+	8.3%	25.0%	66.7%
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Table 8.17 Age and saved text messages

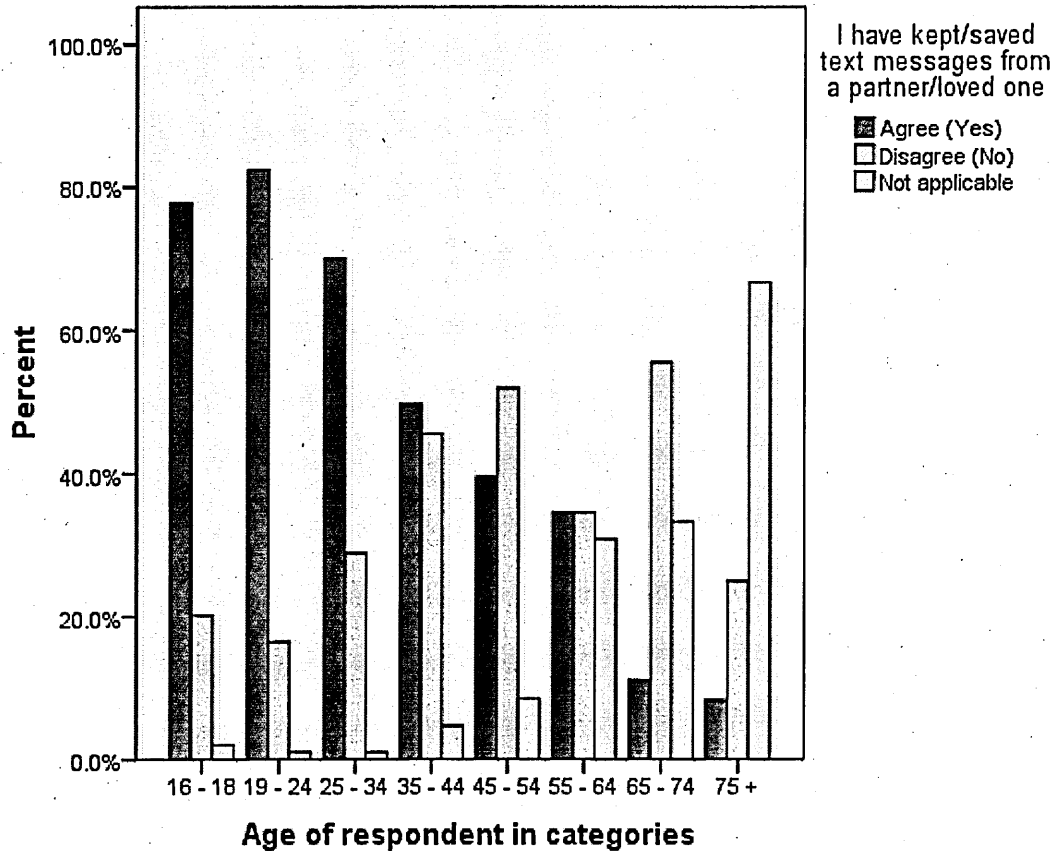


Figure 8.20A graph to show age and saving text messages

The user type results show that 55.5% of standard users and 61.6% of high users have kept / saved text messages from a partner / loved one. The Chi Square test ($P < .001$) and is significant.

Since text messages can act as a record which can be referred to at any time, the device can be likened to a diary - especially since it mediates emotional content in a range of socio-emotional contexts. Harper (2003) highlights that people can store the text information and the information can be kept as evidence. Texts can be used as a part of an archive of information and the information within a text is 'immortal'. Furthermore Harper (2003) suggests that text messages from a partner or loved one hold emotional value and this supports Lasen's (2004) and Vincent's (2005) argument: that people are attached to the contents of their phones.

The gender results show that 59.6% of men and 61.6% of women agree that they have saved text messages from a partner or loved one. The Chi Square test is not significant ($P < .818$).

8.3.10 Summary

The mobile phone can be a key tool for relationship management. It provides an invisible connection between partners who can communicate with one another at any time during the day. Continuous contact allows people to be both independent and co-dependent simultaneously (Arnold 2003). The continuous contact intermittently throughout the day may give people a sense of constant connectivity, reassurance and security (Geser 2004, Hoflich 2006). Of the sample who agreed that they were in a relationship, more of the younger people admitted to contacting their partners more frequently throughout the day. This suggests that young users may gain a sense of reassurance from the continuous communication. Furthermore young users may be dependent upon that continuous communication to feel secure in their relationship, showing that the mediation and management of relationships may have changed with the use of the mobile phone.

Section 8.2 showed that the mobile phone is an affective device for mediating emotion; this section has shown that more high users than standard users agree that sending and receiving text messages to a partner or loved one has made them feel happy and excited. More of the younger users also agree to this. This shows that communication is inherently pleasurable for the users (Katz 2004) and implies that social bonds may become stronger as mediated exchanges of emotional content take place on a daily basis (Taylor and Harper 2003).

The phone assists younger people and high users in developing relationships when they first start dating. The text exchanges build up a level of trust and may even come to represent an offering of the commitment to the relationship (Taylor and Harper 2003).

Text messaging is shown to be important for the management of relationships; people are making and breaking relationships using their phones (Harper 2004, Hoflich 2006). The results show that higher percentages of young people know, or have themselves had a relationship ended by text message. This shows that people may find it easier to manage their face using text

messages as a medium, than performing face management face-to-face (Goffman 1963). Text messages act as a record of communication and they can hold emotional value for the user and this further promotes Lasen's (2004) and Vincent's (2005) concept: people are emotionally attached to the content of their mobile phone.

8.4 Socio-emotional contexts and the mobile phone

Given that people have the potential to be constantly connected, socio-emotional contexts become relevant for managing relationships via the mobile phone. The phone user's location and social circumstances may not be explicit to the remote contact. The survey questioned people in relation to socio-emotional contexts. Several questions relating to mobile phone use whilst drunk are also relevant to socio-emotional contexts.

8.4.1 My mobile phone allows me to text things I would not normally say if I was face-to-face with a person.

The fact that there are no non-verbal cues to manage when sending text messages means that people may find it easier to send text messages with content that they would not normally say when face-to-face. The results for age suggest that mobile phones are being used to manage face since more of the users in the younger age groups agree that their mobile allows them to text things they would not normally say face-to-face. Chi Square test for age is significant ($P < .000$).

	Agree (Yes)	Disagree (No)	N/A
16-18	83.8%	16.2%	2.0%
19-24	69.9%	29.4%	0.7%
25-34	41.9%	55.1%	3.0%
35-44	32.7%	63.7%	3.5%
45-54	24.8%	65.1%	10.1%
55-64	18.5%	54.3%	27.2%
65-74	8.9	68.9	22.2
75+	0%	66.7%	33.3%

Table 8.18 Age and texting

Section 7.5 shows that a key advantage of sending and receiving text messages is that it can assist in the management of face.

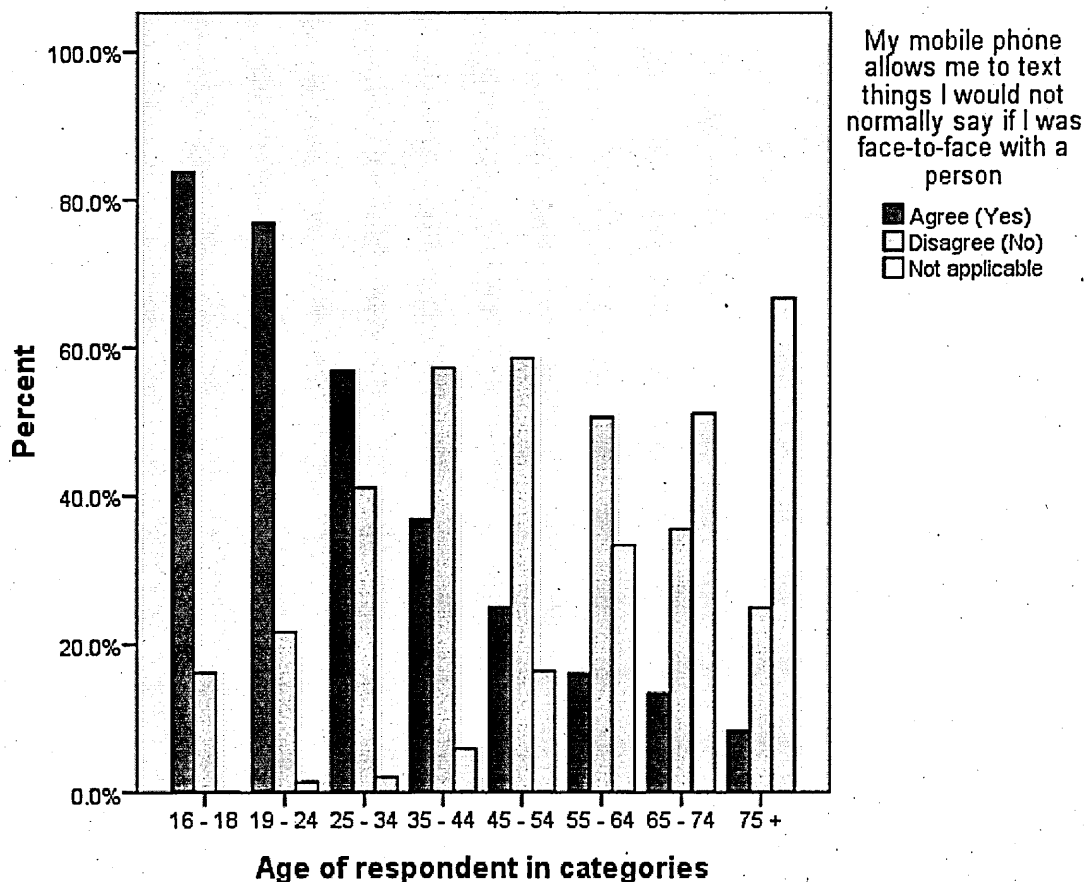


Figure 8.21 A graph to show age and texting things wouldn't say face-to-face

The results show that this question is more applicable to the younger age categories and there is a significant difference in the percentages between the 16 - 18 age category (83.8 %) in comparison with the 75+ age category (8.3%). This result indicates that there are differences in the way younger and older people manage relationships and what's more differences in the way that the phone is used for managing personal relationships by younger age groups. Those who are more familiar with the device and use it regularly may be better practised at managing their face via text messages: younger people may find communicating via SMS more socially acceptable.

In relation to user type, 63.4% of the high users compared with 45.0 % of the standard users agreed that they would text things that they wouldn't say face-to-face. The Chi Square test for this result is significant ($P<.000$).

High users may have a certain sense of dependency towards using text messages as a method for managing their personal relationships because use of SMS may be habitual. High users therefore may find that with frequent use, it is easier to perform face management for relationship management using text messages as they are well practised at it, and therefore may find it easier to communicate via SMS.

Text messages provide an opportunity for intimate personal contact whilst at the same time offering the detachment necessary to manage self presentation and involvement (Reid and Reid 2004).

The interview data in section 7.9.2 becomes applicable since it also shows that mediating via text messages can be essential when developing new relationships. This according to two participants is because it is easier to ask someone out via text message than it is face-to-face. Both the sender and recipient are able to manage the request without the verbal and nonverbal cues: the requester is shielded from potential rejection; and the recipient of the request is shielded from the obligation to agree (see section 7.6).

There is no gender difference in relation to the statement above with 51.5% of men and 52.1% of women agreeing that their mobile allows them to text things they wouldn't normally say face-to-face: the Chi Square test for this result was ($P<.916$).

8.4.2 I once told a current partner / previous partner my first true feelings for them via a text message.

47.8% of high users compared with 26.3% of standard users agreed with this statement and the Chi Square test is significant ($P<.000$). The interview data suggests that one advantage of using text messages as a medium is that you can hide behind them (see section 7.5). It is also easier to manage any rejection. Rettie (2006) found that it was less embarrassing to send a text message than it was to say something in person. In addition Hoflich (2006) believes that the constant

communication and thus reassurance in 'I love you' texts leads to people feeling closer to one another.

