Cape Peninsula
University of Technology

THE IMPACT OF UNDERUTILISING PRODUCTIVITY SOFTWARE

by

David Wyn Evans

Student number: 185001084

A Dissertation submitted in fulfilment of the requirements for the degree

MAGISTER TECHNOLOGIAE: QUALITY

in the Faculty of Engineering

CAPE PENINSULA UNIVERSITY OF TECHNOLOGY

Supervisor: Prof. J. André Watkins
Co-supervisor: R. J. Arderne

Cape Town
September 2010

DECLARATION OF COPYRIGHT

"I, David Wyn Evans, hereby declare that this dissertation submitted for the degree Magister Technologiae at the Cape Peninsula University of Technology, represents my own original unaided work and that this dissertation has not previously been submitted to any other institution of higher education. I further declare that all sources cited or quoted are indicated and acknowledged by a comprehensive list of references".

David Wyn Evans

Signature:

Date: 6 November 2011

ABSTRACT

Author: David Wyn Evans

Degree: Magister Technologiae: Quality

Title: Impact of underutilising productivity software

University: Cape Peninsula University of Technology

Faculty: Faculty of Engineering

Supervisor: Prof. J. André Watkins

Co-supervisor: R. J. Arderne

Date: September 2010

Key words: ICT, productivity software, utilisation, higher education, quality, CPUT, computers, training, administrative staff.

The aim of this study is to examine the level of utilisation of productivity software by staff of the Engineering Faculty of a South African University, and the impact it has on productivity.

One of the primary effects of staff underutilisation is time wasted by staff who are doing tasks manually, instead of learning faster methods of doing tasks. It was thought that the use of computers would free staff up from the tedium of everyday manual tasks, effectively giving staff a shorter work day, however the actual impact has been to increase workload, as one can now simply do much more work. Staff have become so accustomed to using technology in every aspect of the daily work life, that they are not able to perform even the most basic function if that particular technology, such as e-mail or the internet, is not working.

This study investigates the current skills level of staff in their use of productivity software, as well as what effect their current knowledge has on their ability to do their job effectively. Also to be investigated is how their level of training relates to their current level of knowledge, what tasks are staff not capable of doing, what additional skills do they need to improve their productivity, what type of training would they like to receive. A questionnaire will be used to gather required information about both the general skill level, as well as specific functions in Microsoft Excel and Word, as well as Novell GroupWise.

DEDICATION

This study is dedicated to father Jim, sister Annette and very good friend Vivien for their support and encouragement.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ANNEXURES

GLOSSARY

Term	Definition
Application software	Software that has been developed to solve a particular problem, to perform useful work on specific tasks, or to provide entertainment.
ATMs	Automated Teller Machines – Electronic banking machines used for depositing and withdrawing money, usually situated in shopping centres.
Beta version	Pre-sale version of software, released to only advanced users for the purpose of testing for bugs, and giving feedback, in order to improve the software.
CAD (Computer Aided Design)	Application software used by engineers, architects, drafters, and others to create precision drawings or technical illustrations.
Cellphones	Portable phones used for communication. Also called mobile phones.
CPUT	Cape Peninsula University of Technology
Digital immigrant	A person who has adopted the internet and related technologies later in life, typically after adolescence and young adulthood.
Digital native	A person raised in a technological environment, who accepts the environment as then norm, and who has strong computer skill and knowledge.
e-Mail	Electronic mail used for communication, which predominantly replaces traditional paper mail
ICT	Information and Communication Technologies
Integrated Tertiary Software (ITS)	The main database that CPUT uses for student and staff data.
Internet	The Internet is a global system of interconnected computer networks that serve billions of users worldwide, and carry a vast range of information resources and services. It is a network of networks that consists of millions of private, public, academic, business, and government networks. Unlike online services, which are centrally controlled, the Internet is decentralized by design.
IT	Information Technology

Learner management system (LMS)	Online software used to teach and assess students.
Management Information System (MIS)	Online web portal to access statistical data such as student enrolments, pass rates, and throughput rates.
Marks Administration System (MAS)	Web based software that enables staff to upload student's assessment marks, as well as to draw classlists.
Microsoft Excel	Productivity software produced by Microsoft for working with numerical data.
Microsoft Office	Productivity software produced by Microsoft for word processing.
MP3 Players	Portable music player that stores music compressed to approximately $1/10^{th}$ of its original size.
Novell GroupWise	e-Mail client for communication and scheduling of appointments.
PivotTable	PivotTable report is an interactive way to quickly summarize and analyse large amounts of data in Microsoft Excel, where columns and rows can be easily moved (or "pivoted") to see different summaries of the source data. Data can be summarized by categories and subcategories, and expanded and collapsed, and drilled down more detail.
Productivity software	Software that is developed to solve a particular problem. Examples would include Word processing, spreadsheets, e-mail, databases, and financial software.
Software bloat	An increase in functions available in a software package, without adding to the effectiveness of the software.
SPSS	Statistical analysis software
System software	Software that controls the allocation and usage of hardware resources and enables the applications to run.
VLOOKUP (Vertical Lookup)	Function in Microsoft Excel that enables values to be "looked up" from another workbook and inserted in the current sheet. A similar function (HLOOKUP) does the same, but works horizontally, rather than vertically.

CHAPTER 1: SCOPE OF THE RESEARCH

"Any sufficiently advanced technology is indistinguishable from magic"

Arthur C. Clarke

1.1   INTRODUCTION AND MOTIVATION

The application of technology has changed over the years, and the skills required to apply such technology in the workplace has reciprocally placed new demands on users. In the early years of personal computers, users had to be highly proficient to use the technology, and utilisation thereof was limited. As the technology grew in its application, it became more user friendly (predominantly Microsoft Windows), and more and more users were exposed as the number of personal computers grew.

In the late 1990s and early 21st century, the increased processing power of personal computers has culminated in computers used in an office environment being far more powerful and their applications extended, to the extent that the average user underutilises their capacity. This increase in processing capacity is directly related to the number of capacitors that can be squeezed onto a computer chip, and has followed the trend that Gordon Moore, co-founder of Intel, observed. This has subsequently been dubbed 'Moore's Law' shown in Figure 1.1.
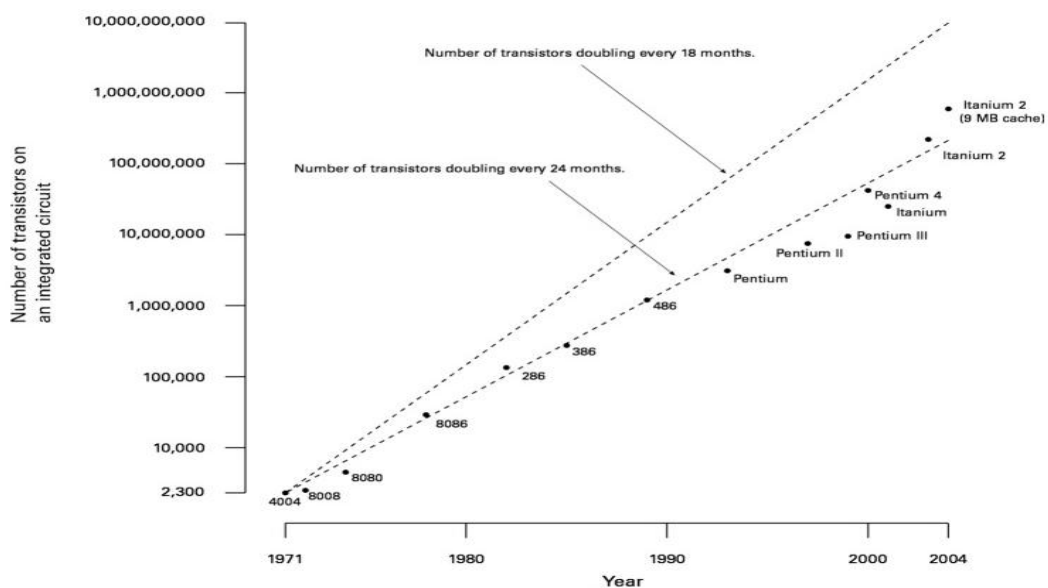
Figure 1.1: Moore's law: Graph of number of transistors against year. (**Source**: Investment and Business News [**Online**])

The software used in these computers has become over-extended with features in an effort to create added value, which is termed 'software bloat'. This added functionality, along with software developers changing the layout and content of menus, has culminated in users becoming more confused and less likely to learn new features. The aim of this study is to examine the level of utilisation of computer software by staff of the engineering faculty of a South African university, and the impact it has on productivity.

