

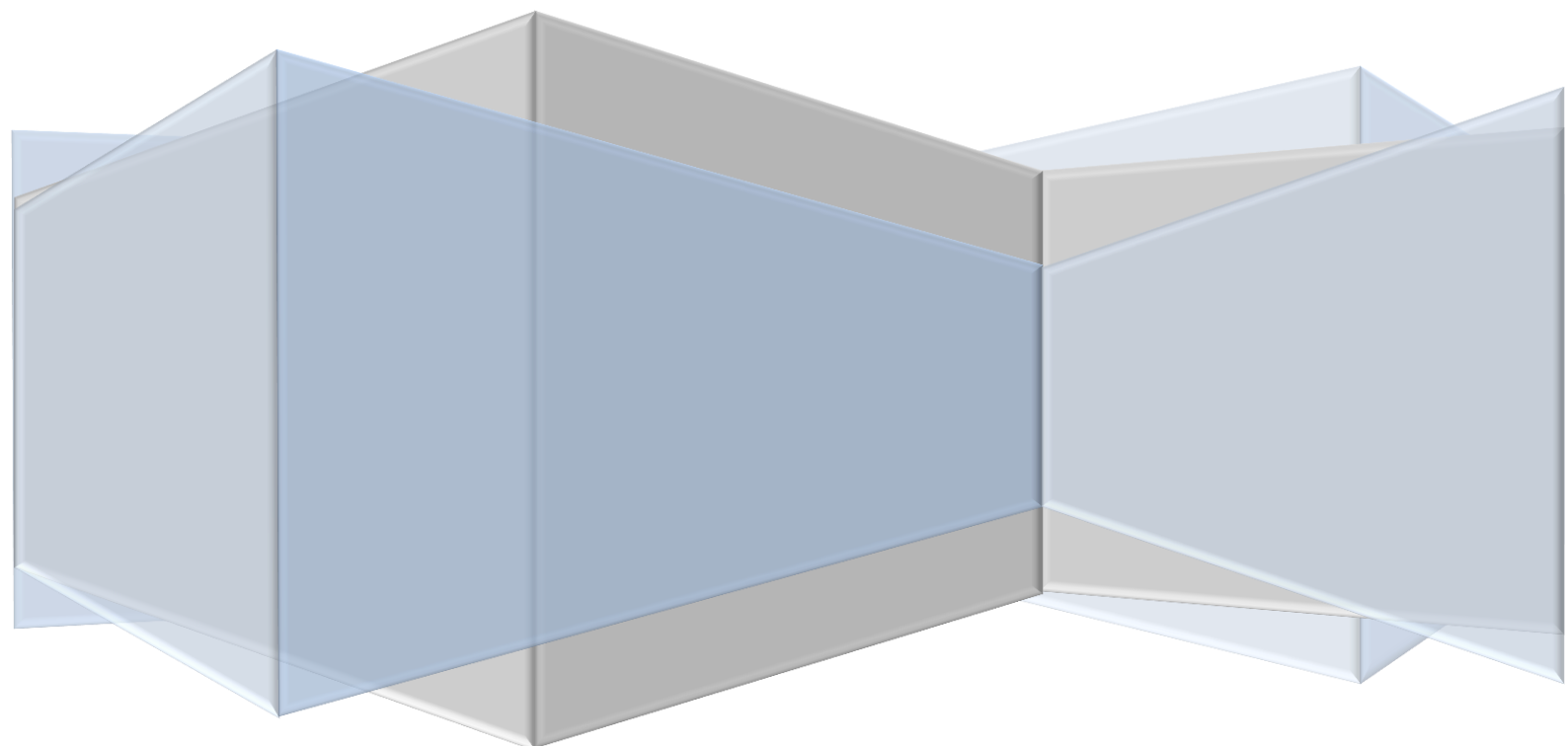
The Interim Report: *Understanding the Structure of Social Networks
from Our Mobile Phone Contacts*

Author: *Lucy Ryan*

Supervisor: *Roger Whitaker and Matt Morgan*

Moderator: Nick Avis

CM0343: *40 Credits*



Abstract

My final year project is based around the use of mobile phone contacts and whether or not there is an increased reliance upon the technology to communicate. I have chosen to focus upon four hypotheses that I feel represent a wide range of different aspects of the use of mobile phone contacts. Research by both Robin Dunbar and others will allow me to hold a firm grip on what a meaningful relationship is and how it can be seen to be measured in order to critically evaluate participants mobile phones based upon this.