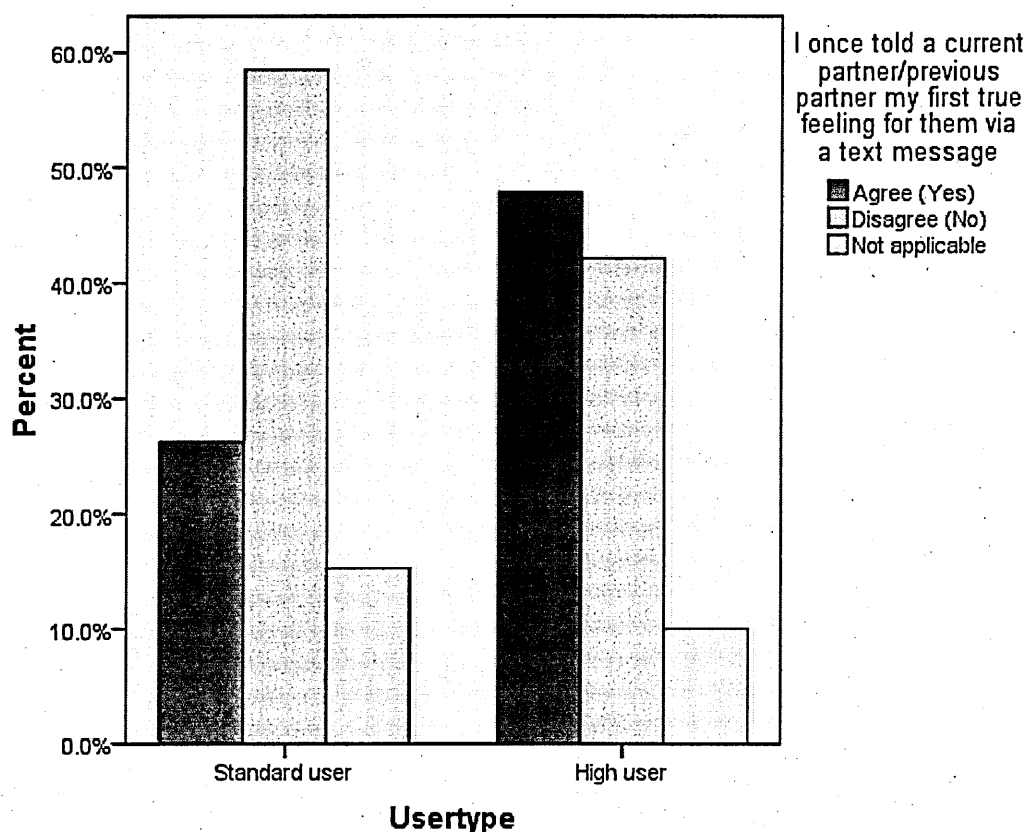


Figure 8.22 User type and declaring true feelings via a text message

The Chi Square result for age is significant ($P < .000$). Acceptance and use of the device as a tool for relationship management may differ for young people whom seem to find it more socially acceptable to declare true feelings via text message. Sending a text message allows both the sender and recipient to manage the declaration without the verbal face-to-face and nonverbal cues. The sender is shielded from potential rejection and the embarrassment associated with that rejection and the recipient is shielded from potential embarrassment. The medium provides an opportunity for intimate personal contact whilst at the same time offers the detachment necessary to manage self presentation and involvement (Reid and Reid 2004).

	Agree (Yes)	Disagree (No)	N/A
16-18	54.5%	43.4%	2.0%

19-24	51.0%	46.2%	2.8%
25-34	39.4%	55.1%	5.6%
35-44	27.6%	62.9%	9.4%
45-54	17.8%	58.1%	24.0%
55-64	2.5%	58.0%	39.5%
65-74	6.7%	35.6%	57.8%
75+	0.0%	25.0%	75.0%

Table 8.19 Age and declaring true feelings via text message

So young people (who are more likely to be in the high users category), are also more likely to use their phones to admit their true feelings to a partner via text message. Although the results show that half or less than half the participants in each category admit to doing this, people do use their phones to text their first true feelings to their partners. Thus using SMS can be considered as a management strategy for conducting and maintaining relationships. Perhaps as mobile use becomes even more prolific; using the mobile phone to communicate private feelings may become widespread practise in the future since norms of use and social acceptance will change with time.

The Chi Square test for gender is not significant ($P < .103$). 38.2% of the men questioned compared with 32.3% of the women, agreed that they once told a current / previous partner their first true feelings for them via a text message.

8.4.3 A current partner / previous partner once first told me their true feelings for me via a text message.

The Chi Square test results for user type however indicate a significant result ($P < .000$). 52.7% of high users and 27.1% of standard users agreed. This result again shows that frequent use of the device holds a different set of socially acceptable norms for use in relationships.

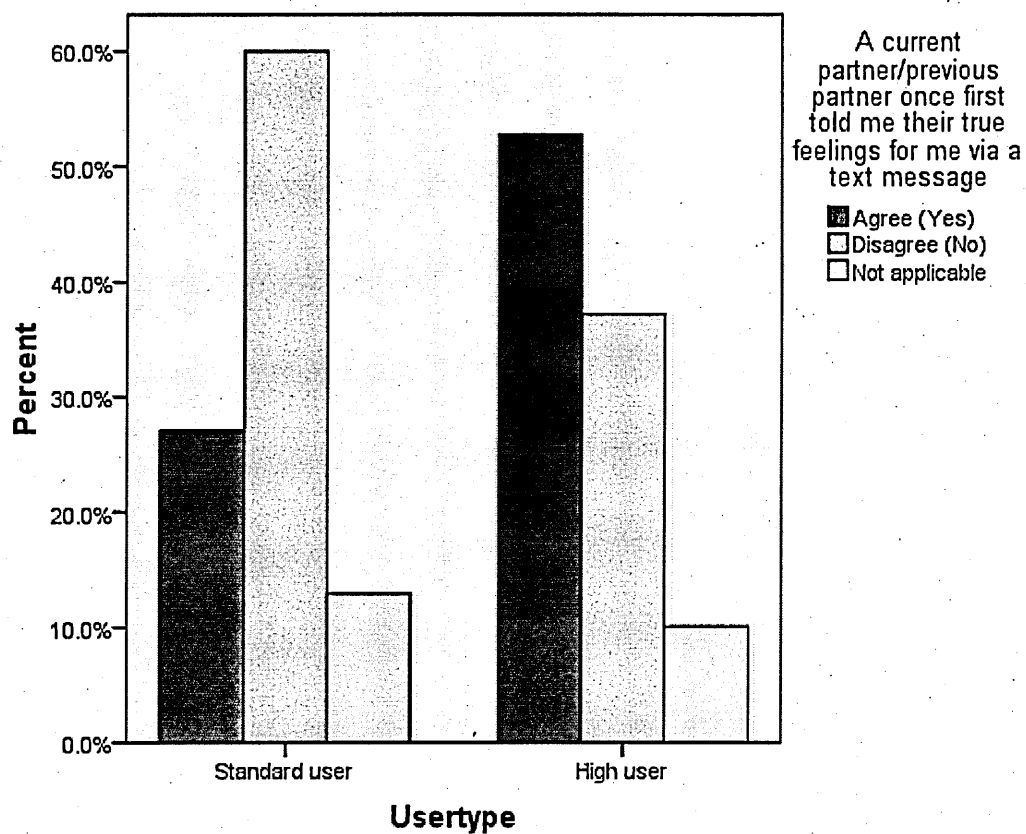


Figure 8.23 User type, current partner declaring true feelings via text message

The results for age show that more of the participants in the younger age categories agree with this statement. The Chi Square test is significant ($P < .000$).

	Agree (Yes)	Disagree (No)	N/A
16-18	58.2%	39.8%	2.0%
19-24	56.6%	40.9%	2.4%
25-34	41.5%	53.8%	4.6%
35-44	28.1%	62.0%	9.9%
45-54	17.1%	66.7%	16.3%
55-64	4.9%	54.3%	40.7%
65-74	2.2%	48.9%	48.9%
75+	0.0%	25.0%	75.0%

Table 8.20 Age and declaring true feelings via SMS

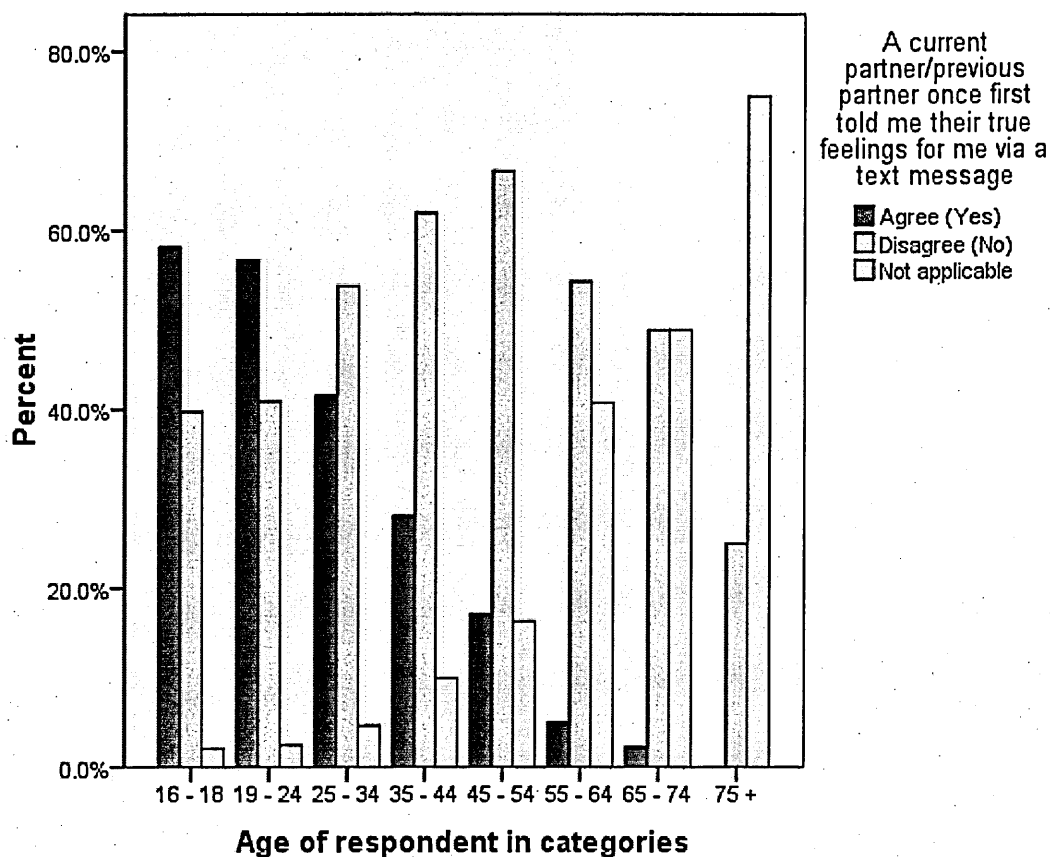


Figure 8.24 Age and partner declaring true feelings via text message

Figure 8.24 shows that there is a clear distinction between younger and older people's mobile phone use for relationship management. This question was not considered applicable by many of the participants in the older age groups. This further supports the fact that mobile phone use has altered the way people manage their relationships: it has given people another medium for communicating and mediating expression and emotion.

There is no gender difference in relation to this question. 34.7% of women and 40% of men agreed, and the Chi Square test is not significant ($P < .112$).

8.4.4 I have phoned up a partner / friends / family to tell them 'I love them' when drunk after a night out.

In relation to phoning a partner up whilst drunk, the results for user type indicate that 59.8% of high users agree with this in comparison with 40.0% of standard users. This is a significant Chi Square test ($P < .000$). The frequent use transcends various socially emotional contexts – including being drunk – particularly for some high users.

	Agree (Yes)	Disagree (No)	N/A
Standard User	40.0%	54.7%	5.2%
High User	59.8%	35.3%	4.9%

Table 8.21 User type and drunken calling

For age, higher percentages of younger people (see table 8.22 below) agreed that they have phoned up a partner / friends / family to tell them 'I love them' when drunk after a night out and the Chi Square test for this result is significant ($P < .000$).

	Agree (Yes)	Disagree (No)	N/A
16-18	62.6%	35.4%	2.0%
19-24	72.0%	25.5%	2.4%
25-34	57.4%	40.1%	2.5%
35-44	36.5	57.6%	5.9%
45-54	26.4%	69.0%	4.7%
55-64	7.5%	80.0%	12.5%
65-74	2.2%	80.0%	17.8%
75+	.0%	66.7%	33.3%

Table 8. 22 Age and drunken calling

The Chi Square test for gender was not significant ($P < .078$) with 56.7% of women and 43.3% of men agreeing to phoning up a partner whilst drunk.