Initial interest in the topic was mooted as a result of an extract from an advanced training manual on Microsoft Excel (Jelen[1], 2006:8-9), which stated that in Microsoft's usability studies, people often asked for software features to be added, only to find out that they were already available, and in many cases, had already been included in older versions. Clearly there was a problem with the way that people were using the menus, which Microsoft has tried to address with the new 'Ribbon User Interface' in the latest version of Office 2007. Breaking with tradition, they have not allowed users to revert to the old interface, ensuring that users must get used to the new interface and thereby step out of their comfort zone. Time will tell if this is the correct approach.

1.2   BACKGROUND TO THE RESEARCH

The Cape Peninsula University of Technology (CPUT) was formed on 1st of January 2005 through the merging of the Cape Technikon and Peninsula Technikon. The use of technology within the institution has evolved over time, from being a very specialised function with a few highly trained people being involved, to the point that it has become an indispensable part of job content with an ever increasing emphasis on the use of technology to automate manual processes.

---

[1] Bill Jelen is recognised as a Microsoft 'Most Valuable Professional' (MVP) who are independent experts acknowledged by Microsoft for their exceptional commitment and product knowledge.

In the course of training provided by the author, staff members were amazed at certain short-cuts or functions which, although the author took for granted, many had never seen before. This is supported by the reaction that Jelen (2006:9), received from audience members during his seminars on Excel.

The research study will focus on staff in the Engineering Faculty, which can be broadly divided into the three categories of academic, administrative, and technical staff. This research study will only look at the category of administrative staff, in both the departmental and faculty office group, of which all the staff are using productivity software, such as word processing, spreadsheets and e-mail in their daily work.

The aim of this study is to find out how effectively they use it, as well as to find out what the patterns of use are in each group.

Even though staff may be using productivity software, they may be underutilising the software, such as doing tasks in a long, or roundabout way, when faster more effective methods are available. An example of this would be the Mail Merge function in Microsoft Word, which merges data (usually from an Excel spreadsheet) into a Work document, or the VLOOKUP function in Excel which can look up values from one spreadsheet and bring it into another spreadsheet.

Currently there is no formal programme of testing or evaluating the computer literacy skills of new staff members at CPUT. Staff are assumed to have a level of competence, and it may be seen as an insult to give a staff member who has years of experience in academia a simple test in order to establish what their level of competence is. This assumption may be further compounded in that the staff member may not want to be seen attending training, as this would give the impression that they are not competent in using the specific software. Even existing staff members are not evaluated for their computer literacy competence. It is assumed that they (or the department head) will decide which courses are required to enable them to do their job effectively. One notable exception to this is the online requisition system on Integrated Tertiary Software (ITS), where staff

will not be given access to the system unless they have attended one of the formal training sessions. This is however the exception to the rule.

1.3   KEY FOCUS AREAS

There are several focal areas for this study:

➢ Adding functionality putatively to increase the value of product. Software bloat can be defined as an increase in functions available, without adding to the effectiveness of the software

➢ Enabling staff to do their work more easily / better.

➢ Use of correct software that is relevant to the task or situation required, or utilise current software more effectively.

➢ 'Once it's digital, keep it digital'. Avoiding additional work by retyping/re-entering data that is already in digital format. This would also include the transfer and re-use of data between applications.

1.4   EFFECT OF UNDERUTILISATION

One of the primary effects of staff underutilisation is time wasted by staff who are doing tasks manually, instead of learning faster methods. One should also consider the effects of doing a task more effectively. It was thought that the use of computers would free staff up from the tedium of manual tasks, effectively giving staff a shorter work day and providing more quality time with families. However the actual impact has been to increase workload, as one can now simply do much more work. Another unintended consequence has been to add to the number of staff required, as the technological dispensation requires large IT departments to support the technology. Staff have become so accustomed to using technology in every aspect of the daily work life that they are not able to perform even the most basic functions if that particular technology, such as e-mail or the internet, is not working.

1.5   STATEMENT OF THE RESEARCH PROBLEM

The statement of the research problem reads as follows: "Staff do not use productivity software optimally, which has an adverse affect on productivity".

1.6   RESEARCH QUESTION

The research question to be investigated in support of the research problem reads as follows: "How can the utilisation of productivity software be improved?"

1.7   INVESTIGATIVE SUB-QUESTIONS

Investigative sub-questions to be included in support of the research question are listed below:

➢ What is the current ability of staff in their use of productivity software?

➢ What effect does their current knowledge have on their ability to do their job effectively?

➢ How does their level of training relate to their current level of knowledge?

➢ What tasks are staff incapable of doing, leading to lower productivity?

➢ What additional skills do staff need to improve their productivity?

➢ What form of training have they received, and what form of training would they like to receive?

1.8   RESEARCH OBJECTIVES

The key research objectives of this research study are:

➢ To identify the current skill levels of staff in their use of productivity software.

➢ To identify skills that have a negative effect on staff effectiveness.

➢ To identify the skills areas that staff need to improve, in order to do their jobs more effectively.

1.9   RESEARCH PROCESS

The research process provides insight into how the process of how the research will be conducted, from formulating the research proposal to the final submission of the dissertation. Remenyi, Williams, Money and Swartz (2002:64-65), explain that a research process consists of eight specific phases. These phases are:

➢ Reviewing the literature.

➢ Formulating the research question.

➢ Establishing the methodology.

➢ Collecting evidence.

➢ Developing conclusion.

➢ Understanding the limitation of the research.

➢ Producing management guidelines or recommendations.

According to Collis and Hussey (2003:16), the research process consists of six fundamental stages:

➢ The research topic identification.

➢ Definition of the problem.

➢ Determining how the research is going to be conducted.

➢ Collecting the research data.

➢ Analyzing and interpreting the research data.

➢ Writing up of the dissertation or thesis.

The process as set out by Collis and Hussey above will be followed.

1.10   RESEARCH DESIGN AND METHODOLOGY

The primary research method for this study will be case study research. Collis and Hussey (2003:59-72), define case study research as "Primarily falling within the phenomenological (qualitative) paradigm, case study research can equally be applied within the context of positivistic (quantitative) paradigm. Case study research represents an empirical enquiry that investigates a contemporary phenomenon within a real life context, when the boundaries between phenomenon and the context are not clearly evident, and in which multiple sources of evidence are used".

According to Collis and Hussey (2003:66), case studies are often described as exploratory research used in areas where there are few theories or a deficient body of knowledge. In addition, the following types of case studies can be identified:

➢ **Descriptive case studies**: Where the objective is restricted to describing current practice.

➢ **Illustrative case studies**: Where the research attempts to illustrate new and possibly innovative practices adopted by particular companies.

➢ **Experimental case studies**: Where the research examines the difficulties in implementing new procedures and techniques in an organization and evaluating the benefits.

➢ **Explanatory case studies**: Where existing theory is used to understand and explain what is happening.

Yin (1994:20-27), emphasises the following five components of a research design, which are especially important for case studies:

➢ **Study questions**: The case study is most likely to be appropriate for 'how' and 'why' questions, which calls for the initial task being to clarify precisely the nature of the study questions.

➢ **Study propositions**: A study proposition directs attention to something that should be examined within the scope of the study. For greater clarity, the proposition points to the 'reason for the study'.

➢ **Unit of analysis**: Should the case study involve a specific person being studied, say a person representing a specific diversity case, the individual being studied is the primary unit of analysis. The tentative definition of the unit of analysis is related to the way in which the initial research questions were formulated.