I will be using questionnaires and focus groups in order to find information that will allow me to draw conclusions to either prove or disprove my initial hypotheses.

Acknowledgements

I would like to thank Roger Whittaker and Matt Morgan for their help and guidance through the initial idea process, and I also express my gratitude to the research participant who has thus far helped me review my case study ready for preliminary focus groups. Also to wish kind regards to Steven Stockhart, Tracy Lavis, and Roger Whittaker for helping me through the extenuating circumstances process.

Contents

Abstract	1
Acknowledgements	1
Introduction.....	3
Background Research	3
Questionnaire Design Research	4
Dunbar's Number	4
Definition of a Strong Relationship	5
Approach	6
Demographics.....	6
Hypotheses	6
Hypothesis One.....	7
Hypothesis Two	7
Hypothesis Three	8
Hypothesis Four	8
Design	9
Questionnaire Design	9
Focus Group Design	9
Pilot Work.....	9
Questionnaire Pilot	9
Conclusion	11
Evaluation	11
Future Work.....	11
References	12
Appendices	13
Appendix One – Revised Time Plan.....	13
Appendix Two – Sample Questions.....	15
Appendix Three – Focus Group Design	16

Introduction

Since the beginning of the project there have been developments in areas such as research and design that have moved my focal ideas in a different direction to what I initially planned. I am still using the idea of Dunbar's Number and the research within the idea regarding the meaningfulness of a relationship; however I am not going to proceed down all of the avenues of research that Robin Dunbar has already explored as I feel there are new aspects involving the mobile phone that could be seen as a contrast to his theories. The need for flexibility in the project is obvious as when I submitted the initial plan I had only been researching the project for a week and therefore had not yet found my niche, whereas now the project has progressed I have found greater possibilities for research and wish to follow them up instead.

The main alterations that I have made to the project relate to my chosen approach or methodology. To begin I will not be harnessing an online survey service as to gain the variety of participants that I am looking for I need to have the possibility to ask someone to fill in a questionnaire at anytime, anywhere and therefore I have found that as the Internet may not always be available I will use a paper based questionnaire to complete this task. I am doing this in an attempt to avoid sampling bias and to give participants the convenience of doing it immediately and not having the chance to forget about it.

I feel that the improvements I have made will benefit me through the improved quality of the data collected, and also allow me to gain a wider spread of participants. Although these changes may make the initial collection of the data more of a hindrance in terms of time consumption and data protection it will allow me to be more thorough and make my results more reliable.

Secondly I have increased the amount of case studies that I will be completing from the original amount of four.

Although to carry out a case study it takes more time and commitment from a participant than a questionnaire, it does allow me to reach participants on a deeper level and gain further data that may be difficult to retrieve from a question. For those reasons I am aiming to carry out focus groups instead in the New Year to allow me to carry out case studies; which essentially an extension of my questionnaire, with multiple people at one time.

A Data Protection Contract has also been introduced to allow the participants to definitively understand and agree to the terms of the data collection and analysis process that they are entering into. I will submit a Data Protection Proposal to Nick Avis in the New Year in order to show professionalism and to ensure that the participants that agree to partake in my study are properly protected.

The final change to the project is the aspect of time management, and the revisions that I have made to my time plan that I submitted in my initial report. From week six onwards nearly every aspect of the time plan has changed to accommodate the different aspects of research that I discovered and the subsequent ideas that I have later developed. In the appendix of this report I will re-submit a revised version of the time plan to allow myself a greater amount of time for research and design.

Initially I did not think that I was going to need more than a week to design the questionnaire, but as I began to read the book *"Questionnaire Design, Interviewing, and Attitude Measurement"* I have come to realise that there are so many different characteristics of a questionnaire that needs to be taken into consideration before developing the questions themselves. Also by using focus groups as a means of data collection instead of individual case studies and extended questionnaires it means that I needed to develop the case study before Christmas in order to be able to begin the focus groups in the New Year, whereas in the first time plan this was a matter for the second semester. All of the changes that I made to the management of my time throughout the project have either been down the change in direction caused by my initial research or the significant amount of time I spent on other pieces of coursework this semester. Other modules have caused me to commit a lot of time that I planned on spending on my dissertation elsewhere, however I will be using the Winter Break to catch up and re-focus my efforts, to allow me a running start in the Spring Semester.

There are also other alterations to the time plan and they can be seen in Appendix One of the report.