8.4.5 I have text a partner / friends / family to tell them 'I love them' when drunk after a night out.

According to Hoflich (2006) texting provides people with reassurance and makes them feel closer. When it comes to texting whilst drunk, 61.8% of high users agree to doing this, whilst 38.5% of standard users also agree. The Chi Square test for user type is significant ($P < .000$).

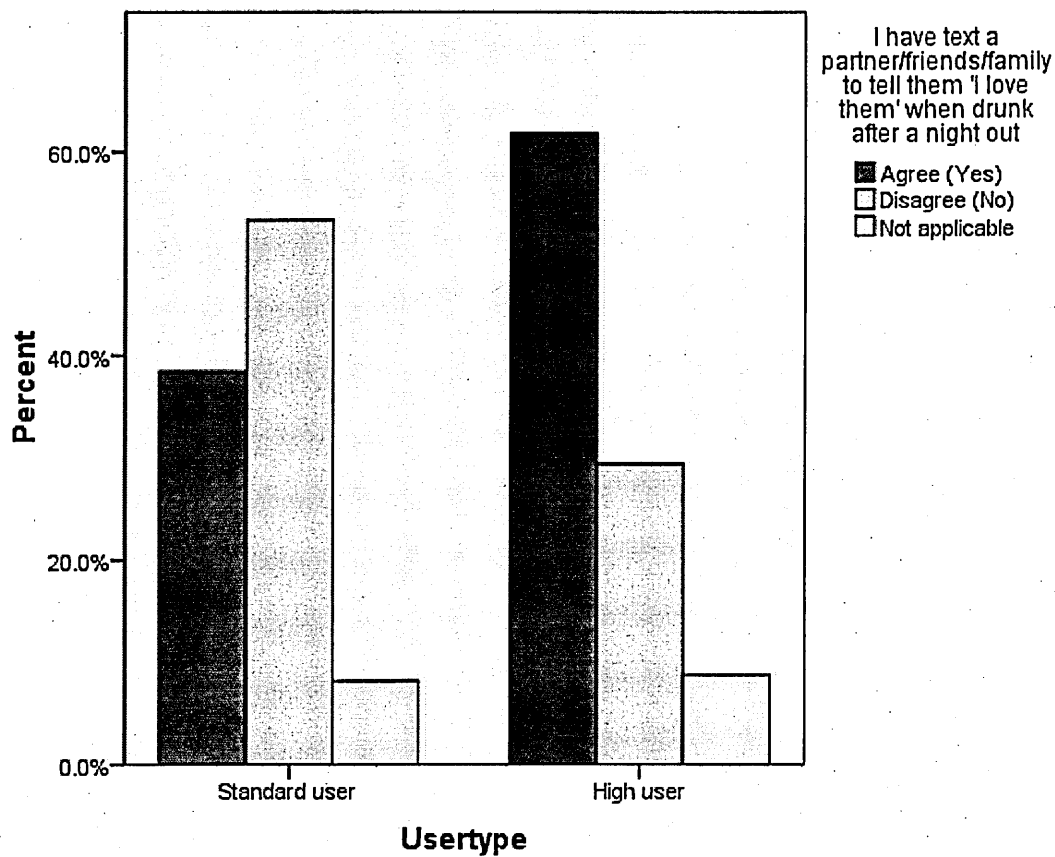


Figure 8.25 User type and drunken texts

Chi Square test for age is significant ($P < .000$). More people in the younger age categories have text a partner / friends / family to tell them 'I love them' when drunk after a night out.

	Agree (Yes)	Disagree (No)	N/A
16-18	68.7%	29.3%	2.0%
19-24	70.2%	27.4%	2.5%
25-34	60.6%	35.9%	3.5%
35-44	35.7%	56.7%	7.6%
45-54	20.9%	67.4%	11.6%
55-64	7.5%	68.8%	23.8%
65-74	.0%	6.2%	19.8%
75+	.0%	50.0%	50.0%

Table 8.23 Age and drunken texting

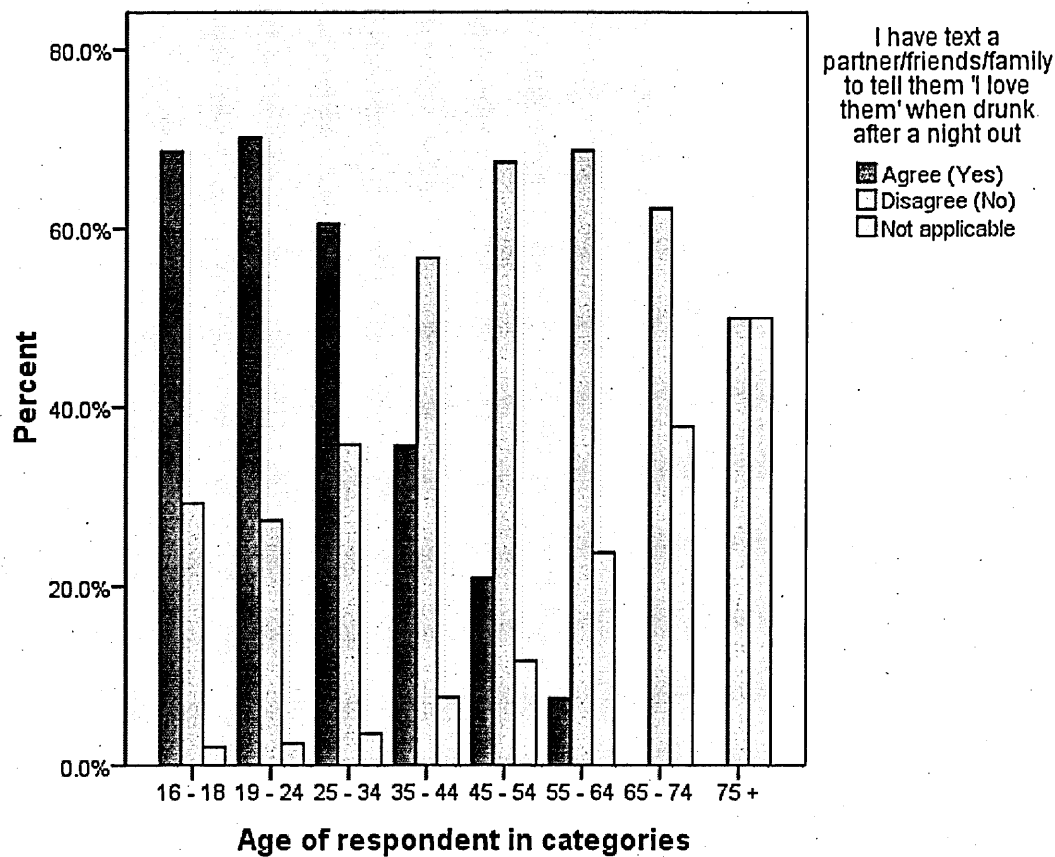


Figure 8.26.A graph to show age and texting feelings when drunk

A large number of younger people utilise the text message facility on their phone (see section 6.2 for patterns of use), so it is not surprising that they utilise the medium in different social contexts and in different emotional states. Hoflich (2006) suggests that with the mobile phone's instant communication, moods are passed on straight away without delay. This means that people are able to share their current state of being whilst in constant connectivity. The loss of inhibition through alcohol consumption and access to text messaging and the mobile phone leads people to use the device for declaring true feelings. The consequences of relationship management and face management are temporarily suspended. However although there are no immediate consequences, there is a massive amount of face work required afterwards, as shown in section 7.3.

The interview data highlights that drunken mobile phone use occurs (see section 7.3) and to date there are no studies which address the use of drunken mobile phone use.

There is no gender difference in relation to texting people whilst drunk with 47.6% of men and 47.0% of women agreeing and the Chi Square test is therefore not significant ($P < .978$).

8.4.6 Summary

This section has shown that socio-emotional contexts become relevant when managing relationships since people have the potential to be continuously connected. Recipients may not be aware of the sender's social or emotional context. Section 8.3 showed how important text messages can be for managing relationships. This section further shows how the characteristics of text messages (faceless, noncommittal) combined with the socio-emotional context can result in people using their phones to declare intimate personal and emotional feelings. Many of the younger users admit that their mobile phone allows them to text things they would not normally say if they were face-to-face with a person. The results in this section show that text messaging provides users with an opportunity for intimate personal contact whilst at the same time offers the detachment necessary to manage self presentation and involvement (Reid and Reid 2004).

Drunken phone use is considered as a socio-emotional context within this section. This issue has not been addressed by existing literature however is shown to be relevant by the results in this study. People – particularly young and high users phone and text their partners, friends and family to tell them they love them when drunk. The loss of inhibition through alcohol consumption and access to the device means that people are able to share their current state of being, moods and emotions.

8.5 Conclusion

This chapter has presented an analysis of the data obtained from the survey for Study Two. Study Two aimed to explore how the mobile phone is used within the private sphere. This chapter has shown that there are several key issues which can be drawn from the data:

- People account for both positive and negative emotion in relations to their mobile phone use.

- The mobile phone can be a key tool for relationship management and it provides people with the ability to be constantly connected.
- The mobile phone presents socio-emotional contexts for interactions.

This chapter has shown that mobile phones are affective devices for mediating emotion and are intrinsically linked to emotion. As an affective technology (Lasen 2004) which provides constant connectivity the mobile phone can be a key tool for managing personal relationships.

Generally the results show that there are no gender differences when it comes to using the mobile phone for managing personal relationships however there are differences between user types and age.

The results for age generally show that there are differences in patterns of use and opinions about use for managing relationships; more young people utilise their phones for managing their relationships. The results also suggest that more people in the younger age categories are high users. More high users than standard users also use their phones as a part of the management of their personal relationships.

The results also indicate that more of the younger users and high users associate their mobile phone use with emotion. This supports the work of Lasen (2004) and Harper (2004) and Vincent (2005): that the mobile phone is closely connected to emotion. The mobile phone is bound up in emotional value for the users and equally is an affective device for mediating emotion; therefore it is easy for people to associate their mobile phones with the various positive and negative emotions.

This chapter has shown that the mobile phone provides an invisible connection between partners who can communicate with one another at any time during the day. Continuous contact allows people to be both independent and co-dependent simultaneously (Arnold 2003). The continuous contact intermittently throughout the day may give people a sense of constant connectivity, reassurance and security (Geser 2004, Hoflich 2006). More of the younger people admitted to

contacting their partners more frequently throughout the day suggesting that young users may gain a sense of reassurance from the continuous communication. Furthermore young users may be dependent upon that continuous communication to feel secure in their relationship. This indicates that the mediation and management of relationships may have changed with the use of the mobile phone. The mobile phone becomes another medium for communicating thoughts and emotions and provides the potential for constant connectivity; it can be a key tool for managing personal relationships. Furthermore text messages act as a record of communication and they can hold emotional value for the user and this further promotes Lasen's (2004) and Vincent's (2005) concept: people are emotionally attached to the content of their mobile phone.

Text messaging is shown to be important for the management of relationships; people are making and breaking relationships using their phones (Harper 2004, Hoflich 2006). People may find it easier to manage face using text messages as a medium, than performing face management face-to-face - for example the results show that higher percentages of young people know, or have themselves had a relationship ended by text message. This shows that the mobile phone can at times assist face management.

Socio-emotional contexts also become relevant when managing relationships since people have the potential to be continuously connected. Recipients may not be aware of the sender's social or emotional context. The characteristics of text messages (faceless, noncommittal,) combined with the socio-emotional context can result in people using their phones to declare intimate personal and emotional feelings. Many of the younger users admit that their mobile phone allows them to text things they would not normally say if they were face-to-face with a person. Text messaging provides users with an opportunity for intimate personal contact whilst at the same time offers the detachment necessary to manage self presentation and involvement (Reid and Reid 2004).

Associated with socio-emotional contexts is drunken phone use. This issue has not been addressed by existing literature however it is shown to be relevant by the results in this study.

People – particularly young and high users phone and text their partners, friends and family to tell them they love them when drunk. The loss of inhibition through alcohol consumption and access to the device means that people are able to share their current state of being, moods and emotions. This supports the concept that the mobile phone for private use is bound to constant connectivity, emotion and socio-emotional contexts.