➢ **Linking data to propositions**: A number of ways are open to students to link data to propositions. An approach suggested by Yin (1994:20-27), is that of 'pattern matching', whereby several pieces of information from the same case may be related to some theoretical proposition.

➢ **Criteria for interpreting findings**: If the different 'patterns' are sufficiently contrasting, the findings can be interpreted in terms of comparing at least two rival propositions.

1.11 DATA COLLECTION DESIGN AND METHODOLOGY

Two options for data collection were considered: questionnaires and diaries. Collis and Hussey (2003:151-164), describe questionnaires and diaries respectively as follows:

➢ **Questionnaires**: Questionnaires fall within the ambit of a broader definition of 'survey research' or 'descriptive survey'. For absolute clarity, the concept

of 'survey' is defined by Remenyi, Williams, Money and Swartz (2002:290), as "...the collection of a large quantity of evidence usually numeric, or evidence that will be converted to numbers, normally by means of a questionnaire. A questionnaire is a list of carefully structured questions, chosen after considerable testing with a view to elicit reliable responses from a chosen sample. The aim is to establish what a selected group of participants do, think, or feel. A positivistic approach suggests structured 'closed' questions, while a phenomenological approach suggests unstructured 'open ended' questions".

> **Diaries**: A daily record is kept of events or thoughts and is typically used to capture and record what people do, think and feel. One can distinguish between:

   > **Logs**: Logs represent detailed diaries in which participants keep a record of the time they spend on their activities

   > **Diaries**: These are diaries in which participants keep descriptive records of the day to day lives.

   > **Diary-interviews**: With this format, participants are asked to keep a diary in a particular format for a short period. Detailed questions are then developed from the diaries and these form the basis of an in-depth interview.

A questionnaire will be compiled to gather information on the staff members' current knowledge level, training received, areas in which they feel that they need additional assistance, as well as to identify the areas where staff are having problems, or feel that there are specific areas with which they need assistance.

1.12   ETHICS

In the context of research, Saunders, Lewis and Thornhill (2000:130), define ethics as "...the appropriateness of your behaviour in relation to those who become the subject of your work or are affected by it". Most ethical issues in research fall into one of four categories, namely protection from harm, informed consent, right to privacy, and honesty with professional colleagues (Leedy and Ormrod, 2001:107-108):

- ➢ **Protection from harm**: In cases where the nature of a study involves creating a small amount of psychological discomfort, participants should know about it ahead of time, and any necessary debriefing or counselling should follow immediately after their participation.
- ➢ **Right to privacy**: Any research study should respect participants' right to privacy. In general, a researcher must keep the nature and quality of participants' performance strictly confidential.
- ➢ **Honesty with professional colleagues**: Researchers must report their findings in a complete and honest fashion, without misrepresenting what they have done or intentionally misleading others as to the nature of their findings. Under no circumstances should a researcher fabricate data to support a particular conclusion, no matter how seemingly 'noble' that conclusion may be.
- ➢ **Informed consent**: Participants should in advance be told about the nature of the study to be conducted, and be given the choice of either participating or not participating. Furthermore, they should be given the right to withdraw from the study at any time, as participation in a study should be strictly voluntary. An informed consent form that describes the nature of research as well as the nature of the required participation will be presented to participants of this research study.

According to Leedy and Ormrod (2001:108), a form that is attached to the questionnaire as a covering letter should contain the following information:

- ➢ A brief description of the nature of the study.
- ➢ A description of what participation will involve in terms of activities and duration.
- ➢ A statement indicating that participation is voluntary and can be terminated at any time without penalty.
- ➢ A list of potential risk and/or discomfort that participants may encounter.
- ➢ The guarantee that all responses will remain confidential and anonymous.
- ➢ The researcher's name, plus information about how the researcher can be contacted.
- ➢ An individual or office that participants can contact, should they have questions or concerns about the study.

- An offer to provide detailed information about the study (e.g. a summary of findings) upon its completion.
- A place for participants to sign and date the consent form, indicating agreement to participate.

1.13 RESEARCH ASSUMPTIONS

The following assumptions apply to this research study:
- The staff members who complete the questionnaire make use of the productivity software that will be researched in this study.
- CPUT will allow the relevant staff to participate in the study.

1.14 RESEARCH CONSTRAINTS

1.14.1 Limitations

The case study will be conducted with administrative staff in the Engineering Faculty of CPUT, and may not be applicable to other faculties or institutions

Other factors which could influence the quality of the data are:
- Staff members not willing to take part in the survey, or unwillingness to answer truthfully, for fear of being victimised.
- Insufficient knowledge in the area.
- Staff members not taking the questionnaire seriously.

1.14.2 Delimitations

The scope of the research will be limited to administrative staff in the Engineering Faculty of the Cape Peninsula University of Technology.

1.15 SIGNIFICANCE OF THE RESEARCH

The significance of this research will be to assist:
- CPUT in identifying areas of staff development that are lacking in skill in the use of productivity software.
- Heads of Departments to identify areas that staff can improve their effectiveness in the use of productivity software.

➤ Help individual staff members to identify areas for improvement.

1.16   CHAPTER AND CONTENT ANALYSIS

The following content analysis will relate to the research study:

➤ **Chapter One: Scope of the research**. This consists of the introduction, background, problem statement, research questions, objectives, research process, and chapter outline.

➤ **Chapter Two: Background to the research problem: A holistic perspective**. This section will give a holistic view of the current state of productivity software use at CPUT.

➤ **Chapter Three: Utilisation of productivity software: A literature review**: This chapter will investigate literature related to utilization of productivity software, as well as methods of measurement.

➤ **Chapter Four: Research design and methodology**: This chapter will examine the tools and methods that will be used for data gathering, as well as any possible problems during the data collection exercise will be disclosed.

➤ **Chapter Five: Data analysis and interpretation**: This chapter will cover the analysis and presentation of data gathered from the questionnaires.

➤ **Chapter Six: Conclusion and recommendations**: In this chapter, the research will be concluded and analogies will be drawn based on data analysis, connecting them to the problem statement, research questions, and objectives.

CHAPTER 2: BACKGROUND TO THE RESEARCH PROBLEM: A HOLISTIC PERSPECTIVE

> "There's an old story about the person who wished his computer were as easy to use as his telephone. That wish has come true, since I no longer know how to use my telephone"
>
> Bjarne Stroustrup

2.1 INTRODUCTION

The Cape Peninsula University of Technology (CPUT) was formed in 2005 through the merging of the Cape Technikon and Peninsula Technikon. The use of technology within the institution has evolved over time, from being a very specialised function with a few highly trained people being involved, to the point that it has become an indispensable part of job content with an ever-increasing emphasis on the use of technology to automate manual processes. The university currently has six faculties, namely Applied Sciences, Business, Education and Social Sciences, Engineering, Health and Wellness Sciences, and Informatics and Design. This study will only concentrate on the Engineering Faculty.

2.2 HISTORY OF THE UNIVERSITY – A BRIEF TIMELINE[2]

The history of the Cape Peninsula University of Technology dates back to 1920 when the Cape Technical College was established, followed by the Peninsula Technical College being established in 1962.

The two institutions had their status changed to College for Advanced Technical Education in the late 1960's and early 1970's, becoming known as the Cape and Peninsula Colleges for Advanced Technical Education respectively.

After the proclamation of the Technikons Act in 1976, colleges were allowed to offer tertiary education, and in 1979 they were established as technikons, with Cape Technikon in Cape Town and Peninsula Technikon in Bellville, and in 1993

---

[2] History of CPUT from the CPUT webpage: 'http://www.cput.ac.za/institution/history.php'

the Technikons Act was published, which allowed technikons to also offer Bachelors, Masters and Doctoral degrees in Technology.

In 1997 the Peninsula Technikon restructured its academic programmes into three faculties, namely: Engineering, Business and Science. Similarly, the Cape Technikon reorganised into six faculties. In 2001 the Boland and Mowbray Education Colleges were incorporated into the Cape Technikon, forming the Faculty of Education in Wellington and Mowbray respectively.