Background Research

There are three main research topics that I have covered this semester, to ascertain a tighter grip on the fundamental ideas surrounding the project. On-going research will have to be carried out throughout the project, which will allow me to look into subjects such as egocentric diagramming. Each of the research areas that I have

looked at relate to the work that I have carried out thus far in the project. Dunbar's Number and defining the strength of a relationship allowed me to give the participants a solid knowledge basis before they continue on to either the questionnaire or the focus groups. Then the research into the specific design aspects and considerations needed when using questionnaires in a project has allowed me to create a preliminary questionnaire that is unambiguous and participant friendly.

Questionnaire Design Research

When I carried out my research I found that there was a lot more involved with designing a questionnaire than I first believed there to be. I knew that I would have to take into consideration certain factors such as, bias within my data collection sample (as they were all going to be people I knew), and also what would be the best layout of the question (including question ordering and open or closed questioning). However through reading some of the work of [Oppenheim, A] through his publication *"Questionnaire Design, Interviewing, and Attitude Measurement"* I have realised that

I also have to consider problems such as geographical sampling bias, what makes a group of participants a fair representation of the majority, and also how to word the questions in order to gain the exact data that I need to gather in order to prove or disprove my hypotheses through analysis of the results. All of these topics will be discussed in the background section of my final report as they are issues concerned with the later stages of my dissertation.

The book gave me a structure to my project also through a methodology that provides me with a way of creating a questionnaire using my initial project aims and objectives. The original method contains fourteen different steps to run through; however I have only used 7 of the steps in my project so far as the remaining steps relate to issues such as creating a fair representation sample and conducting the field work which will all be carried out after the submission of this report. The steps as stated by [Oppenheim, A] are listed below:

1. Deciding the aims of the study and possibly the theories to be investigated. General aims must then lead to a statement of specific aims, and these lead should be turned in operationalized aims; that is a specific set of practical issues or hypotheses to be investigated.
2. Review the relevant literature.
3. Preliminary conceptualization of the study, followed by a series of exploratory or 'depth' interviews; revised conceptualization and research objectives.
4. Deciding the design of the study and assessing its feasibility within the limitations of time, costs and staffing.
5. Deciding which hypotheses will be investigated. Making these hypotheses specific to the situation. Listing the variables that which will have to be measured.
6. Designing, or adapting, the necessary research instruments and techniques such as postal questionnaires, interview schedule, attitude scales, projective methods, check lists or rating scales.
7. Doing the necessary pilot work to try out the instruments, making revisions where necessary and trying them out again.

From this research I have developed an adaptation of this method in order to ensure that the questions I have written within my question are complete and will return the data that I need.

For example stage three of the process calls for me to conduct in depth interviews to gain opinions on my conceptualizations and objectives, I slightly altered this stage as instead I had meetings with my supervisors in order to guide me in the direction of certain objectives I had and away from others that were too heavy and complicated to concentrate on as part of a bigger project.

The method that I used on each of the hypotheses I proposed in order to create and validate the questions that were later attached to them is discussed in the Approach section of the report.

Dunbar's Number

Obviously I have researched deeper into Dunbar's Number, which I mainly did through an online recording of a speech he had made [Fora TV] or through the book authored by Robin Dunbar *"How Many Friends Does One Person Need?"* as it contains a section depicting Dunbar's Number.

Dunbar's Number denotes that on average an individual should be able to hold around 150 meaningful relationships at any one time. There is a limitation to the amount of cognitive relationships that a person can hold, which is capped at 250 as it would be too much of a challenge to hold any more than this. The concept of "Time Budgeting" becomes a problem also above 250 relationships as you would not have time to invest in all of the relationships on a regular basis in order to hold meaningful relationships.

According to this research there are constraints that define what we understand to be a meaningful relationship. The individual needs to firstly know the person in question and be able to explain their relationship to others that the individual knows.

A meaningful relationship does not include people previously known but that have no current social relationship in the individual's life, or those who are known to the individual in general and do not have a repeating social relationship with the individual. However there is an exception to this rule in which if the individual has old colleagues where if there were to be reacquainted with them, they would then try to hold a steady social relationship with them, therefore they are included in Dunbar's Number.

A meaningful relationship is basically a situation where you can recognise that you are in a relationship and you can also notice when others are in one. It is very difficult to place into words exactly what a relationship can be defined as since each person you ask to describe one may describe it differently. One person may see trust as a main factor of a relationship where as another may see reliability as the main variable to which they decide who to hold closer than others.