Study Two is concerned with how the mobile phone is used in the private sphere and especially how the mobile phone is used for managing private relationships. This chapter has presented survey data which shows the mobile phone as an effective device for mediating emotion and for managing relationships. The device allows user's to feel constantly connected and this may changed the way that people perceive the management of their private relationships. The key issues from the data will be further discussed in Chapter Nine.

9 Discussion

"The mobile clearly enables additional communication that we might not have made before (as does email) for example phatic calls where the point is not so much the message but the gesture of getting in touch" (Haddon 2000 p.5).

According to OfCom in 2007 58.8 Billion text messages were sent and nearly 100 billion outbound mobile call minutes were made in the UK (see Chapter One). This demonstrates that mobile phone communication is effectively ubiquitous. Yet whilst there is a wealth of mobile phone research based in Scandinavia, central Europe and Asia, there are fewer studies concerning mobile phone use in the UK.

This study began in 2004 when there was limited literature available about UK mobile phone use. In conducting an ethnographic study and in gathering large amounts of data, it has produced some interesting patterns of mobile phone use. As a sociological study, the research makes use of Goffman (1959, 1963). The development upon Goffman's work was inspired by literature (Ling 1997, 2001, Plant 2001, Persson 2001, Humphrey's 2005). However the study takes an empirical approach to research as apposed to being theoretically driven. The study has also informed the design and development of a model: the Co-local and Remote Interaction Model can be applied to public mobile phone use in the UK.

In conducting two studies, this research has intended to present data on UK mobile phone use in the public and private spheres. The thesis has demonstrated that mobile phone use in both the public and private needs to be understood in terms of interaction management, face management and relationship management.

9.1 Research aims

Study One aimed to explore how mobile phone users manage phone use in public interactions and user's attitudes to public phone use. Study One did this by conducting an ethnographic study of people's mobile phone use in public and also by conducting a survey. Two key issues were considered in Study One:

- How people conduct their interaction management - including implementing interaction management strategies whilst making use of the mobile phone in public.
- How Goffman's concepts of public behaviour can be applied to fit today's social norms in a technically driven sphere.

Whilst Study One concerned public mobile phone use, Study Two concerned private use. It aimed to gain perceptions of mobile phone use in the private domain, including gaining opinions about socially acceptable etiquette for the management of relationships via the mobile phone. Two main issues were considered:

- How people use their mobile phone for private use in relation to relationship management and face management.
- People's attachment to the device and its use as an affective technology for mediating emotion.

Study One has demonstrated that public mobile phone use requires interaction management strategies as users are managing both the remote contacts and co-local environment simultaneously. Users must decide how to best conduct their phone interactions while potentially managing multiple roles in front of both the remote and co-local contacts. Study One also shows that existing social norms have been adapted to fit public mobile phone use and that 'etiquette' may affect the interaction management strategies that are used. This study has shown that based on user type, there is a correlation between high users (those users who send and receive more than nine texts per day, and make and receive more than nine calls per day) and age: young people use their phones more frequently than those in the older age groups. Due to the sample, the results have focused upon differences in age and highlight patterns of use by the general demographic: young people.

Study One has also shown that Goffman's theory can be updated to include public mobile phone use. Although whilst Goffman fits the parameters of this study it must be highlighted that

his concepts may not be applicable to other cultural contexts. Within different social and cultural contexts, Goffman's theory may not be applicable.

Study Two has demonstrated that mobile phones are affective devices for conveying and expressing emotions. People also have an attachment to the phone's contents and what the phone can offer them in terms of constant connectivity. Text messages in particular are key to facilitating and maintaining relationships. Linked to this is the fact that face management is still applicable in private mobile phone interactions.

The following chapter will provide a discussion about the themes and implications for mobile phone research, firstly by discussing the results of both studies.

The discussions about mobile phone use in public consider interaction management strategies for simultaneous remote and co-local interaction. This section also considers interaction management for single phone users, phone users in dyads and phone use in groups. Specifically dual-front interaction, three-way talk and flight are discussed. The implications of multiple roles are shown to have an impact upon interaction management. Goffman is used to understand interaction management before considering how age, user type, gender and location may affect public phone use. Etiquette, social norms, acceptance, annoyance and opinion are also discussed in this section. Some conclusive comments are then presented for Study one.

The mobile phone use in private section discusses how the mobile phone is used for relationship management. Using the mobile phone to manage face is shown to be a key issue for relationship management. The device is also shown to be an affective technology for mediating emotion and excitement and annoyance are particularly linked to mobile phone use. Attachment to the phone is closely linked to constant connectivity as people feel distressed when they are not connected. Socio-emotional contexts are highlighted and are particularly linked to text messaging. Age, user type and gender are considered as factors in private use before conclusive comments for Study Two are presented. The chapter ends by providing some conclusive comments and makes suggestions for future work.

9.2 Mobile phone use in public

9.2.1 Interaction management

People always make use of interaction management strategies when using their mobile phones in public. They do this, when alone, in dyads or when in groups so not to disrupt the communication and interactions in the local environment. This is because a phone user has to manage the remote and co-local interactions simultaneously. Doing this is a key element to public mobile phone use.

'The mobile phone call brings what is normatively regarded as a private part of the backstage of social life into the front stage or public realm. This challenges what is appropriate behaviour in public and leads to various infractions that requires interaction repair work' (Turner et al 2008, p.202).

9.2.2 Management of the remote and co-local

A key issue for public phone use is the management of the remote and co-local interactions simultaneously. That is the phone communication (remote) and the communication in the local environment. The mobile phone can force people to be in two places at once - the 'physical space' (shared with the co-located) and the 'virtual space' (where remote communication occurs). Whilst Palen et al (2001) believe that social and behavioural norms are under development as new technology is adopted, Humphreys (2005) suggests that mobile phones are blurring the boundaries between the physical location and the social sense of self. Ling (1997) highlights how the negotiation of role switching and management of face can have an impact on bystanders and they can be often left suspended whilst a person answers a call mid-conversation. In considering these ideas Kleinman (2004) asks whether face-to-face communication can maintain richness when people can connect to other sources of information when in the presence of others. The Co-local and Remote Interaction Model helps to explain how mobile phone calls can impact upon the local environment whilst the remote communication is occurring. This model has been designed and developed based upon the findings in Study One.

The Co-local and Remote Interaction model helps to understand interactions which can occur during public mobile phone use. It shows the potential communication which can occur not only between phone users, but also between people who are co-located to the phone user. The communication occurring in the co-local environment may be not always be revealed to the people in the remote environment. That is to say, although the communication can potentially occur, the phone users, the co-local and the remote people may not always be aware that the interactions are taking place at the other end of the phone. An explanation of the model is provided in the following section.

9.2.3 Co-local and Remote Interaction Management Model

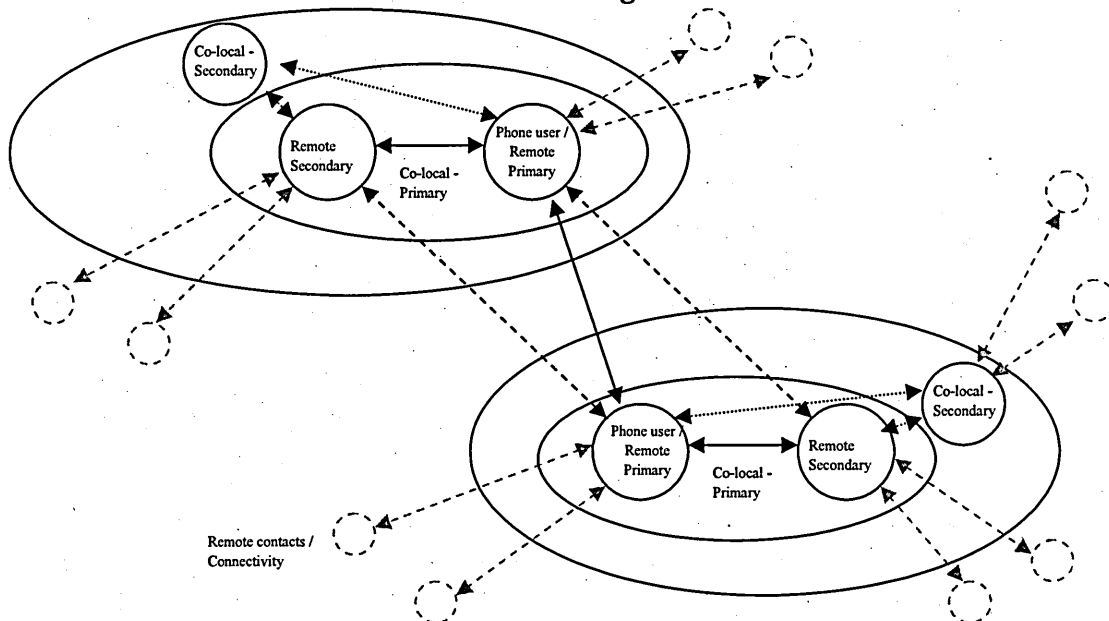


Figure 9.1 Co-local and Remote Interaction Management Model

This Model helps to understand the basic interaction management which occurs during public phone use. It has been informed by the ethnographic research conducted in Study One. Specifically it is useful for explaining the interaction which occurs when a mobile phone user is managing their co-local and remote communication simultaneously. The '*co-local primary*' interaction occurs between two (or more) people who are 'physically' in each other's company (or presence). For example two people in a dyad. The '*co-local secondary*' interaction is what

Goffman refers to as by-standers. By-standers are people in the immediate environment who are able to witness the interaction between the dyad and the phone interaction from a distance. Whilst they do not directly engage in the communication between the dyad, they can perform civil inattention and are able to watch the performance of the dyad. The dyad is also able to watch the performance of the '*co-local secondary*'. The '*co-local primary*' communicators are also labelled '*remote primary*' and '*remote secondary*'. The '*remote primary*' is the phone user who is remote to the other person on the phone. The '*remote primary*' communication occurs directly between the phone users. The '*remote secondary*' can potentially engage with the phone conversation through what Humphreys (2005) calls 'three-way talk'. The '*remote secondary's*' are not necessarily involved in the communication and if they are involved are not necessarily aware of the whole of the conversation. The '*remote contacts / connectivity*' is the constant potential communication which can occur via the mobile phone. Anyone who owns a mobile phone has the potential to contact or be contacted when their phone is in their possession. This means that there is always the potential for a mobile phone interaction and the potential for it to interrupt co-local interaction. What appears to simply be a mobile phone conversation is in fact a more complicated set of interactions which may or may not impact upon one another.

9.3 Management strategies for single behaviour

Goffman (1963) terms people who are alone in public as 'singles' and this can be adapted to fit mobile phone users who are in a 'co-locally' alone in public. 'Singles' use closed body language as an interaction management strategy when using their phone in public. Love and Perry's (2004) research also found that phone users use closed body language. Crossed arms, crossed legs, and a bowed head are all notable positions adopted by single phone users. The positions convey to other people in the surrounding environment that they are otherwise occupied with remote communication. Puro (2002) suggests that mobile phone use in public leads to closed and passive public behaviour. This helps the phone user to indicate their disconnection from the co-local environment whilst engaging in the remote communication. The social norms of mobile phone use in public are under development as the technology is adopted for social use (Palen et

al 2001) but the majority of body postures used follow existing norms (though they are modified by the requirements of using the phone). The closed postures used, help people to manage their phone use by signalling to others that although they are physically present, their main involvement is the remote phone communication and their side involvement concerns their presence in the local environment. Being on the phone in some cases may warn other people not to approach them (Fox 2001) and often does not leave any openings for face engagements with other people.

Goffman's (1963) concept of 'singles' is therefore partly applicable to public mobile phone use. It shows that 'singles' can use their phone to assist their own impression management; to show to others that even though they are alone in public they are needed, wanted (by the remote contacts) and want to be contacted in a technological context (Arnold 2003). A 'single' phone user can be alone in public, but with a phone they are engaged in remote communication and the phone becomes an involvement shield. So Goffman's (1963) concept of singles alters with the use of the phone - since the 'single' can be in communication with a remote other: although a person may be 'single' in a physical context, they are not necessarily single in a communicative context.

9.4 Management strategies for dyad interaction

The making or taking of a call has the potential to break a dyad into a remote interaction and a 'single'. In order to prevent the break up of a dyad both the phone user and the co-local employ methods to manage the maintenance of the dyad:

- The phone user may or may not demand civil inattention from the co-local. (If it is required the co-local other may read a menu; check their own phone; drink a cup of coffee; look out of the window. Performing civil inattention gives off a signal to bystanders and the co-local that they are appropriately inattentive).
- The caller may undertake 'absent presence'. (Often this signals that the co-local should perform civil inattention).