In May 2002, the Minister of Education announced the possible merger of the Cape Technikon and Peninsula Technikon in January 2005, and in October 2003 the Minister approved the new name, Cape Peninsula University of Technology, and announced that the status of technikons would be changed to universities of technology.

In February 2006 Prof L Vuyisa Mazwi-Tanga was appointed to be the first Vice-chancellor of the Cape Peninsula University of Technology, and in May 2008 Dr Trevor Manuel, then Minister of Finance, was elected as the first Chancellor of the University.

2.3   OTHER MERGER ISSUES

The merging of the institutions has created an additional problem of the alignment of processes, systems, as well as the duplication of resources. This alignment of processes has caused an extra workload, due to the additional work needed (such as meetings to evaluate current processes, reworking of forms, etc). Fortunately both previous institutions used the same institutional database, Integrated Tertiary Software (ITS), but there were still many problems with the merging of data, such as different numbering systems for student numbers, which meant that a new format had to be introduced for both new and old students.

Microsoft Office and Novell GroupWise were in use at both previous institutions, although there were different versions being used. These variations occurred within the same institution, as well as across institutions.

The whole of the Engineering Faculty, with the exception of Maritime Studies because of its proximity to the sea, will ultimately be moved to the Bellville campus. Departments that are currently duplicated across campuses may have an excess of staff once consolidated, which will have an effect on the number of staff ultimately needed in each department.

2.4   BACKGROUND TO THE RESEARCH PROBLEM

In the course of training provided by the author, staff members were amazed at certain short-cuts or functions which, although taken for granted, many had never seen before. Often these functions were not directly related to the software being trained on (such as using Alt-Tab to scroll between windows), but merely used as part of the presentation of the training, and not part of the training itself. From the questions received during and after the training, the staff were planning to use these functions and short-cuts when they returned to the office. The same was also experienced during one-on-one sessions with staff, where often assistance would move from original topics to more general skills. Jelen (2006:9), also received a similar reaction from audience members during his seminars on Excel and calls them his 'gasp' items, where the members of the audience literally gasp when shown them.

This research study will focus only on the administrative category of staff in the engineering faculty, and not the academic or technical staff. Most of the staff in the administrative category are using productivity software to some varying degree in their daily work, but how effectively they use it varies considerably. The difference in requirements within this group may also be considerable as the tasks they are required to do may be very diverse, as over time their roles within the departments may have evolved. In the author's experience the responsibilities of some secretarial staff is significantly more than in other departments, with some secretarial staff performing more of a managerial function.

Even though staff may be using technology (specifically productivity software), they may be underutilising the software, such as doing tasks in a long or

roundabout way, when faster and more effective methods are available. An example of this would be the Mail Merge function in Microsoft Word, which merges data (usually from an Excel Spreadsheet) into a Work document, and speeds up the creation of bulk customised documents. Many staff still type out each letter manually (or the fields that change), when the mail merge function would substantially speed up the creation of documents, as well reducing errors. Time would therefore be saved, as well as errors reduced (such as incorrect addresses, names, etc).

The definition of a digital literacy, according to the Danish Technological Institute (2010:**Online**), is that "Digital literacy involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet".

If one evaluates the concepts of 'confident' and 'critical use', the following analogies can be drawn:
'**Confident'** is defined as, "certain of having the ability, judgment, and resources needed to succeed", exemplified by a staff member who uses the correct technology in their daily job without it being seen as additional effort. It would be used seamlessly.
'**Critical use**' could be interpreted as using the relevant solution for the task at hand; one that would solve the problem most effectively, without wasting time, and getting the best result.

This could be compared to the definition of a 'digital native', who is someone who has grown up with digital technology, and does not see it as an imposed burden in daily life, but an inseparable part of it. The definition of a digital native, according to the Digital Native website (2010:**Online**), is "A person raised in a technological environment, who accepts that environment as the norm. This person often has grown up surrounded by digital devices, such as MP3 players and cell phones, and regularly uses these devices to interact with other people and the outside world". Palfrey and Gasser (2008:346), define a digital native as a

person who is born into the digital age and having access to networked digital technologies and with strong computer skills and knowledge. They do however qualify this by stating that it is not strictly defined by age, but also by other factors such as how they interact with technology, as well as the information itself. Palfrey and Gasser (2008:1), give the cut-off between native and immigrant as those born before or after 1980, which they describe as the start of the digital age.

Most staff at higher education institutions would not fall into the digital native category and most could be categorised as 'digital immigrants'. The definition of a digital immigrant, according to the Digital Native website (2010:**Online**), is "A person who has adopted the Internet and related technologies later in life, typically after adolescence and young adulthood. Like a geographical immigrant, this person may adopt some aspects of a digital native, while still retaining old habits. For example, this person may purchase a CD to play on his/her computer instead of purchasing digital music from the Internet". Palfrey and Gasser (2008:346), define a Digital Immigrant as a person who uses the internet and related technologies, but who was born before the digital age.

Digital Native website (2010:**Online**), also describe digital literacy as: "An individual's fluency and comfort within the digital environment", and stresses the need to educate all members of society to use the Internet and other digital technologies so that they can actively participate in society. Palfrey and Gasser (2008:346), describe it as the ability to use the internet and other tools effectively, and also stress the need for education in order to close the gap between those who have digital literacy and those who do not. While they do not specifically define the other tools, digital literacy could be taken to include any type of interaction with computer technology, such as specialised and productivity software, cellphones, ATMs, and even programming of the ubiquitous video machine.

2.5 KEY FOCUS AREAS

There are several key areas that could be focused on:

- Adding functionality putatively to increase the value of product. Software bloat can be defined as an increase in functions available, without adding to the effectiveness of the software

- Enabling staff to do their work more easily / better.

- Use of correct software that is relevant to the task or situation required, or utilise current software more effectively.

- 'Once it's digital, keep it digital'. Avoiding additional work by retyping/re-entering data that is already in digital format. This would also include the transfer and re-use of data between applications.

2.6 EFFECT OF UNDERUTILISATION

One of the primary effects of staff underutilisation is time wasted by staff who are doing tasks manually, instead of learning faster methods. One should also consider the effects of doing a task more effectively. It was thought that the use of computers would free staff up from the tedium of manual tasks, effectively giving staff a shorter work day and providing more quality time with families. However the actual impact has been to increase workload, as one can now simply do much more work. Another unintended consequence has been to add to the number of staff required, as the technological dispensation requires large IT departments to support the technology. Staff have become so accustomed to using technology in every aspect of the daily work life that they are not able to perform even the most basic functions if that particular technology, such as e-mail or the internet, is not working.

2.7 IT RELATED TRAINING AT CPUT

Training at CPUT is predominantly done by the Human Resources department, and covers a wide variety of fields.

2.7.1 Types of training

There are various types of training available at CPUT, namely:
- Formal training courses with a specific qualification, such as the International Computer Driving Licence (ICDL).

➢ Formal training courses without specific qualifications (see Annexure 3 for an example of the CPUT training schedule), from the Microsoft Word beginners course, through to more advanced courses in SPSS (a statistical analysis package).

➢ Formal self-study courses, such as the courses on Office 2007, on the CPUT Learner Management System (LMS).

➢ Semi-formal training, such as Marks Administration System (MAS) training, which is done on an ad-hoc schedule

➢ Informal one-on-one peer training, which would be staff members assisting other staff members informally.

➢ Self study by staff members, studying specific topics in order to improve their skills, using either the internet, books.

The types of training are summarised in Figure 2.1, giving the class size and type of training.

Figure 2.1: Types of training available **(Source:** Own source**)**

Types of training	Formal	Informal
Large class size	Formal Training courses, ICDL Course	
Small class size	Targeted training, Small groups	
Single Staff member		One-on-one, Peer training, Self study

2.7.2 Effectiveness of training

An evaluation may be done at the end of the training course, which looks at the how effective the trainer was, and how relevant the materials were, but there has been no system where the effectiveness of the training has been measured once the staff member returns to his or her job. If this could be measured at a later stage, then one might get a true reflection of the effectiveness of the training course.