The idea of friendship has become more of a competition than an actual investment into a relationship since the introduction of social media. The idea that friends are more of a collectable item than an actual meaningful relationship stems again from social media, as the common perspective is that the more friends you have through your account the more popular and important you are. This isn't directly applicable to my project but I found it an interesting point surrounding Dunbar's Number as if someone can only hold 250 cognitive relationships at one time then the amount of friends that are collected on Facebook do not truly represent a person's meaningful relationships since there are often more than 250. Plus there may be people that you hold meaningful relationships with that are not on Facebook and are therefore not counted.

Dunbar's Number suggests that time is a variable that should be invested into a relationship in order to make it meaningful, so therefore in order to quantify the meaningfulness of a relationship you can evaluate the amount of time invested into it. This idea is in line with the ideas of the following research that I have collected.

Definition of a Strong Relationship

Through Dunbar's Number I can establish what constitutes as a meaningful or un-meaningful relationship, however it is difficult to give the participants guidance on what is the definition of a strong relationship is. The definition that I provided each of the participants when they begin the tests was defined by [Granovetter, M.] in his works "*The Strength of Weak Ties*". "The strength of a tie is a combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie"

All of the different aspects are completely independent of one and other, although they are inter-related to each other. A relationship could have had a lot of time invested in it, yet there could be no mutual confiding as there is very little trust or emotional intensity in the relation. This could for example be a work colleague that you saw every day for a majority of the day. I do not wish the participants to base the intensity of their relationship on the amount of time invested or vice versa as they do not rely on each other as measurable variables of a relationship. Each separate part of the definition is to be measured individual in the participants mind in order to establish true representations of friends, acquaintances, or un-meaningful relationships.

This enabled me to understand how a person would assess their relationships with others as without this each participant's perception of what the "strength" of a relationship is dependent on could be completely different. This enabled me to introduce some stability into my research as I could tell participants exactly what to base their decision upon. I used this information in collaboration with the definition of what constitutes as a meaningful relationship in order to remove any ambiguity during the process of relationship classification.

Approach

Demographics

Originally I was hoping to look at a wide range of different demographic groups in order to determine if there were any noticeable differences within the correlation of the data from my questionnaire. This would involve a great deal of work as for each demographic group I would have to ensure I had collected the same amount of responses, that the representation of data was fair to the demographic and also that I had no initial assumptions and bias's. To ensure all of those plus other factors for each of the groups would be a task too great for my final year project and therefore I have narrowed it down to simply looking at different sex and age groups.

I will not be outwardly stating that you need to be within a certain age or sex demographic to answer the questionnaire; I will simply be trying to spot patterns in relation to these demographics once my data has been collected. This will hopefully eliminate any bias I have towards a particular age or gender demographic as I am simply looking for ideas in the data and not trying to gain data to represent my ideas.

Hypotheses

Creating hypotheses is a difficult task due to the fact that you need to be able to capture the entirety of your aims for the research you are planning to carry out in a few sentences. To avoid any misguidance within my hypotheses I used a variety of the steps listed by [Oppenheim, A] as a means of ensuring I had captured my ideas concisely and correctly. I used a method of my own in order to validate the hypotheses however it was based around the three main points below:

1. Preliminary conceptualization of the study, followed by a series of exploratory or 'depth' interviews; revised conceptualization and research objectives.
2. Deciding which hypotheses will be investigated. Making these hypotheses specific to the situation. Listing the variables that which will have to be measured.
3. Deciding the design of the study and assessing its feasibility within the limitations of time, costs and staffing

To begin with I had decided upon five initial hypotheses; these hypotheses were specifically chosen as the represented the key ideas that I held for the project. They did represent demographic differences in their wording, however they did not contain bias as I was happy to either disprove or prove them during the project. Through my decision to eliminate the variety from my demographic selection I had to also disregard one of my initial hypotheses as it was based around data that I would no longer be looking specifically for because of time constraints. The hypotheses that I decided against revolved around the different occupations that participants may hold and how their mobile phone contacts may vary in regards to the context in which they hold the contact; for example business, family, social etc... The hypothesis was as follows.

"The profession that you hold would affect the amount of contacts in your mobile that are used for business only"

This is showing here that I actually considered another part of the guide from [Oppenheim,A] as I have noticed my limitations and begun to alter the study accordingly, allowing to still look into the field in depth yet at the same time restrain myself from becoming bogged down and producing inferior research.

Once I had established all of my limitations I decided upon four strong hypotheses, they are as follows.