- The caller may choose to involve the co-local. (Humphreys 2005 describes these actions as dual-front interaction or three-way talk).

The following methods of interaction management may be conducted by a mobile phone user in a dyad:

9.4.1 Dual front interaction

can be performed by the phone user through non-verbal gestures and helps the co-located person from becoming a single. Often the remote caller is left completely unaware of the interaction whilst communication between the dyad is maintained (see section 5.4.2).

9.4.2 Three-way talk

is method for managing communication which also prevents the co-located person from becoming a single. The phone user includes the co-located person into the phone conversation with the remote person. The remote person is aware of the co-located other and the co-located other contributes to the phone interaction.

9.4.3 Flight

Some people can be seen leaving a dyad when talking on the phone; this allows the phone user to fully engage with the remote contact without being over heard by the co-local other. Moving away from the dyad may help the phone user to manage their face (Goffman 1959) and manage their potential multiple roles (Palen et al 2001, Arnold 2003, Harper 2003). However part of this interaction management strategy involves the phone users having to manage rejoining the dyad after terminating the call. This is often done by making apologetic cues and signals in order to restore the dyad interaction since they temporarily prioritised their remote communication.

9.4.4 Civil inattention

Specifically with dyad interaction the co-local may be left to perform civil inattention. The co-located person almost becomes a single as the mobile phone interaction take precedence. The newly 'single' must then look as though they are not eavesdropping on the phone communication and also as though they have something else to do whilst the other person is otherwise engaged on the phone.

Within the survey data the results for making and answering phone calls whilst with one other person in public do differ. More people would answer a phone call than make a phone call when in public with one other person. As with the results for public mobile phone use when in groups, the compulsion to answer a ringing phone may be a factor affecting people answering calls (Geser 2004). If the phone user is in demand and receives a call, the choice of shifting attention to the phone communication is excused since people understand they are compelled to answer the phone. If the phone user chooses to make a call when in a dyad, then they are prioritising the remote communication, potentially threatening the dyad, and leaving the co-local to perform civil inattention as a single (see section 6.4).

9.5 Management strategies for group interaction

Making a call when in a group has similar consequences to being in a dyad, although the difference is that the co-local others do not need to undertake other non-verbal actions as the group interaction continues. The group can perform civil inattention towards the phone user, but the phone user must undertake the non-verbal actions (absent presence) to sanction and support the civil inattention of others. A phone user will often use closed body language in these instances. This not only gives the caller a degree of privacy but also helps to signify that they are otherwise engaged in remote interaction and temporarily disconnected from the group. Phone users may use the following strategies to manage their phone use when in a group:

9.5.1 Dual front interaction

Dual front interaction (Humphrey's 2005) can also be performed whilst a member of the group is on the phone. This helps the phone user to manage their communication with the co-located and remote contacts - often without the remote person knowing.

9.5.2 Three-way talk

Phone users may choose to manage the remote communication by involving the group into the call. This helps the group from having to perform civil inattention and the phone user from supporting their civil inattention and performing absent presence. The group becomes involved in the phone interaction. Weilenmann and Larsson (2001) and Taylor and Harper (2003) also observed instances of this kind of interaction in their research.

9.5.3 Flight

When considering flight as a management strategy, the survey results revealed that more women than men have walked away from a group to answer a call and more people in the older age groups have walked away from a group to make a call. Whilst more people in the older categories have walked away from one person to answer a call and have also walked away from one person to make a call. This implies that there are some existing norms relating to etiquette that have been adapted to public mobile phone use by people in the older age groups (see sections 5.4.6.3 and 5.4.6.4).

Leaving a group to talk on the phone allows the phone user to fully engage with the remote communication without disrupting the group. Leaving the group to prioritise remote interaction may occur when the phone user does not want their conversation being overheard (Lasen 202). Moving away from the group helps the phone user to manage their face (Goffman 1959) and their potential multiple roles (Palen et al 2001, Arnold 2003, Harper 2003). However when phone users have finished their conversation they must then carefully re-engage with the group (Ling 1997). Often phone users will sit quietly and listen to the conversation before joining into the group interaction (see section 6.5.2).

9.5.4 Other strategies

Young people can be seen sharing the contents of their phones when in group situations (Taylor and Harper 2003) and usually it is what Weilenmann and Larsson (2001) term 'minimal sharing' which takes place. The phone during these interactions becomes the focal point of the group interaction.

Alternatively texting allows the phone user some interaction with the group whilst remotely communicating outside the group since it is a more private and discrete method of communication (Retti 2006). The phone user manages their main and minimal involvement simultaneously (Goffman 1963) whilst interacting with the group.

The survey data indicates that people are more likely to answer calls when in groups than make calls. When making calls the phone user has more control over the management of face, and the

remote and co-local interactions - and is choosing to prioritise the remote communication over the co-local communication. Answering a call means that the interruption is involuntary and phone users may have to use interaction management strategies to ensure their face, role, and co-local interactions are not compromised.

9.6 Interaction management and multiple roles

In the public - people using their phone in the company of others have to consider the management multiple roles (Palen et al 2001, Arnold 2003, Geser 2004). It is possible that younger people find multiple role management easier to do because they may not have as many roles to manage and may also be practised at performing different roles via the device. Older people may have more roles to manage which means that taking a mobile phone call in front of others involves much more consideration and management. The mobile phone forces people into different roles regardless of their location and this can have an effect on the phone user and also on the companions of the phone user. It is important to note that roles and performance are similar, but they do differ since roles are institutionally defined. To Arnold (2003), a mobile phone performance can be seen in terms of different roles which can contradict each other. Phone users have to manage role conflicts and discrepancies of self presentation at the same time. Geser (2004) suggests this can cause confusion but usually people are able to manage two areas of this life at once. Geser (2004) also suggests people are forced to switch roles regardless of their physical location and sometimes in doing so they are forced to manage the impression they are giving off to individuals within ear shot. Goffmans' (1959) notion of impression management seems particularly apt for considering the mobile phone affecting role changes.

9.7 Interaction management and Goffman

The mobile phone provides another set of contexts for communication: the device simply gives people an alternative medium by which to contact each other. Therefore creating new theory is not necessary - since what people are doing is not a new phenomenon. Understanding an alternative medium for communication can make use of existing theory by updating it to fit the context of human computer interaction and technology.

Several ideas from Goffman have been briefly examined and it is clear that Goffman's (1959, 1963) work still applies to everyday social practices and communication. Goffman sought universals in human interactions of contemporary modern life. Forty years have passed and these still seem to be relevant in light of the mobile phone. It must be made clear however that although Goffman's concepts may be applicable to UK cultural contexts they may not be applicable to other cultural contexts. The following of Goffman's concepts are particularly relevant to this research and can be applied to public mobile phone use in the UK.

9.7.1 Face management

The level of face management is no less so than when it is performed through a mobile phone. There may be no non-verbal signals to read during the mobile phone communication; however this does not mean that mobile phone interactions use less face management. The engagement via the phone – either through calling or texting still involves the management of impression – and thus face. The content and tone of a text message is still carefully conveyed before being sent, and the tone and content of a phone call is still managed appropriately.

9.7.2 Impression management

Within performance people must act to ensure that they are conveying an impression that is appropriate at the time of the interaction. Impression management assists performance and also the management of face. The phone acts as a tool which assists in the management of impression, performance and face.

9.7.3 Performance

Performance is what Goffman considers people to be doing when they are interacting with others on a social level. To Goffman, people are always performing. Again the phone is used as a tool in the performance; or for the performance.

9.7.4 Main and Side involvement

Main and Side involvements absorb an individual's attention. The main involvement is often the dominant involvement whilst the side involvement is often the subordinate one. Managing these involvements can change from moment to moment. A mobile phone may be a main involvement when the remote communication is prioritised, or may be a minimal involvement if

the user is texting. The use of the phone, to call or text may change from a main to minimal involvement from moment to moment - depending on the remote and the co-local interactions and depending upon the management of them.

9.7.5 Civil inattention

Civil inattention is the process whereby individuals who are co-locally situated demonstrate to one another that they are aware of one another, but without being either threatening or over-friendly. This action is conducted by pretending not to look, pay attention, or listen, or by assuming a posture that conveys that it is not possible to see or hear what others are doing.

When a member of a dyad is on the phone the other co-located person is left to perform civil inattention. The co-located person becomes a single as the mobile phone interaction takes precedence. The newly 'single' must then look as though they are not eavesdropping and also as though they have something else to do whilst the other person is otherwise engaged.

9.7.6 Singles

Goffman's (1963) concept of 'singles' is applicable to public mobile phone use. 'Singles' use their phones to assist their own impression management; to show to others that they are needed, wanted and want to be contacted (Arnold 2003). A 'single' phone user can be alone in public, but with a phone they are engaged in remote communication. In order to signify this to others they use closed body language.

9.7.7 Involvement shields

According to Goffman, involvement shields are often used to hide someone's emotion or discomfort in being alone in a public place. Someone reading the paper is involved in the task of doing so and thus provides an excuse for being a 'single' in a public place. The mobile phone provides people with a perfect involvement shield: phone users appear as though they are in communication with a remote other. People become involved in the phone interaction and this can shield contact from co-local others.

9.7.8 Boundaries

Performers need to control boundaries to control who has access to the performance. Within boundaries there are participants (who are directly involved in the communication) and bystanders (who are involved in the situation but not necessarily in the direct interaction). This particularly links to the concepts concerning the Co-local and Remote Interaction Management Model (see section 9.2.3).

Goffman's (1959, 1963) work has been applied within several research studies about the use of the mobile phone. Humphreys (2005) makes use of Goffman's cross talk, singles and withs, and involvement shields to develop a concept of 'three-way talk' (see section 2.4.1). To Humphreys Goffman's (1963) work on behaviour in public places is a basis for examining newly established social norms. Persson (2001) uses Goffman's concept of impression management, involvement shields and civil inattention to help understand people's mobile phone use in public. According to Persson phone users particularly benefit from civil inattention because it allows a degree of privacy in public. Ling (1997) also uses the concept of civil inattention and highlights Goffman's notion of boundaries (see section 2.3.10) to understand why some people feel mobile phone use in public is inappropriate. Ling concludes that technology has shifted the boundaries of social interactions in every day life.

This study has shown that new theory about public mobile phone use in the UK is not necessary since the phone simply provides people with another medium for communication. The phone provides people with new contexts for communication and elements of Goffman's concepts can be applied to these. Goffman's (1959, 1963) concepts of behaviour in public have helped to develop the Co-local and Remote Interaction Management Model. Interaction management also relates to the social and cultural factors and contexts which are discussed below.

9.8 Interaction management and age

The data in this study has shown that there are distinct differences between young and older users in relation to public mobile phone use and opinion. This may be because the 'net generations' (Oblinger and Lombardi 2008) use of the device in the public does differ from

older generations. This in turn may impact upon the set of assumptions young people have about the public and private spheres and about the media available to them.

The results in this study suggest that high percentages of younger people send and receive more text messages than participants in the older age categories. Furthermore, there are differences in the results for sending text messages even between the younger categories: 42.6% of 16 - 18 year olds compared with 20.8% of 22-24 year olds send more than ten text messages. The results also show that younger people make and receive more phone calls than people in the older age categories (see sections 6.2.4 and 6.2.5).

For phone use specifically in public, younger people answer and make more calls. There is also a small difference between making and receiving calls in public: more people answer the phone than make calls. It is perhaps more socially acceptable to answer a ringing phone – since people always answer a ringing phone – even if it interrupts important communication (Hopper 1992, Geser 2004).

More people in the young age groups would answer a call when in a group (see section 6.3.2). Young people may be better practised at interacting with remote contacts in front of co-locals and this may be due to the frequency of use. On the other hand younger people may need or want to perform phone use in order to support their own impression management: being on the phone shows that they are connected and popular. More people in the younger age groups would always or sometimes answer or make a call when in a group (see section 6.3.2 and 6.3.3).

The results indicate that younger people are more likely to always answer their phone when with one other person (see section 6.3.4). However there is no significant difference in any of the categories for making calls when with one other person (see section 6.3.5).

Young people are also more likely to split their conversation between the person on the phone with one other person i.e. perform three-way talk and more young people split they're conversation with the remote contact and the group (see sections 6.4.2 and 6.4.3).