Staff who do not regularly use particular skills are likely to forget what they did in training over time. The content of the training is usually quite extensive, so the staff are inevitably not going to be able to use all that they have been taught. A possibility is to have targeted training (short sessions) that are targeted at specific skill sets, and vary for job category.

2.7.3 Time taken in training

Most formal training sessions on productivity software are usually a half or full day, which is a substantial part of the work day/week. If class sizes are between 12 and 20 pupils, then this represents a fairly good utilization of the trainer. In informal training sessions, such as one-on-one peer training, one staff member is used to train only one other staff member, which is not an effective use of the staff member's time. Also as this type of training is usually done in a just-in-time manner, in order to complete an urgent task, it is usually not an ideal environment to learn. Unless staff regularly use the skills that they learn in the training, they are likely to forget much of it, as many different skills are covered, and they are more concerned with their daily needs. Even if they were proficient in the skills at the end of the training session (usually a half day training session), by the time that they actually need to use the relevant skill, they would most likely have forgotten it. The most prevalent attitude amongst staff that the author has assisted, is that it will take longer to find out how to do the task than to do it manually, or by traditional means.

2.7.4 Time wasted in not being trained

Staff are usually concerned with getting the job done, and training is seen as a time consuming activity. A possible incentive would be to create a method of quantifying the savings (for each task), such as an index – a ratio of time used in learning the new task, compared to time used in doing it the old way. For the VLOOKUP function in Excel, the time taken to train the staff member, plus the time taken to complete the task, is actually less than the time takes to do the task the old way, as well as being more accurate. Any subsequent use of the function would compound the saving, as well as decrease errors. A quantifiable method of comparing the old and new tasks would assist in promoting training. Even if the

best training is available, the staff may not attend, therefore care must be taken to ensure that staff receive the training that they need in order to carry out their duties effectively.

2.7.5   Why staff do not attend training courses

Staff can be divided into two categories: those who will tend to go on training, and those who will tend not to. At a departmental level, staff could be forced to go on training courses, but do the staff who are resistant to training get the benefit of the training? Very often the skills required are for a task that needs to be completed to an imminent deadline. If a colleague assists the staff member to solve the immediate problem, then it is unlikely that any effective learning will take place due to the additional pressures of the deadline, and the staff member will not be able to solve the problem again by themselves in the future.

One possible reason for staff not going on the training, or not going on the correct level of training, is the naming of the course levels. Usually courses are named basic, intermediate or advanced. In the author's opinion, most staff would not want to be seen as mediocre, so would not want to enrol for a Basic course. They probably use the software daily in their job, so would not like to be seen going on a basic course that covers skills that they should already have. If they enrol for the intermediate course, when they should be doing the basic course, the problem is twofold:

➢ they are missing out on foundation work that is covered in the basic course, that will be needed in the more advanced courses;

➢ they slow down the progress of the intermediate class, as they do not have the requisite skills, and hold up staff who should legitimately be on the intermediate course.

Another reason for staff not attending training is the lack of time. This is a reason that is often given, and given the length of the training sessions, this could be legitimate. Although this is a legitimate complaint, using the technology correctly, through training, should assist with getting tasks done more effectively, thereby releasing up time that was previously 'wasted' in doing tasks manually, instead of more optimally.

2.7.6 Shortcomings of training

Staff are sometimes not aware of what training is available (see Annexure 3 for an example of the CPUT training schedule). This is sometimes due to their not actively looking for what training is available, or training is not offered at a suitable time for these staff, as the demands of an academic department may not fit in well with the institutional training schedule. Also staff may not be aware of what software or technology is available (this also includes web sites / portals, such as MIS), and this would fall under the category of more general technology training: general training on what technologies available, and letting the staff decide which suits their needs best.

The training for productivity software that is done at CPUT may be too general (too broad and not targeted enough to specific skills required). In terms of training, there is a general resistance to training by staff in general. One would have to compile an anonymous questionnaire to investigate the reasons for this, as well as possible solutions, or areas to focus on. The CPUT's service desk also logs the staff problems, and data from this could be used to identify problem areas (for the various staff groups) and this information used to make the training more effective.

2.8 CONCLUSION

In this chapter a holistic perspective was presented of the research problem, giving the history of the institution, as well a background to the problem, and an overview of the key focus areas. The correct training of staff is a necessity, but buy-in from the individual staff, as well as the Heads of Departments is necessary, in order to ensure that the correct training is done for the correct staff members. CPUT must be seen to be embracing the use of technology, and not lagging behind other institutions in its use of technology, both by the institution, as well as by the individual staff members. One CPUT staff member concisely summed it up with the expression: 'We are a University of Technology, not a University of Manuality' (Anon:2010).

CHAPTER 3:

UTILISATION OF PRODUCTIVITY SOFTWARE: A LITERATURE REVIEW

"If the automobile had followed the same development cycle as the computer, a Rolls-Royce would today cost $100, get a million miles per gallon, and explode once a year, killing everyone inside"

Robert X. Cringely

3.1 INTRODUCTION

Huff, Munro and Marcolin (1992:1-10), conceptualises user competence as consisting of three independent dimensions, namely breadth, depth and finesse, which are elaborated below.

➢ **Breadth** refers to the extent or variety, of different end user tools, skills, and knowledge that an individual and can bring to bear on his or her job

➢ **Depth** represents the completeness of the user's current knowledge of a particular sub-domain, such as spreadsheet software, and the degree to which they have mastered the full capabilities of a particular software package.

➢ **Finesse** is defined as 'the ability to creatively apply end user computing'.
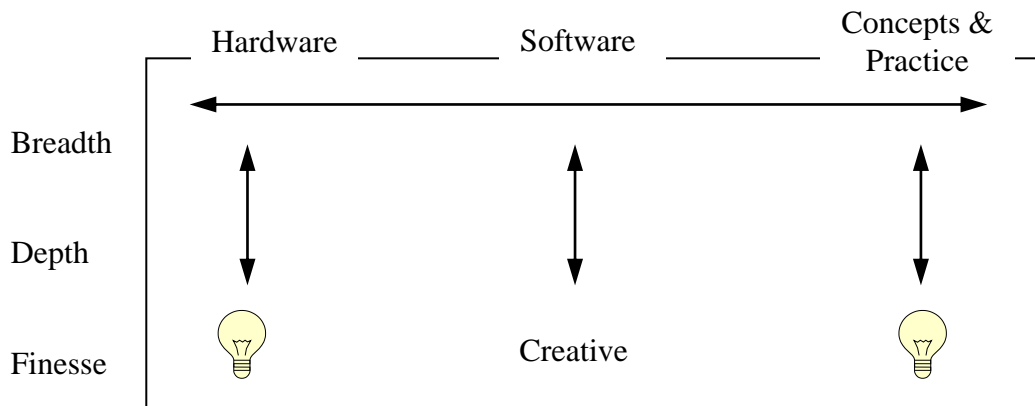
Figure 3.1: The User Competence construct (**Source:** Huff *et al*, 1992: 1-10)

Huff *et al.* (1992:1-10), further explain that the dimension of *finesse* is an extension of *depth*, and refers to what has been traditionally termed the 'power user', and goes beyond the depth of knowledge, but also the "…ability to exercise innovativeness and creativity in the practical use of technology – the ability to find new or unusual, especially effective ways of using a technology that was seen

as innovative in the organisation; in effect pushing the edge of the envelope". With regard to productivity software, depth would apply to how well a user is able to use a particular software package, while breadth could describe how various software packages are used with each other, as well as how data is used/re-used interchangeably between them. An example of this would be the Mail Merge function, which draws data from Excel into Word in order to produce bulk customised documents.