H1 "The social network mapped out through the use of your mobile phone contacts does not reflect your true social network support system"

H2 "Mobile phone contacts allow you to hold more un-meaningful relationships than usual through old contacts"

H3 "A user's age may affect how important mobile phone contacts are at maintaining the user's current lifestyle"

H4 "Males use their mobile phone contacts less for social contact and more as a means or arranging physical social contact and activities"

Once I had decided what hypotheses I was planning to focus on I was able to present them to the supervisors of my project, who then sat down and analysed the ideas in depth with myself. By placing my hypotheses and preliminary ideas under the scrutiny of my supervisors I feel I adapted the step of reviewing my work through in-depth expert interviews. I used Roger and Matt to gain different perspectives on my work, and improve my project further. For example when I presented to Roger and Matt a preliminary diagram for the representation of a participant's mobile contacts social structure and also their support network structure, they suggested to improve this I should research further into egocentric diagramming. This will be conducted in the next stage of the project in order to find a fair and comparable design for my focus group diagrams.

To then forward the project I looked to begin specifying what variable I needed to collect data for surrounding the hypotheses that I had chosen. I looked at each of the hypotheses individually and stated what variable I needed to aim to receive from the user through the questionnaire.

Hypothesis One

This is the hypotheses that the focus groups extended questionnaires will be used to prove/disprove. The first point I wish to make about this hypothesis is the fact that I feel it is impossible to ask someone to label their support system as a generality. Everyone is bound to make different decisions of who to go to for support depending on the scenario that they are experiencing. There may be a constant support such as a spouse or parent however variables such as grandparents and close friends may come before those constants in some situations. I will be providing participants three different scenarios in the focus groups and asking them to take the problem in and then state their support system accordingly.

They will also be asked to map out their social network based upon the regularity of contact through their mobile phone contacts only in the same fashion. I hope to show that in a real situation where support is needed, which theoretically should come from those who are socially closest to you (in terms of your mobile phone contacts in this case), will in fact come from those who are not as heavily included in that category.

I will also be looking to see here if there is any correlation with the method of communication and the regularity of the contact. I believe that the contacts that are contacted for example "In the last 12 months" or "Not in the last 12 months" will more than likely be subject to a text than a call, as I feel to send a text is more emotional distant (in most situations) than to make a phone call.

The variables that need to be imbedding in this particular section of the questionnaire are:

- ✓ The relationship of the contact. (Family, Friend, Acquaintance)
- ✓ How often communication is made through mobile phone contacts to each person
- ✓ The means of contact whether its texting or calling.

NOTE: The participants will know how to distinguish a friend from an acquaintance from the content I will provide them specifying the definitions of such relationships from my research on Dunbar's Number and The Strength of Weak Ties. A social support system will also be explained through a definition that is to be researched at a later date.

Hypothesis Two

There are certain criteria that a relationship should abide by in order for it to be meaningful. I believe that through mobile phone contacts people are almost hoarding un-meaningful relationships through old or general contacts. If mobile phones did not exist and you finished school, lost contact with someone afterwards and had no desire to hold a relationship with them should you be re-introduced it would be forgotten about and not even considered in the individuals Dunbar's Number.

I am looking at each participant's calculation of their Dunbar's Number based solely upon their mobile phone contacts. I will be removing all of the contacts from their number that do not constitute as meaningful. Service numbers such as work phone numbers, the hairdressers etc... will be included as the participant may have a meaningful relationship with them and to un-include them would be bias and based on nothing but assumptions.

The variables that need to be imbedding in this particular section of the questionnaire are:

- ✓ How many phone contacts are stored overall in the participants mobile.
- ✓ How many of them are known a very general sense.
- ✓ How many of them are previous relationships with no current social standing.
- ✓ How many of them are not currently active relationships, but if they were to regain contact would you wish to undertake a meaningful relationships with them.

Hypothesis Three

The Likert Scale will be mainly used in order to structure the statements that I am going to use in order to gauge the importance of mobile phone contacts to different generations. At the moment there is a large generational gap between age groups, which I feel is partly down to the huge leaps that have been taken in technology in the last fifty years. I am aiming to display through this hypothesis that there is a higher reliance on mobile phones in the younger generations as they have been brought up surrounded by the technology. The need to be in constant contact, or even simply the option to be able to do this seems extremely important to younger generations, and hinders there lifestyle without such a choice. By looking at the different attitude responses to the statements that I shall make in the questionnaire and then comparing the age of the respondents against a technology timeline I am hoping to see that in instances where I have made statements about the loss of the convenience of a mobile hindering a person's current lifestyle greatly, they will be on the younger end of my demographic scale.