According to the results people in the younger age groups are less likely to be embarrassed by hearing other people's mobile phone conversations (see section 6.5.3). Young people are also less concerned if others can overhear their mobile phone conversation (see section 6.5.4).

Younger people may be less concerned at being overheard, more familiar managing remote and co-local interaction simultaneously, and it may also be easier to manage face as there may be fewer roles to perform (see section 2.5).

So young people generally are more familiar with the technology and use it more frequently - both generally and in public, and this familiarisation seems to impact upon what is deemed to be socially acceptable mobile phone use in public.

'The reason why so much cell phone activity goes on in public may well stem from the symbolic status display functions associated with the availability and actual usage of this technology: 'status' not in the sense of higher wealth or education, but in terms of intense social integration' (Geser, 2004 p.9).

9.9 Interaction management and user type

There are also inevitably distinct differences between standard and high users: high users send and receive more text messages and make and receive more calls (see section 6.2). There are also, retrospectively limitations in using two user types. Using two groups provides data about broader patterns of mobile phone use rather than providing data with finer detail about usage. Future studies could make use of user categories which are divided more specifically according to mobile phone use.

The results within this study found that high users are more likely to perform three-way talk when in groups: 72.7% of high users and 56.2% of standard users agreed that they had used this management strategy (see section 6.4.2). Whilst a person's user type does not determine whether they will answer their phone when with a group of people in public, frequency of use may have an impact upon the norms of use and acceptance of the technology in the public domain. What is considered as acceptable use by high users may differ to what is deemed as acceptable use by

standard users. With frequency of use comes the familiarity of the technology and in turn familiarity of public use. So high users may be more practised at using interaction management strategies.

9.10 Interaction management and gender

Generally there are few gender differences concerning patterns of public mobile phone use. Previous studies have highlighted the differences in men and women's use (Plant 2001, Reid and Reid 2004) however as the familiarity of the device increases and usage becomes ubiquitous, gender differences may become more subtle. One difference showed that more men (18.9%) than women (13.9%) always mind if people can overhear their mobile phone conversation when in public. Being over heard may impact upon what strategies are used by both men and women when taking calls in groups and dyads.

Section 6.4.3.6 shows that flight is used as a management strategy by women: more women (85.5%) than men (78.8%) have walked away from a group to answer a call. Perhaps women find it easier to use flight as interaction management strategy than performing multiple roles in front of the remote and co-local contacts.

On the other hand impression management may play a part in the result for gender and flight: some men may be more confident and practised at 'stage phoning' (Plant 2001). The observations found that some men can be seen using more open body language when sitting alone with their phone - and 'stage phoning' gives the impression that they are confident and connected. Conversely women can be seen using their phones as involvement shields when alone in public and this may be to avoid being approached by others (Plant 2001, Fox 2006) (see section 5.6.2).

There are also gender differences for rejecting incoming calls depending upon the circumstance. The results show that more women (59.1%) than men (50.5%) would reject a call in a quiet environment. More women (79.4%) than men (68.9%) would also reject a call during a serious

conversation. Where as more men (26.8%) than women (19.7%) would reject a call in a noisy environment (see section 6.4.3).

More women than men would also reject an incoming call in the following places: a restaurant; a cinema; and a theatre (see section 6.4.4). These results imply that there are gender differences in relation to mobile phone use and location: women are more likely to reject calls in quiet environments where they can be over-heard and the management of multiple roles may involve a more overt performance. The results found that more women would reject a call as a management strategy during serious conversation and in restaurants, cinemas and theatre - showing that they would prioritise their co-local communication in social settings where forms of etiquette and norms about behaviour exist.

This shows that whilst generally speaking there is very little difference in relation to patterns of use / how often men and women use their phones - there are contextual differences in relation to etiquette and the interaction management strategies they may choose to adopt. Future studies could exclusively focus upon public phone user and gender and may find a difference in the way men and women use their phones in public. Given that the technology is rapidly developing and changing, the way people utilise it, and the social norms surroundings it's use may also change.

9.11 Indoor locations / contexts

Indoor contexts tend to be institutional places which have an existing set of norms and values to that environment and allow more observation of others. However even though people are in close proximity to others they continue to make calls. In some cases the calls are a form of staging (or what Plant 2001 terms 'phone staging'), whilst for others, the calls require people to carefully manage the environment they are communicating in. Since people must adhere to a set of existing social norms in indoor places, phone users can often be observed managing their phone communication away from the group by conducting the following actions:

- Being on the phone during transit e.g. walking to and from the bar / toilet whilst using their phone.

- Answering phones near to entrances / door ways - at the entrances of indoor locations.

It may be more acceptable to take a call when in transit when in indoor locations than when sitting down in company for the following reasons: a level of privacy maintained; the nonverbal cues required to perform civil inattention are avoided; others in the group are not disturbed by the communication of phone user.

9.12 Outdoor spaces / contexts

Outdoor locations are less socially defined spaces. Therefore people may find it easier to make phone calls since they are not constricted by an existing set of social norms. Outdoor spaces tend not to be institutional and are open and so callers gain a certain amount of privacy.

People are seen calling on their phones more frequently in outdoor locations - especially when they are on the move. People again gain a sense of privacy although this is due to the open space rather than the mode of communication. The existing social norms that may be present in indoor places are not applicable to outdoor places since outdoor spaces are less defined.

People in outdoor locations can be seen doing the following things:

- Stopping and standing in doorways (perhaps to avoid being carried into the sea of people walking by (Larsen 2002)).
- Leaning up against walls (to take a moment to concentrate on the call - making it the main involvement (Goffman 1963)).
- Pacing in circles (to carve out a private arena whereby any external interference is deliberately and visibly excluded (Plant 2001)).
- Kicking or playing with objects whilst pacing (this is another way of carving out a sense of personal space).

So phone users do gain a sense of privacy in outdoor spaces but also define their own sense of space whilst on the phone.

9.13 Interaction management and etiquette and social norms

As mobile phone use has become prolific, some social norms of public phone use have been adopted - for example texting in confined spaces or refraining from using the device in mobile-free zones, whilst other codes of practise have been adapted from existing social norms. For example leaving a group to manage the remote communication (see section 6.5.2). However an important point to make is that people do not have a set method for managing their mobile phone use in public or private- it is context dependent.

Text messaging is shown to be an interaction management strategy used when in confined spaces. This study observed people texting rather than calling in intimate spaces i.e. on public transport and in restaurants. Texting is a more private form of communication which assists in saving face since people in close proximity are not subject to a conversational content. Texting rather than calling helps to avoid disrupting the co-local communication and users do not have to perform role management or manage the remote and co-local simultaneously. This also shows that the impression of power is not as important now that public mobile phone use has become so ubiquitous.

On the other hand, when people do use their phone to call, 'loud talk' (Ling 1997) tends to happen when the phone user is sitting alone and may feel that if there are no people in close proximity, there is a degree of privacy. These types of mobile phone interactions seem to be most common on public transport, and in public transport locations.

Section 5.5.8 shows that etiquette is related to age: more of the participants in the older age groups believe there should be some etiquette rules when using a mobile phone in public. People in the older age groups may have a different perception about the technology; and seem to have a different set of patterns of mobile phone use in public, and this has an impact on their perceptions about the social norms of its use.

9.14 Acceptance and the mobile phone

People's acceptance of the use of mobile phones in public is growing since people are using their phones, for example, in informal restaurants and in cinemas before the films start - places

where previously use may have been considered rude. This supports Katz (2004) and Vincent's (2005) suggestion that after a period of adjustment, mobile phone use in public will no longer be considered as disturbing, and humans will normalize to the mobile phone use.

Generally large percentages of people agree that it is acceptable to use mobile phones in public (see section 5.5.5). The advantages of what the technology can offer the user in terms of connectivity; communication, and availability may lead them to believe that use of the technology is acceptable in public.

There are other distinct differences relating to age and acceptance of public mobile phone use. More people in the older age groups sometimes or always feel embarrassed by overhearing other people's conversation and this supports Love and Perry's (2004) study. More people in the younger age groups 'rarely' or 'never' mind if people can overhear their mobile phone conversation when in public and this supports Lasen's (2002) study.

In addition, more people in the older age groups consider phone use in the company of others rude (see section 6.5.9) showing that people have different levels of social acceptance towards public phone use according to their age. More people in the older age groups also believe that generally it is rude for other people to use their phone when in their company (see section 6.5.9). This could be related to existing norms of politeness and etiquette: people in the older categories have a different set of social norms and values.

The correlation between social acceptance and user type also becomes apparent in section 6.5.9 since 60.5% of standard users and 77.0% of high users do not think it is rude to use a mobile phone whilst in the company of others. Furthermore section 6.5.10 shows that 60.5% of standard users and 77.0% of high users would not consider it rude if someone else used their phone in their company. This further supports the concept that acceptance of the device comes with more frequent use.

9.15 Annoyance and the mobile phone

Social acceptance of the technology may be related to annoyance of the technology. People may find public mobile phone use less annoying if they accept use of the technology's presence in the local environment. Section 5.5.7 shows examples of specific elements to mobile phone use that people find annoying and the results show that there are less people who are annoyed by mobile phone attributes relating to interaction management strategies.

Perhaps people have become accustomed to the social norms of public phone use since 54.4% of high users and 39.9% of standard users rarely or never get annoyed when other people use their phones in public (see section 6.5.5). High users may accept other people's phone use because they themselves use their phone frequently.

It is inherently pleasurable to contact others using a mobile phone and humans are hard wired to seek social contact. Therefore people's motivations for using the mobile phone in public may be greater than the annoyance it possibly creates for others (Katz 2004). The results for age and annoyance shows that higher percentages of people aged over twenty-five sometimes feel annoyed at other people's phone use (see section 6.5.5). Older age groups have had to adopt mobile phone technology and learn to socially accept the device, whereas the younger age groups may not remember social life without them. The 'net generation' (Oblinger and Lombardi 2008) are often more familiar with the technology, with multitasking, and managing their remote and co-local communication in a variety of locations and contexts. Therefore the interactions presented by other people's mobile phone use may be an inherent part of being in public and so are not necessarily perceived as annoying.

9.16 Public phone use and opinion

Ten years on, mobile phones have become so integrated into both public and private everyday life that they are no longer perceived as a status symbol. Mobile phones are blending into social environments and they are mostly taken for granted across public and private spaces. The younger generations have had mobile phones from an early age so are accustomed to the device

and its everyday use – the novelty of showing off their phones may have worn off after years of use.

Increasingly, people are aware of their own mobile phone's presence and the connectivity it brings them and this is shown in section 5.6.4. 80.7% of standard users and 86.6% of high users have checked their phones for messages or missed calls even though they know the phone hasn't sounded.

Further to this, the results show that 49.5% of standard users and 58.9% of high users never turn their phones off when they go to sleep. The percentages are also higher for young people who rarely or never turn their phones off when they go to sleep (see section 5.6.5). This highlights the sense of connectivity that the phone brings and shows the device as an every day commodity which is for some people 'always on'.

9.17 Study One conclusive comments

- The management of remote contacts and co-local environment is a key concern for public mobile phone use.
- The interaction management model is useful for explaining the dynamics concerned with managing the remote and co-local communication simultaneously.
- Goffman's concepts of behaviour in public can be applied and used to explain public mobile phone use.
- The mobile phone provides new contexts for communication in public - therefore Goffman's theory can be updated to fit socio-technical contexts rather than creating new theory.
- Social factors such as age gender and user type have an impact upon public phone use and opinion of public phone use. Specifically young people and high users may have a different set of socially acceptable norms (due to the familiarity with the technology and frequency of use) which impact upon their own mobile phone use in public.

9.18 Mobile phone use in private

Using a mobile phone to manage relationships is a key issue within Study Two. The following section shows that the mobile phone can be used as a tool for relationship management. In doing so, the user is still performing a large amount of face management; it is just through a different communicative context.

Mobile phones provide people with new ways to perform old rituals (Taylor and Harper 2003). Instead of managing their communication face-to-face, people are choosing to manage some of their relationships via their mobile phone. Vincent (2005) suggests that the mobile phone has not replaced what people do, but rather it has made life easier for them. In some cases this research supports this view point - text messages particularly allow people time to manage their impression and face. On the other hand, because there are no non-verbal cues in text messaging, people must understand the rules and signifiers which have developed into the norms of use. Whilst it is easier to initiate communication via text messages, it is harder to interpret the content of people's messages (see section 7.6).