Rockart and Flannery (1983:776-784), have observed that end users could range in their capabilities from complete novices up to individuals who could properly be considered IT professionals. Although their end user competence construct (See Figure 3.1) looks at the three domains of hardware, software and concepts and practice, this study will only focus on the software domain, and specifically the area of productivity software.

There has been much discussion about the relative merits of self-efficacy versus actual usage. Bandura (1994:71-81), states that "Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives". Munro, Huff, Marcolin, and Compaeu (1992:49), further define computer self-efficacy as "...an individual's perception of his or her ability to use a computer successfully in the performance of a job task". Munro *et al.* (1992:53), state that it must be remembered that it is the competence level of the user that is measured, not the effectiveness of their computer use.

Actual usage may be measured quantitatively using a hands-on test to measure the actual capabilities of the staff member. Gravill, Compeau and Marcolin (2005:388), have found that there is very little correlation between subjective knowledge, self-assessment and procedural knowledge. They define declarative knowledge as "….the early phase in the learning process. In it the individual cognitively encodes a set of facts about a skill. It is typically measured by a paper and pencil test…". They measure procedural knowledge "… by a hands-on test to evaluate the extent to which individuals understand the linkages required to perform tasks". Gravill, Compeau, and Marcolin (2006:378), state that for

organisations to effectively use their information infrastructure effectively, they need to ensure that their staff keep pace with changing technology through continuous learning.

Scholtz (2006:508), cites Lucas (2000), as suggesting that it is necessary for us to move from a 'computer-centric' world to an 'information-centric' world. The author goes on to use Gershon's (1995), definition of 'human information interaction' as: "...how human beings interact with, relate to, and process information regardless of ... the medium connecting the two".

Many users make the mistake of retyping information, and not obeying the axiom: 'Once it's digital, keep it digital', and avoiding additional work by retyping/re-entering data that is already in digital format. It is the author's experience that often for administrative staff, their strength of fast typing is in fact often their weakness. They use traditional methods, i.e. those that they know and are familiar with, rather than find a new method that will be faster and more effective. Someone who cannot type as fast may be more inclined to find a more effective method of performing the function, and in fact perform it in less time.

Scholtz (2006:508), is of the opinion that the term 'information' is overused, and that there are problems with the distinction made between 'data' and 'information'. In the context of this dissertation, the term information will be used to describe data that has been processed from the raw form.

3.2   TYPES OF SOFTWARE

According to Williams, Sawyer, and Hutchison (1999:18-19), software can be divided into two types, namely system software and application software. System software can be defined as controlling the allocation and usage of hardware resources and enables the applications software to run. There are a wide variety available:

- **Microsoft:** range of operating systems, from MS-DOS, Windows 95, 98, NT, ME, 2000, XP, Vista, and Windows 7.
- **Macintosh:** MacOS 9, MacOS X.

➢ **Open Source**: Linux, SUSE, Ubuntu.

Williams *et al.* (1999:18-19), define application software as software that has been developed to solve a particular problem, to perform useful work on specific tasks, or to provide entertainment. Within application software there are five categories of software:

➢ **Entertainment software**: Games, music and video DVDs.
➢ **Home/personal software**: Genealogy, home repair, gardening, decorating.
➢ **Education / reference software**: Encyclopaedias, dictionaries, almanacs.
➢ **Productivity software**: Word processing, spreadsheets, e-mail, databases, financial software
➢ **Speciality software**: Computer Aided Design (CAD), Desktop publishing, Web authoring software.

3.3 TYPES OF PRODUCTIVITY SOFTWARE AVAILABLE AT CPUT

There is a wide variety of software used at CPUT, in all categories of system and application software, but for the purposes of this study only certain types will be covered. The study will not include system software, and only certain types of productivity software within application software. The various types are listed below, divided into those which have the potential of being used, and those that will not have the potential of being used.

3.3.1 Software to be used:

➢ **Microsoft Office Word**: Word processor which is widely used by staff.
➢ **Microsoft Office Excel**: Spreadsheet software used for calculation, analysing data and creating charts and tables.
➢ **Novell GroupWise**[3]: The e-mail client used at CPUT. Access to the software can be through the desktop version, the browser based client, as well as cellphones. For the purpose of this study only the desktop version will be included, as this is consistently used by all the staff members.

---

[3] *Note*: The use of medial capitals used within the text such as 'GroupWise' and 'QuickViewer', as well as lowercase prefixes such as 'e-Learning' are common in the computer industry.

Only the Microsoft Windows versions of the software is used, as there are no staff within the target group using Apple Macintosh. Even though the option of 'not applicable' is given for the three types of software in the questionnaire, it is not expected that any of the staff will choose this option, as all the staff to be surveyed use all three the software packages on a daily basis.

3.3.2   Software that will not be used:

➢ **CPUT Marks Administration System (MAS):** This is predominantly used by the academic staff for the purposes of entering marks, and not widely used by administrative staff.

➢ **CPUT Management Information System (MIS):** This is only used by senior academic staff only, and not widely used by administrative staff.

➢ **e-Learning Platform:** BlackBoard Learner Management System (LMS) and SafeAssign anti-plagiarism software: Mainly used by academic staff, and not administrative staff.

➢ **Internet browsers**: Mainly Microsoft Internet Explorer (although use of the Internet is becoming less browser specific). This is mainly used as an interface to online software (such as MAS, MIS or e-learning)

➢ **SMS usage – bulk smsing:** Too specialised, and only used by a few staff members

➢ **Computer Aided Design software (CAD):** There are too many different packages used by the various departments, such as Unigraphics and SolidWorks CAD in Mechanical Engineering, and AutoCAD in Civil Engineering. It would be difficult to compare different packages against one another. They are not used by administrative staff.

➢ **Microsoft PowerPoint**: Quite specialised, and also more widely used by academic staff.

➢ **Microsoft Access:** Too specialised, and not widely used by administrative staff.

➢ **Desktop Publishing/Web design software**: Too specialised, and not widely used.

➢ **Open Source Productivity Software**: StarOffice, OpenOffice. Not widely used.

> **Adobe Reader and Adobe Acrobat**: The full version (Adobe Acrobat) is used predominantly only for creating documents for distribution, while the Reader is limited in functionality, mainly viewing documents.

It is the author's opinion that Adobe Acrobat is one of the most underutilised productivity software programs used at CPUT, as it has a wide range of functionality, yet so few functions are used. See Annexure 4 for a comparison of the full list of features available in the various versions.

3.4   SOFTWARE FEATURES

The following two sections give the features available in the respective software packages, and what methods were used to formulate the final list of features to be included in the questionnaire.

3.4.1   Microsoft Word and Excel

There are a wide variety of software features within Microsoft Word and Excel that could be covered, and while some are in regular use, others are very rarely used. The following sources were consulted in order to build up a list of features from Word and Excel to be included in the questionnaire:

> Training manuals, both for the current version of Microsoft Office, as well as older versions (Jelen, 2008, Robertson, s.a. and Pillay, 2010).

> CPUT's Online Learner Management System (Blackboard) online training course (CPUT, 2010b:**Online**) for Microsoft Office 2007 Word and Excel training.

> The Microsoft training website (Microsoft, 2010a and 2010b:**Online**) was also consulted for the skills measured in their 'Microsoft Office Specialist' qualification exams for Word and Excel.

> The content of sample tests from the European International Computer Driving Licence 'ECDL/ICDL' and 'ECDL/ICDL Advanced tests' was also used to find what features were examined. The ECDL tests (known as the 'International Computer Driving Licence' or 'ICDL' outside of Europe) have been set up to provide an international standard in end-user computer skills, and provide high-quality, internationally-recognised certification designed

composed of modules, validated, and approved by international experts. (ECDL, 2010:**Online**).

➢ CPUT Computer Skills 1 tests for Word and Excel (From the department of Mechanical Engineering, CPUT)

➢ Additionally data on calls was obtained from the CPUT Service Desk (CPUT, 2010a), spanning three years. This data which was restricted to the Faculty of Engineering was analysed for any calls relating to the specific productivity software within the scope of the study. An extract (Table 3.1) is shown below (specific personal user information has been removed).