The variables that need to be imbedding in this particular section of the questionnaire are:

- ✓ Participant's age.
- ✓ Technological differences in generations.
- ✓ Need to either be in constant contact with another, or have the option to make contact immediately.

Hypothesis Four

I will be using hypothesis four to look into an angle that was first suggested to me through Dunbar's Number that women harness the power of their mobile phone contacts as a means of communication and bonding more than men. By this is simple mean that men I assume are more likely to use their phones as a necessity, or to communicate briefly to meet somewhere physically to bond. For example bonding through group sports such as rugby is common thing for men to experience whereas women tend to bond through communication and in some cases "gossiping" to gain knowledge of each other, thus a mobile phone would seem to be the perfect media for communication for women.

Mainly I will be looking at how long each sex on average uses their mobile phone to communicate for and also the way in which they communicate. By looking at how long they communicate for and what they communicate about I will be able to establish which sex would rather have conversations (via text or talk) on the phone or physical meetings.

The variables that need to be imbedding in this particular section of the questionnaire are:

- ✓ Average amount of time spent on the phone contacting an individual.
- ✓ Preferred means of communication, phone or physical.
- ✓ Reasons behind a preference to physically meeting.
- ✓ Reasons behind a preference to using a mobile phone.

The variable that I have discovered to be important to the hypotheses have been considered constantly whilst writing the questions in order to ensure that they will gain me the exact type of data that I am looking for alongside a few basic demographic questions.

Design

Questionnaire Design

The questionnaire design process is currently drawing to a close in time to begin distributing it out to participants during the Christmas Period and in January. The full design of the questionnaire will be later discussed in the final report of my project.

As a brief outline I have chosen to use one questionnaire for both the surveying process and the focus groups that I am hoping to conduct. Within the focus groups the participants will simply have an extended version of the questionnaire to include questions that will generally take more time and concentration to answer. I did not wish to put all of the questions on the general questionnaire as I felt it may reduce my response rate. If people had to stop and take 30 minutes on a survey it's inconvenient and also unlikely in the situations I will be approaching people in that they would have that time to spare anyway, for example before a shift in my place of work.

I will be using fairly closed questions in order to gain tighter data to make analysis simple and clear. If I left a question regarding a person's feelings on a particular topic open it is likely that I am going to gain a variety of different answers that I cannot scientifically correlate together. I could make assumptions about the participants meaning behind their feelings, however this may alter the actual opinion of the participant and makes my research questionable and unreliable.

The Likert Scale will be used within my research collection as I find that by giving someone a statement it is easier to make up their minds in terms of a feeling towards that statement. Whereas if someone has a closed question with for example four answer choices if they are slightly impartial to the question they may just respond with any of the answers, without any real concern for how they feel on the topic in order to process through the questionnaire process.

I will be asking some demographic based questions, however this is simply to be able to distinguish the differences (if any) between the answers within these groups, and whether there are any obvious patterns worth exploring further. These will be placed at the end of the questionnaire as research (discussed in the final report) carried out on question ordering within questionnaires show that this is appropriate place to ask such a question, so the participant does not lose focus as to what the questionnaire is about.

I have provided some of the perspective questions in Appendix Two.

Focus Group Design

Originally I was not going to be carrying out focus groups consisting of multiple people at the same time I was planning on carrying out individual case studies in order to extend the questionnaire that I had already collected.

The design of the original case study was not a pre-emptive process, because I had so many different ideas I thought the best way to decide how to carry out the study was to set a preliminary one up with a willing participant and present them with a range of methodologies and allow them to choose the one that they preferred the most.

I have designed a case study procedure, however it is neither finalised nor finished at this moment in time as I am looking to schedule another meeting with the same participant to run through the aspects of it again in order to ascertain further feedback. Appendix three contains some of the design that together with the research participant I have discovered to be of value.

Pilot Work

Questionnaire Pilot

Once the questionnaire is completed I will be conducting a panel review on the final results. A panel of people that I feel represent a wide range of the demographics that I wish to collate data from will be asked to critically dissect the questions individually and also the questionnaire as a whole. They will be asked to analyse based on particular

criteria, as to again avoid open ended statements that do not correlate without assumption from me to one and another.