Harper (2004) suggests that it is not just appointments that people are making- people are making and breaking relationships via their phones. This study has found that people are using their mobile phones in various relationships contexts - even to the point where the mobile phone is a key tool for developing new relationships (see section 7.9.3). Lasen (2004) suggests that phones are an important element in building and maintaining groups and communities and the data in Study Two also proves this (see section 7.9).

The following section will look at several issues relating to private use of the mobile phone. The mobile as a tool for relationship management is briefly discussed in section 9.19. Face management is addressed in section 9.20. Issues concerning emotion, attachment and constant connectivity are then highlighted in the following sections. Socio-emotional contexts are discussed in section 9.24 and section 9.25 continues by addressing socio-emotional texts. The role of text messaging in private communication is then touched upon in section 9.26 before

private use and social factors and etiquette and social norms are addressed. Conclusive comments for Study Two are drawn in section 9.29.

9.19 Relationship management

The mobile phone can be a key tool for relationship management. It provides an invisible connection between partners who can communicate with one another at any time during the day. Continuous contact allows people to be both independent and co-dependent simultaneously (Arnold 2003). The continuous contact intermittently throughout the day may give people a sense of constant connectivity, reassurance and security (Geser 2004, Hoflich 2006). Hoflich (2006) particularly highlights that mobile phone use is a medium for relationships from beginning to end - especially where close relationships are concerned: from the first exchange of telephone numbers right through to breaking up by mobile phone. The data in Study Two supports this viewpoint (see Chapters 7 and 8). Of the sample who agreed that they were in a relationship, more of the younger people admitted to contacting their partners more frequently throughout the day (see section 8.3). This suggests that young users may gain a sense of reassurance from the continuous communication. Furthermore young users may be dependent upon that continuous communication to feel secure in their relationship, showing that the mediation and management of relationships may have changed with the use of the mobile phone for relationship management.

The fact that text messages are faceless (see section 7.5) means that people are able to manage face without managing non-verbal cues. The following sections will show that the mobile phone - and particularly texting via the mobile phone is an important medium for mediating emotion - for both developing and maintaining relationships.

9.20 Face management

Face management is a key issue in using the mobile phone for managing relationships and private mobile phone use. Retti (2006) believes that text messaging etiquette is minimal compared with face-to-face communication but whilst people are able to 'hide' behind their phone (see section 7.5) the communication via the phone still requires a large amount of face

work. Text messages in particular can be used to assist the management of face since they allow the user time to consider a response. The content of the message holds cues and represents the phone users face management. Sending text messages assists the sender in managing face since they do not have to manage the other person's immediate co-local reaction. The asynchronous medium may help people to manage and maintain their impression more easily.

Rettie (2006) found that it was less embarrassing to send a text message than it was to say something in person. The participants in this study say that people are more likely to take risks i.e. by expressing feelings, since there are no immediate face-to-face consequences to their actions (see section 7.9.2). By sending text messages, rather than calling, people gain a level of face saving since they have time to compose the impression they want to portray in the message. The results show that more of the younger people (83.8% 16 - 18 age category in comparison with 8.3% in the 75+ age category) agree that their mobile phone allows them to text things they would not normally say if they were face-to-face with a person. This result indicates a difference in the way that the phone is used for managing personal relationships by younger age groups. The fact that there are no non-verbal cues to manage when sending text messages may mean that people find it easier to send text messages with content that they would not normally say when face-to-face. Further more those who are more familiar with the device and use it regularly for relationship management may be better practised at managing their face via text messages (see section 8.3).

One participant even admitted to leaving their phone at home when going out on a night out - not to prevent them from losing it (as Vincent 2005 suggests) but to prevent them from sending drunken texts! (See section 7.3). This shows a conscious level of impression and face management. The phone owner is pre-empting the potential contradiction of face that sending text messages could cause whilst drunk. This also demonstrates how the phone functions as a tool for face and impression management in a much more dynamic way than landline or email for example.

Removing contacts from the phone, was described as a means of preventing the sender from communicating with people when in a vulnerable position (i.e. when drunk!), and thus saves face. Not having access to the remote contact is a barrier to communication, but it is one that ensures the phone user is consistent in their behaviour. By not sending drunken text messages the phone user does not have to compensate for their behaviour the next day (see section 7.3). Section 7.3 showed that participants were often embarrassed by the texts they had sent when in a drunken context. The data revealed that people would usually compensate the following day by sending apologetic text messages. This shows that saving and maintaining face is performed via SMS.

Section 7.4.3 shows that sending a text message to someone *accidentally on purpose* is often employed to get a message across that they feel they cannot say face-to-face. Several participants said they have done this if they want to let a friend they can't approach know something important. Two of the participants agreed that this method is employed either to initiate communication with the recipient or to tell the recipient something without directly addressing them. Reid and Reid (2004) believe that text messages provide an opportunity for intimate personal contact whilst at the same time offer the detachment necessary to manage self presentation and involvement. The sender is maintaining face since they are not directly approaching the recipient and have an excuse for the communication – a mistake. If the other person does not respond favourably, the sender can gauge the situation and manage it accordingly. By sending the text message the sender and recipient do not have to manage non-verbal communication, and this assists both parties in managing face.

9.21 Emotion and the mobile phone

This study has shown that the mobile phone is an affective device for mediating emotions and this supports prior studies concerning emotion and the mobile phone (Lasen 2004, Vincent 2005). Vincent (2005) highlights an extraordinary relationship between people and their mobile phone. The emotional attachment to the mobile phone exists towards the content of the device and also towards the connectivity it provides. Vincent (2005) says even just by considering how

dependent people are on their phones shows the evidence that there is an emotional relationship with the technology. Lasen (2004) also suggests that people feel attached to their mobile phones content. Mobiles phones are 'affective technologies', are an extension of the owner's presence, and link people to a virtual network.

The mobile phone is bound up in emotional value for the users and equally is an affective device for mediating emotion; therefore people may find it easy to associate their mobile phones with various positive and negative emotions.

Specifically people agreed to feeling annoyance at receiving no reply or no contact – and sometimes at the other person not picking up on purpose but also with the mobile phone network if there is no signal (see section 7.8.2).

People particularly described feeling excitement within the interview data. During the development of new relationships, was specifically associated with feeling excitement. Excitement was specifically described when users were sending and receiving text messages to a loved one or partner (see section 7.8.1). A wide range of positive feelings were described toward the person and the contact with them when they cannot be face-to-face and further more the contact often reinforces the relationship (see section 7.5).

However people also admitted to feeling frustration at the lack of response via text message. Frustration can be felt when the device itself does not work properly and the phone owner is unable to communicate. Damaging the phone itself shows the extent of this frustration, although some people know that this would mean the lost connectivity so do not take their feelings out on their phones. Although people have described feeling anger but usually this is at the content of text messages (see section 7.6).

The results for the positive emotions indicate that for age, there are higher percentages for feeling happiness followed by excitement, pleasure and contentment. The results for age and the negative emotions indicate that the percentages were highest for annoyance, followed by stress, anxiety, and sadness (see section 8.2).

More high users (70%) than standard users (54.3%) agree that sending and receiving text messages to a partner or loved one has made them feel excited. More of the younger users also agree to this. This shows that communication is inherently pleasurable for the users (Katz 2004) and implies that social bonds may become stronger as mediated exchanges of emotional content take place on a daily basis (Taylor and Harper 2003).

Overall, the results for the questions relating to emotion and the mobile phone show that the mobile phone is an affective device for mediating emotion. The results also indicate that more of the younger users and high users associate their mobile phone use with emotion. This supports the work of Lasen (2004) and Harper (2004) and Vincent (2005): that the mobile phone is closely connected to emotion.

9.22 Attachment to the phone

This study found that attachment to the phone refers specifically to content – rather than the device itself, which supports Vincent's (2005) claim: people are particularly attached to the contact information, text messages and photos rather than to the device itself. People may also get attached to what the device can offer in terms of connectivity and communication (see sections 7.2) and this finding also supports Vincent's (2005) study.

The phone is incorporated into people's lives so much that it becomes a multi-functional device – used as an alarm clock or radio and the participants admitted that they rarely turn their phones off - even at night. Using the phone as a multi-functional device shows a high level of attachment to what the phone can do for them (see section 7.2). It also suggests that there may be a level of dependency on the device for some people who do not want to miss any potential communication (Hoflich 2006).

Losing the phone for some people means losing their text messages and the contacts on their phone, but most importantly it means losing connectivity to an invisible network. This loss causes people to feel distressed. Feelings of sadness, anger, and annoyance have been described by the participants (see section 7.2.1). This further supports the fact that people feel attachment

to their phones in terms of what they offer, since they feel various emotions when the connectivity is lost.

Owning a device reduces anxiety about connection, staying in touch, and the co-ordination of meeting up, and not having a phone generates anxieties about being disconnected (see section 7.2.1).

It is clear that the mobile phone is closely related to attachment and also emotion. The attachment and emotional ties people feel they have towards their phone is for the phone's content and the connectivity that it affords than for the device itself (see section 7.2).

9.23 Constant connectivity

Constant connectivity is a key concept in private mobile phone use. Being in constant connectivity provides users with a certain sense of security since they have a connection to an invisible network. The 'always on' generation feel close even when they are distant (Geser 2004, Hoflich 2006).

Constant connectivity is shown to be linked to emotion and the mobile phone - especially since people feel a whole range of emotions when losing - or at the thought of losing their phones (7.2.1). The potential to be in contact at any time allows users to feel secure and this in turn allows people to feel closer (Hoflich 2006). Geser (2004) suggests that the potential for any-time communication gives people a sense of connectedness and security.

Losing the phone for some people means losing their text messages and the contacts on their phone, but most importantly it means losing connectivity to an invisible network. This loss causes people to feel distressed (see section 7.2.1). Feelings of sadness, anger, and annoyance have been described by the participants. This further supports the fact that attachment is not only bound to emotion - but also connectivity. People feel attachment to their phones in terms of what the phone can offer, since they feel various emotions when the connectivity is lost.

Arnold (2003) shows that the constant connectivity enhances people's communication. Although sometimes the constant communication can become a hindrance, since

communication must be maintained at all times and in all places.. By just having access to contacts, people feel connected to them – even if they cannot get in touch with them. Whilst constant connectivity can be seen as a positive thing: people can always be in touch; it also has negative connotations: people become co-dependent (Geser 2004).

The survey results indicate that some people are contacting their partners continually throughout the day (see section 8.2) and this provides people with a sense of constant connectivity. The continuous contact intermittently throughout the day may give people a sense of constant connectivity, reassurance and security.

Further more the interview data and survey data in Study Two found that people do not turn their phones off - even when asleep (see sections 7.2 and 6.6.5). This shows that the phone owners may have an underlying need for constant connectivity - since they want the potential to always be in contact. Constant connectivity may be a driving factor for people's public and private use.

9.24 Socio-emotional context

Phone use of this nature is borne from the fact that people have access to constant connectivity and also from the fact that the device is affective in mediating emotions. Socio-emotional contexts become relevant when managing relationships since people have the potential to be continuously connected. Recipients may not be aware of the sender's social or emotional context and furthermore moods can be passed on straight away (Hoflich 2006). The characteristics of text messages (faceless, noncommittal, informal - see section 7.5) combined with the socio-emotional context can result in people using their phones to declare intimate personal and emotional feelings.

Many of the younger users admit that their mobile phone allows them to text things they would not normally say if they were face-to-face with a person (see section 8.4.1). This parallels with the fact that text messages assist face management. Text messaging provides users with an opportunity for intimate personal contact whilst at the same time offers the detachment

necessary to manage self presentation and involvement (Reid and Reid 2004). Section 8.4 shows that people do use their phones to declare their true feelings via text messages and phone calls.

Another socio-emotional context concerns the use of the mobile phone whilst drunk. The issue of drunken phone use has not been addressed by existing literature however is shown to be relevant by the results in this study. People – particularly young and high users phone and text their partners, friends and family to tell them they love them when drunk. The loss of inhibition through alcohol consumption and access to the device means that people are able to share their current state of being; moods and emotions (see section 8.4.4 and 8.4.5).