Table 3.1: Sample of Service Desk Calls for Word and Excel (**Source:** CPUT Service Desk)

Service	Servicename	Subservice	Subservname	Caseid	Details
6	COMPUTER /LAPTOP APPLICATION PROBLEMS &	650	ASSIST WITH MS WORD	xxxxxx	USER DOES NOT WANT TO GET THE " DISABLE MACROS " ERROR SHE GETS EVERYTIME SHE OPENS A WORD DOCUMENT. EXT.xxxx
6	COMPUTER /LAPTOP APPLICATION PROBLEMS &	650	ASSIST WITH MS WORD	xxxxxx	USER WANTS TO CHANGE THE SETTINGS ON WORD (UNABLE TO CHANGE THE FONT SIZE) EXT xxxx / USER NOT AVAILABLE - LEFT MESSAGE FOR USER TO RETURN CALL / SPOKE TO USER - USER ASKED TECHNICIAN TO COME CHECK PC BUT NO ONE WENT - WILL ASK TECHNICIAN TO GO TO U

When the Service Desk data was analysed the following was found:

➢ 834 calls in a variety of categories, such as network, software, printing, etc.

➢ 379 calls relating to productivity software in general.

➢ 81 calls relating to Microsoft Word and Excel.

When this data was further analysed, it was found that almost all the calls related to general problems with the software, and very few to the actual use of specific functions within the software. Other comments such as "Unable to open word document" or "MS word documents have disappeared" are too general in nature to be of help.

3.4.2   Novell GroupWise

There are a wide variety of features within Novell GroupWise that could be included, but while some are in regular use, others are very rarely used. The

following sources were consulted in order to build up a list of Novell GroupWise features to be included in the questionnaire:

➢ CPUT training manual for Novell GroupWise. (Robertson, s.a.)
➢ Novell GroupWise Windows Client User Guide. (Novell, 2010a:**Online**)
➢ Novell GroupWise Client Frequently Asked Questions (FAQ). (Novell, 2010b:**Online**)
➢ CPUT Service Desk (CPUT, 2010a), with 122 calls relating to Novell GroupWise. An extract (Table 3.2) is shown below (specific personal user information has been removed).

Table 3.2: Sample of Service Desk Calls for GroupWise **(Source:** CPUT Service Desk**)**

Service	Servicename	Subservice	Subservname	Caseid	Details
1	EMAIL SERVICES AND PROBLEMS	100	USER NOT RECEIVING E-MAIL	xxxxxx	USER NOT RECEIVING E-MAILS SUSPECTS THAT GROUPWISE IS FAULTY. EXT xxxx
1	EMAIL SERVICES AND PROBLEMS	101	UNABLE TO SEND MAIL	xxxxxx	USER CANNOT SEND EMAILS TO EXTERNAL RECEIPIENTS (CAN ONLY SEND INSIDE CPUT). EXT xxxx

3.4.3   Final feature list for all three software packages

From these sources, a number of features were selected ranging from the most basic to fairly advanced, and sorted in order of complexity (easiest at the top). These features represent the range of functions that staff in the administrative category would be reasonably expected to carry out in their day-to-day jobs. It is not expected that all the staff would be able to carry out all of these functions, but the results of the survey would give a representation of the distribution of features used. The features selected are shown in Table 3.3.

Table 3.3: Features of productivity software used **(Source: Own source)**

Microsoft Word	Microsoft Excel	Novell GroupWise
Insert symbol	Changing number style (percent / decimal)	Create / send mail message
Insert page break	Insert or delete row/column	Attaching a file to a message
Insert table	Hide rows / columns	Viewing / opening an attached file
Insert clip art / images	Manually re-size row/column	Checking on the status of mail
Insert watermark	Re-size row/column to fit contents	Resending mail

Insert header /footer	Adding background/fill	Retracting mail
Set / move tabs	Automatic fill	Forwarding mail to other users
Justify text	Conditional formatting	Quick viewer
Find / replace text	Enter manual formulas	Marking an item unread
Change text orientation	Change relative / absolute references	Creating / renaming personal folders
Change case of text	Enter automatic formulas	Creating a shared folder
(Uppercase / sentence case)	(e.g. Max/Ave/VLOOKUP)	Manage the calendar
Creating superscript text	Merge cells	Managing contacts / groups
Insert bullets / numbering	Create header / footer	Adding a signature / vCard
Page numbering	Create charts	Searching for e-mails / contents of e-mails
Set margins / page size / orientation	Print row / column headings on each page	Delaying the sending of e-mails
Use format painter	Create new worksheet	Setting the priority of e-mails
Find word count of document	Link data between worksheets	Setting up of mail rules
Check spelling / grammar	Link data between different workbooks	Setting up of vacation / out-of-office reply rules
Track edit changes / mark-up	Filter and sort data	Setting up proxy access
Use / modify built in styles	Add automatic subtotals to data	Create a routing item
Insert automatic table of contents	Remove / highlight duplicate data automatically	Online mode
Mail Merge / merge to e-mail	Insert PivotTables	Caching mode
		Remote mode
		Archiving / retrieving e-mails

For Microsoft Word, the functions of insert symbol or page break, and insert clip art/images were considered to be at the easy end of the spectrum, while mail merge and automatic table of contents more difficult. As each staff member's exact duties will vary, it is not expected that there will be a uniform set of features used, or required. Even using this detailed analysis of specific functions, it is difficult to evaluate the depth of user's ability, as the evaluation is subjective.

3.5   THE SOFTWARE INTERFACE

The following two sections give an overview of the interface of the respective software packages.

3.5.1   Microsoft Office: Word and Excel

According to Jelen (2006:9), the interface of Microsoft Office 2007, as well as the file format, has substantially changed from the previous version, with many more

functions being added in the new version. This is Microsoft's only substantial change in file format for the office suite since its introduction, and the only time that an older version was not able to open newer versions. Users receiving Word or Excel files in the new format would have to either download and install the 'Microsoft Office Compatibility Pack' or upgrade to the new version. To put the scale of the change in context, the increase in number of cells in an Excel worksheet went from 16.7 million to 17.2 billion, an increase of 103649%

The biggest visual change is the introduction of the 'Ribbon User Interface'. Figure 3.2 and Figure 3.3 show the drastic differences in the two versions even though Office 2003 and Office 2007 are sequential releases (coded version 11 and 12 respectively).

Figure 3.2: Microsoft Office Excel and Word 2003 Traditional interface **(Source:** Screen capture of Microsoft Office 2003 Suite**)**
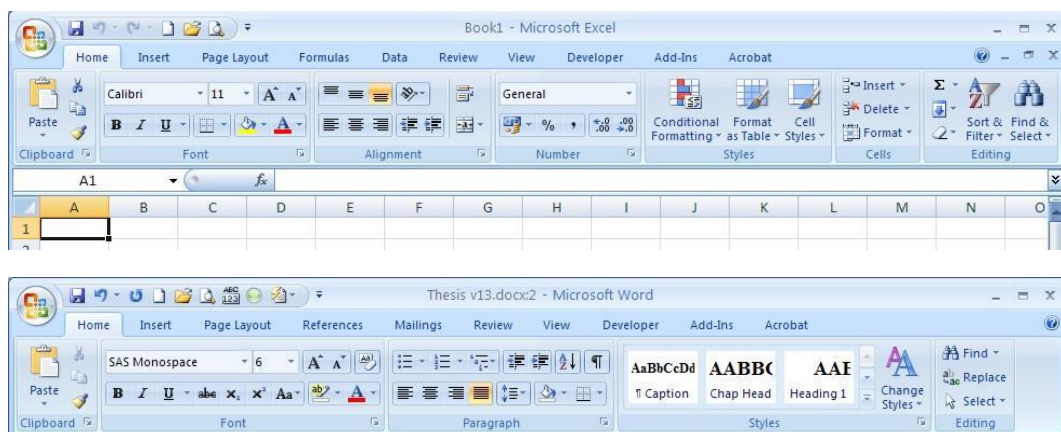
Figure 3.3: Microsoft Office Excel and Word 2007 Ribbon interface **(Source:** Screen capture of Microsoft Office 2007 Suite**)**