The criteria will be based around issues such as, ambiguity in the questions, layout, sensitivity of the questions, is it easy to understand regardless of age etc... All of those issues and more will be put to the panel and then through an in-depth discussion with me and the rest of the panel, they can bring up any failings or achievements that they feel necessary to.

At the end of this process if there are any issues that have come to light that seem that if left unresolved will completely affect the questionnaire data collected I will alter the questions accordingly. Once/If I have changed the questionnaire and it has been approved by the panel I will then choose to send it out to a pilot group of participants to ensure the actual data that I am collecting is indeed the data I need to prove or disprove my hypotheses in the long run.

When I am happy that the questionnaire has been approved by the panel and there are no failings in the data collection process I will then release it to my sample.

Conclusion

Evaluation

I feel confident that although I have had to change the timings of the project along the way, I am focused and on track to present relevant and interesting results in my final report. The research I have conducted has been thorough and has also presented me with aspects and options of investigation that I had not previously considered. I believe that providing I stay on track with the data collection stage of the project, and continue to drive my research further I achieve a final outcome that compliments the research of Robin Dunbar in the appropriate manner.

I have strived to maintain professionalism through my data protection contracts and I am hoping that by expressing my interest in the participant's piece of mind I will gain a greater response rate through the questionnaires.

Future Work

I will now begin to push on within the project and provide the following before the final report is due:

- ✓ Data collection from a variety of different sources and demographics.
- ✓ A completed questionnaire with a full explanation for all design decisions.
- ✓ A completed focus group structure again with a full explanation for all of the design decisions.
- ✓ Correlated and verified results from the questionnaires and focus groups.
- ✓ Visual aids in the form of an egocentric diagram to show the social and support structure of participants of the focus groups.
- ✓ Proved or disproved hypotheses.
- ✓ A final report summarising all of my findings and suggests for further research into the area.

References

Fora TV, 2006-2012. *Robin Dunbar: How Many Friends Does One Person Need*. [Online] Available at: http://fora.tv/2010/02/18/Robin_Dunbar_How_Many_Friends_Does_One_Person_Need. [Accessed 22 October 2012].

Granovetter, M.S. *The Strength of Weak Ties*. John Hopkins University.

Oppenheim, A.N. 2003. *Questionnaire Design, Interviewing and Attitude Measurement*. London. Continuum.

Appendices

Appendix One – Revised Time Plan

Project Week	Semester Week	Project Action
1	1	❖ Introduction to supervisors and finalise choice of project.
2	2	❖ Brainstorm ideas for the project to discuss with supervisors and write 1 st draft of initial report.
3	3	<ul style="list-style-type: none"> ❖ Initial report deadline, submit before 19/10/12. ❖ Begin background research into Dunbar's Number and other likeminded theories. ❖ Also look at different ways to design a successful questionnaire to get the most information from people whilst looking the least intrusive. ❖ The problem of over researching may occur at this stage.
4	4	<ul style="list-style-type: none"> ❖ Carrying on with background research to finalise key ideas. ❖ Decides whether or not I need to design a questionnaire from scratch or is there a suitable one that I could adapt? ❖ May discover that there is no suitable research in terms of pre-designed questionnaires.
5,6	5,6	<ul style="list-style-type: none"> ❖ Focus research concerning questionnaire design. ❖ Choose final demographic groups that I will study. ❖ How many people properly represent a demographic group? ❖ Is the questionnaire too open or too closed to gain sufficient data from it? ❖ Should I trial the questionnaire first in order to possibly alter it before I submit it to all of the different groups? ❖ Will there be bias in my choice of demographic groups as I will need to involve people I know in my studies? Will this then affect my perception on the results?
7,8	7,8	<ul style="list-style-type: none"> ❖ Present a case study layout and design to a research participant in order to gain feedback and alter the design accordingly. ❖ I am easing off mid-term in order to ensure that all of my other coursework's are on track and I am not falling behind.
9	9	<ul style="list-style-type: none"> ❖ Create data protection proposal and contract for every participant to sign. ❖ Creating a data protection proposal that is both technically detailed and easy for the participant to understand will difficult to achieve.
10	10	❖ Finalise hypotheses and decide on the variables that need to be collected.
11	11	❖ Write and submit Interim Report, but sadly due to unforeseen situations I had to apply through the extenuating circumstances process for a week's extension.
12	12	❖ Complete Interim Report and submit for 21 st December
13,14	Christmas Break	<ul style="list-style-type: none"> ❖ Create a finalised questionnaire design. ❖ Distribute questionnaires. ❖ Arrange a date for a focus group in the New Year. ❖ I may encounter trouble trying to arrange a focus group, as people may not wish to participate or perhaps schedules will clash and to find a common time and day may be hard.
15, 16	Exam Period	<ul style="list-style-type: none"> ❖ REVISION ❖ I have not planned any dissertation work here as these are the week before and the week of my exam.
17	Exam Period	<ul style="list-style-type: none"> ❖ Present Data Protection Proposal and Contract to Nick Avis for review. ❖ I understand that the proposal is being submitted after the collection fo the data but that has occurred because the semester has finished before I have had a chance to arranged a meeting with Nick and I do not wish to hinder the project by not collecting data over the Christmas Break because of this. ❖ Look into the design of other social network and support structures diagrams. ❖ Research egocentric diagrams to see if there is enough relation to include them in the project.