The survey in Study Two questions whether people text when they are drunk. The results show that 68.7 % of 16-18 years olds and 70.2% of 19 - 24 year olds do text whilst drunk and 61.8% of high users 38.5% of standard users also admit to doing this (see section 8.4.5). These results prompted some ad lib questions within the interviews. Most of the participants admitted to sending text messages whilst drunk. Participants in the interviews have described feeling regret and embarrassment the next morning after sending drunken text messages the night before. Loss of inhibition combined with access to the phone leads to people text things they wouldn't normally say to people face-to-face (see section 7.3).

Sending text messages when drunk assists the sender in managing face (Goffman 1963) since they do not have to manage the other person's immediate co-local reaction (see section 7.3). However the text message may not assist in managing a person's impression since the impression the sender gives whilst drunk may differ or even contradict the more familiar impression they usually give.

It is clear from the interview data that as mobile phone use whilst drunk exists, it opens a window on how face relations and emotions are expressed and managed. People feel like they lose their inhibitions when drunk. This, combined with the constant connectivity that the phone provides, and the advantages of sending text messages (see section 7.5) makes it easier for

people to text things they wouldn't normally say. People are more likely to take risks i.e. by expressing feelings, since there are no immediate face-to-face consequences to their actions. By sending text messages, rather than calling, people gain a level of face saving. However the messages sent have consequences and the phone maintains a record of messages. Since there are consequences to sending text messages and a certain level of face management is required in doing so, people feel embarrassed when they view the record of their actions. Often people will try and compensate the next day to attempt to manage their impressions and often they will use alcohol as an excuse and apologise (see section 7.3).

9.25 Socio-emotional texts

The interview data revealed that people make use of the device's functions to manage face. The participants admitted that text messages can be sent to the wrong person. A text can be written about a person and then accidentally sent to that person and people suggest this happens because they are at the forefront of the senders thoughts. This may happen when the text message is a secondary involvement rather than a primary involvement: the sender may not be fully concentrating on the CMC. If the sender realises their error they must then make a judgement on how best to manage the situation and their own face (see section 7.4).

People can also send a text message accidentally on purpose. This is often employed to initiate communication with the recipient or to inform the recipient of information without directly addressing them. Face management is key to this method since the sender is able to deceptively hide behind 'the accidental text message'. Even if people have not performed this method of communication they had heard of other people doing it. Some of the participants said that it is a useful method of providing people with information that they may not reveal in face-to-face interactions whilst other's said that the intention is obvious. Either way it is clear that users have developed methods for the management of relationships through a meta-understanding of SMS use which help both the sender and recipient save face (see section 7.4).

Many of the participants had heard of, knew someone, or had themselves been 'dumped' by text message. This was attributed to the fact that texts are faceless, but was generally considered as

rude and unacceptable. On further investigation it was found that the relationships were not considered to be serious. The only time it was deemed acceptable to end a relationship via a text message was if it consisted of a few dates only. In using text messages to portray the message the sender avoids the embarrassment of having to explain their disinterest and the recipient avoids the embarrassment of rejection: both parties are saving face (section 7.7).

9.26 Role of text messaging

Whilst Study One concentrated on, but was not exclusive to the use of calling in public, Study Two has focused upon texting for managing personal relationships in private use. The study has also shown that face management is still very apparent in text message interactions: the cues for interaction may differ but the portrayal of the self and how the self is projected is still very important for users.

Previous literature based on small scale studies indicates that the act of text messaging is important within relationships (Taylor and Harper 2003, Grinter and Eldridge 200, Reid and Reid's 2004, Rettie 2006). Text messages are perceived by the participants as an affective method for communication. This study has shown that there are several advantages to text messaging and some advantages are also highlighted in existing literature. In the private, people 'hide' behind text messages. The nature of texting allows people to manage and convey their thoughts and feelings more easily since they do not have to manage non-verbal cues (see section 7.5).

There are both positive and negative sides to using text messages to manage and maintain relationships. Whilst the positives of text messages are listed as faceless, noncommittal, and informal, the negatives are that they can be easily misconstrued and open to misinterpretation. Text messages can be easily misconstrued and are often open to misinterpretation due to the lack of non-verbal cues. Senders must be careful about the content of their messages, whilst recipients must be careful in reading their interpretation of them. There can be a level of ambiguity in the content of a text message so recipients may often have to 'read in between the lines'. As there are no non-verbal cues, texters have come to rely on a different set of cues. For

instance if too many text messages are sent to one person without a reply, this implies that they are very keen on the person they are texting. Whilst too few text messages implies the sender is not interested, a delayed response or non-response can be a way of communicating in a negative way since it gives the impression of disinterest (see section 7.6).

The examples in this study suggest that people are consciously aware of the lack of non-verbal cues in text messages (see section 7.9.1). Even though there are no non-verbal cues to manage, there is still a level of face management required in order to portray the self within the content of the text message. Text messages also allow people to take the time to carefully select the message that they want to convey - thus managing their impression and face.

9.27 Private use and social factors

9.27.1 Age

This study has presented data which shows that there are distinct differences between younger and older users in relation to private mobile phone use and this in turn shows that there are differences in the way the younger generations manage their relationships – particularly by using the phone.

The results show that young people are sending and receiving more text messages to their partners throughout the day and are also making and receiving calls to their partners more often through the day than people in the older age groups (see section 8.3). This may imply that young people also have a different method for managing their personal relationships using the mobile phone.

In hindsight devising the age categories may have been a limitation in the study. The categories allowed for analysis on a broader level and distinctions between different specific ages were not considered. The study shows clear differences between younger and older age groups however future work could include an analysis of the specific distinctions in age.

Another limitation within this study concerns the age categories and the questions within the survey relating to drunken mobile phone use. The age categories begin at the age of sixteen.

However the in UK the legal age for alcohol consumption is eighteen. This raises ethical issues concerning the data. In hindsight, the survey should have been designed to reflect this issue and 'under age' participants should have been asked to skip the questions relating to drunken mobile phone use. The results for these questions in future work would require a second analysis - excluding the data from the 'under age' participants.

9.27.2 User type

The results showed that more of the standard users (73.6%) than high users (65.9%) are in relationships - suggesting that people in relationships may not use their phones as much as others who may be single. However people in relationships, who are also classed as high users, may be continually texting and calling their partners throughout the day rather than, or as well, as contacting a social network of friends (Reid and Reid 2004, Rettie 2006).

In relation to feeling emotions, more high users than standard users admit to feeling excitement, happiness, pleasure and contentment during or after using a mobile phone. More high users also feel more stress, anxiety and sadness and annoyance (see sections 8.2). This result indicates that high users are more likely to account the various positive and negative emotions to phone use. This may be due to the higher frequency of use: there may be more opportunities for different contexts for communication.

The issues relating to the user type categories mentioned in section 9.9 are also applicable here. The categorisation of two user groups provides a broad set of data. Future work would be improved by making further distinctions in the categories in order to gain finer detail in the analysis.

9.27.3 Gender

The data revealed that there are few gender differences in relationship management, private use and the mobile. The gender differences that are apparent in Study Two link to feeling emotion - more men than women admit to feeling excitement, anxiety and sadness (see section 8.2). This implies that men and women are using their phones to manage their relationships in a similar way.

9.28 Private use and etiquette and social norms

Participants mentioned that there are some predefined rules of dating - especially when using the mobile phone. For example several of female participants admitted to waiting for the male to initiate the communication showing that deep rooted traditional norms and values are still applicable to mobile phone use today. An exception to the 'waiting game' would be if a person was drunk (see section 7.9.1). As previously mentioned - there are some signifiers which are taken into consideration because of the lack of non-verbal cues. The number of texts sent and when they are sent are important signifiers in the dating game. For instance texting a person immediately after meeting them can indicate a person is too keen. But people can also protect themselves through using their phone in the initial dating stage since they can monitor how much information and communication the other person is offering (see section 7.9.1).

More of the participants said they would prefer to text over call when initiating a date. The requester is shielded from potential rejection and the recipient of the request is shielded from the obligation to accept a request. Once again this parallels the concept of face management. Rettie's (2006) research suggests it is less embarrassing to send a text message than it is to say something in person. This is because the recipients do not have to manage face-to-face interactions. Some participants even admitted that they had previously started texting conversations before going on an initial date and this can lead to a certain sense of familiarity. A greater bond can be formed since text messages help to create continuous communication (Rettie 2006).

When exchanging numbers with new people and initiating contact, several people said if they did not get a response, it would imply that the other person is not interested. So again the lack of response acts a signifier. Whilst most people said they would be put off by someone who sent them several text messages without receiving a reply (see section 7.6).

The data throughout Chapter Seven provides further evidence to suggest that norms of use in text messaging have been established - especially for relationship management. The set of cues

which are used as a substitute for the lack of non-verbal cues have become a form of etiquette for text messaging in relationship management.

9.29 Study Two conclusive comments

- The mobile phone is a key tool for relationship management - especially for young and high users.
- Text messages particularly assist with face management for developing and maintaining relationships.
- The mobile phone is tied to emotion and is an affective device for mediating emotion.
- People are attached to what the phone can offer in terms of content, communication, and constant connectivity.
- Constant connectivity is key to private mobile phone use. It provides people with a continuous invisible link which in turn provides a sense of reassurance and security.
- Socio-emotional contexts show how the mobile phone is bound to emotion and face management for the management of relationships.

9.30 Conclusive comments

The aim of this thesis was to show that the mobile phone is simply another medium for interaction which opens up new contexts for communication. The mobile phone provides people with another means to communicate in both public and private. Study One has shown that public mobile phone use presents new contexts for communication and makes use of the Co-local and Remote Interaction Management Model to explain how people manage their mobile phone use in public. Study Two shows that the mobile phone presents new contexts for managing relationships and text messaging in particular allows people to do this privately.

The data collection in Study One has provided information about attitudes and opinions of public mobile phone use through the use of an online survey. Whilst how people manage their phone use in public was documented through conducting a set of observations. Study Two data collection gained perceptions of mobile phone use in the private domain through carrying out a

set of interviews, and established patterns of mobile phone use in the private domain through conducting a telephone survey.

Study One has several key themes:

- Goffman and the mobile phone
- Interaction management strategies for the management of the co-local and remote contacts simultaneously
- Etiquette and social norms – the opinions of acceptable public phone use.

Importantly Study One has shown that Goffman's (1959, 1963) concepts concerning public behaviour fit to mobile phone use in public - specifically to UK cultural contexts. By applying Goffman's theory to the phone use, an extension of Goffman which fits into today's social norms in a technology driven sphere has been developed.

Study Two has consisted of several key themes:

- Emotion and the mobile phone
- Attachment to the mobile phone
- Constant connectivity
- Goffman's face management

Study Two supports Lasen's (2004) and Vincent's (2005) concept of emotion and the mobile phone, Goffman's (1963) concept of face management is also applicable for private mobile phone use.

Section 1.5 indicated that this thesis would focus upon three forms of management via the mobile phone. This research has shown that the mobile phone has been culturally appropriated into methods of everyday interaction, face management and relational work. Study One focused upon interaction management for public phone use. Study Two showed how the mobile phone is

used for relationship management. Both Study One and Two showed that face management is implicitly tied to both public and private mobile phone use. In presenting ordinary everyday occurrences of mobile phone use in public and private spheres this research has shown that mobile phone use is an extension upon existing social interactions but at the same time the mobile phone opens new contexts for communication.

9.30.1 Future work

More work is needed on the phenomenological aspects of mobile phone use in order to examine the 'meaning' of the phone for users and how and where these meanings are drawn from and integrated into everyday cultural life. Additional work is also needed to identify the specific ethnomethodological elements of use in a greater variety of contexts and cultures. However most importantly how the contextual functioning of the affordances of the phone (however understood or interpreted by users) needs to be identified and underpinned to specific relational work and methods.

Specifically, further work, based broadly upon this study could consider the education of teenagers and use of the mobile phone in public and private contexts. This study highlights that younger users may have a different set of norms in relation to what is socially acceptable behavior, therefore educating them about other people's perceptions of use could be combined with a research design based on usage.

Similarly, work from this study concerning public mobile phone use and the management of the co-local and remote could be applied to the use of text messaging for marketing purposes. How much attention people pay to mobile phone advertising during social interactions could be considered.

Future work could also expand upon the research concerning socio-emotional contexts - specifically drunken mobile phone use and could consider other theoretical perspectives - for instances the psychology of inebriation.

The findings from this study could also be used and applied to other theoretical approaches - for example social distance theory and media richness theory could be applied specifically to public mobile use.

Other work concerning cross cultural comparison would help to increase our understanding of the social impact of the mobile phone.

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