		❖ Finalise the focus group layout and design and review again with the same participant in order to ensure the suggested changes that were made were fully understood and carried out correctly.
18	1	❖ Carry out the first focus group. ❖ Begin to collate the results from the questionnaires in a spreadsheet. ❖ Ensuring they are all carried out in the same controlled environment may prove to be an issue.
19	2	❖ Review the results from the focus group. Were they definitive or do I need to hold another one? ❖ Continue to collect and collate data from the questionnaires.
20	3	❖ Begin designing ideas for diagramming data retained from the focus groups. ❖ Stop collecting questionnaire data. ❖ I may struggle to meet the deadline to stop data collection, especially if people do not wish to co-operate.
21	4	❖ Create all of the social structure diagrams from the focus group(s) ❖ Create all of the support network diagrams based on the focus group data. ❖ May be hard to decide who provides a higher quality and level of social support in a persons' life? For example just they may be the parent of one of the participants does not mean that they provided the highest level of support.
22,23	5,6	❖ Analysis of questionnaire and focus group data. ❖ Beginning to draw conclusions from the data in regards to the hypotheses I have stated.
24	7	❖ Analysis of questionnaire and focus group data. ❖ Beginning to draw conclusions from the data in regards to the hypotheses I have stated.
25	8	❖ Write up Design and Implementation section of the Final Report.
26	Easter Break	❖ Write up Evaluation and Results section of the Final Report. ❖ May struggle to find explanations for anomalies.
27	Easter Break	❖ Continue to write up Evaluation and Results section of the Final Report. ❖ May struggle to find explanations for anomalies.
28	Easter Break	❖ Write up Future Work and Evaluation of Learning section of the Final Report. ❖ Hand in a draft for preliminary marking.
29	9	❖ REVISION ❖ Due to a large amount of exams in the summer I do not wish to be carrying out any dissertation work past last week of the Easter break unless it is minor last minute alterations.
30	10	❖ REVISION ❖ Due to a large amount of exams in the summer I do not wish to be carrying out any dissertation work past last week of the Easter break unless it is minor last minute alterations.
31	11	❖ Final Report Due in 05/05/2012



= Problems I may face whilst I carry out the tasks stated for the given week.



= Extra Reasoning for timings.



= Milestones for each week.

Appendix Two – Sample Questions

How long on average do you spend on the phone to the people that you have contact most frequently?

0 – 5 → 5 – 15 → 15 – 30 → 30+

Would you rather communicate to a regular contact via

Phone call [] Text Conversation [] Physically Meet []

Why would you rather physically meet?

Due to usage limitations of phone contract []

Due to usage limitations of texts and calls []

Is the fact you prefer text conversations due to

Limitation of minutes on contract []

Limitations of time to call or meet therefore it's quicker to text []

Generally what topic do you communicate about?

Arranging plans [] General catch up [] Vital news [] Other []

If answered phone call is it due to

Limitation of texts and abundance of minutes on contract []

Need for a quick response of immediate communication []

More personal than text, but less effort than physically meeting []

How many phone contracts do you hold where you only know the person in a very general sense?

How many contacts do you have where you previously knew the person but have no current social relationship with them?

Based on your answer above consider this ... How many of those people would you wish to start a steady social relationship with if you were re-introduced?

Appendix Three – Focus Group Design

This table will be filled in by the participant detailing how often they contact each of their contacts. In the table they will fill in the persons relationship to them and how they contact them either via text or phone call, although if there is no preference it can be mixed.

Daily	2 – 5 Days	Weekly	2 Weekly	Monthly	Inside 12 months	Outside 12 months