The new layout adapts and changes with the context that is currently being worked on, so if the user is working on a table or an image, then the menus will change accordingly. Additionally Microsoft has introduced an additional toolbar

called the 'Mini Toolbar' (see Figure 3.4). This toolbar appears at the cursor position, and presents the user with mini selection of often-used functions, such as font type and size, bolding, and indenting without the user having to move to the main toolbar. Additionally it can also be accessed by clicking on the right mouse button.
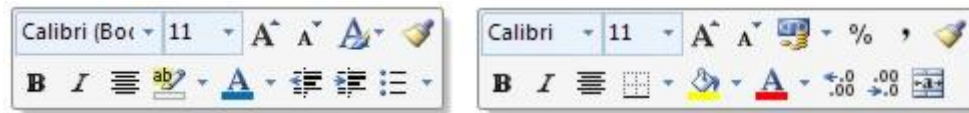
Figure 3.4: Microsoft Office 2007 Word (left) and Excel (right) Mini Toolbar **(Source:** Screen capture of Microsoft Office 2007 Suite**)**

One additional feature of this toolbar is that it initially appears almost imperceptibly, and only fades in as the cursor is moved towards it. If the user does nothing then it just disappears. This, along with the new ribbon interface, does take some getting used to, but in the author's opinion does seem to be more effective.

Access to features in Microsoft products can usually be accessed by a number of different methods, such as the menu bar, toolbars, context sensitive right clicking with the mouse, or keyboard shortcuts. An example of this is the cut and paste function, which may be access using any one of the following methods:

➢ **Menu bar:** Edit > select 'Copy' or 'Paste'

➢ **Toolbar:** Click on the 'Copy' or 'Paste' button

➢ **Context sensitive right-click:** Right click with the mouse, and select 'Copy' or 'Paste'

➢ **Keyboard shortcut:** Control button, and at the same time either 'C' for 'Copy', or 'V' for 'Paste'

➢ **Drag and drop:** Highlight text, and drag to the new position to 'cut and paste', or press the Control button to 'copy and paste'.

The keyboard shortcut, right-clicking and 'drag and drop' are by far the easiest and fastest method to use, as they do not require the user to look at a toolbar or menu, which takes their attention away from the document. Jelen (2006:8-9), mentions, however, that in the data that Microsoft collected using their 'Customer Experience Improvement Program', which internally is called 'Service Quality Monitoring' or SQM (pronounced 'skwim') it was found that the majority of

customers used the toolbar option. The data collected using this program, (from 1.3 billion user sessions) clearly showed that even though there were more effective ways of accessing functions, most users were doing it the old-fashioned way. In fact when Microsoft was considering removing the toolbar option for paste, they consulted this wealth of data, and found that it was the most used button in all of Office. Most staff use only one method of performing a function, and are often unaware of the other ways of achieving the same result.

Martin, Puls and Hennig (2008:4), explain that the paradigm shift from hierarchical menu structure to some new sort of interface was inevitable, as the number of new features increased. They state that "As the user interface moved from top-level to hierarchical menus, things started to get out of control and people were frequently searching for commands. It was often so challenging to find a command that most users had difficulty in locating desired options, or perhaps worse, they would give up on trying to find something that they knew was there". Microsoft had tried to address this with 'adaptive menus', which tried to anticipate what the user would need, but this actually became a hindrance, and most users turned it off in frustration.

Jelen (2006:15), quotes Bill Gates who asked Jensen Harris, after seeing the Office 2007 ribbon: "You will have a classic mode, right?" Unfortunately users will not have that option. In a change from tradition, Microsoft have not allowed users to revert to the old interface, ensuring that users must get used to the new interface, thereby stepping out of their comfort zone. Users are in fact able to get the old interface back, but only by buying third party software (approximately $15 to $30) to 'recreate' the old interface, or by complex programming as described by Martin, *et al* (2008), in their book "RibbonX: Customizing the Office 2007 Ribbon".

Jelen (2006:8-9), states that in Microsoft's usability studies, customers often asked for features that were already available, and in many cases, had already been included in older versions. Clearly there was a problem with the way that people were using the menus, which Microsoft has tried to address with the new 'Ribbon User Interface' in the latest version of Office 2007 (Figure 3.3). As many

competent users now have to re-learn to use Microsoft Office this may provide an ideal opportunity to train staff without the stigma of not being competent in the use of the software, as all users are having the same problems with the new layout of menus and functions. Although courses have been offered, they have concentrated on the differences between earlier versions and office 2007, and not trying increase users knowledge more broadly.

3.5.2   The GroupWise interface

CPUT currently uses version 7 of GroupWise, and has done so for the past few years. There are however various ways of customising the way in which the information is displayed, as shown in Figure 3.5 and Figure 3.6. Columns can be changed around, as well as added or removed, and the location of the QuickViewer can be customised.
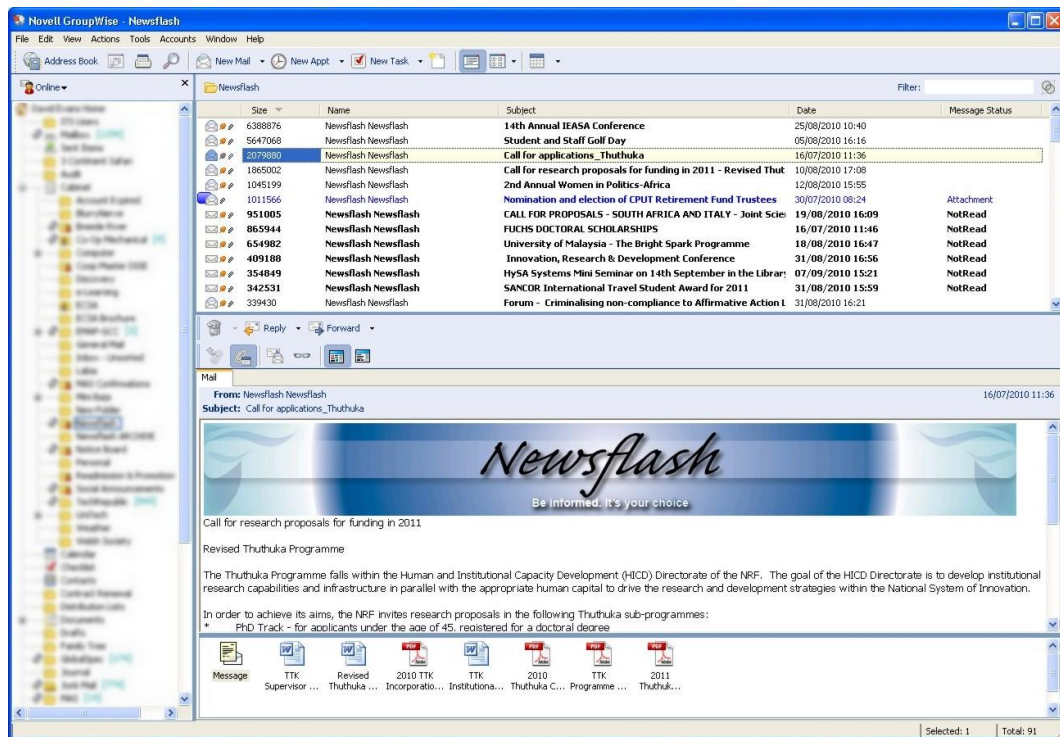
Figure 3.5: GroupWise interface with QuickViewer view (**Source:** Screen capture of GroupWise)

This tuning of the software interface would fit in with the definition of a user's depth in the use of software, as well as their finesse (Huff, *et al*, 1992:1-10).

The ways to which a user can customise the interface to suit their changing needs, differing from situation to situation, would ultimately define what value they obtain from the software, beyond that of just a basic communication tool. Unfortunately an examination of this is beyond the scope of the current research, but could be included in future research.
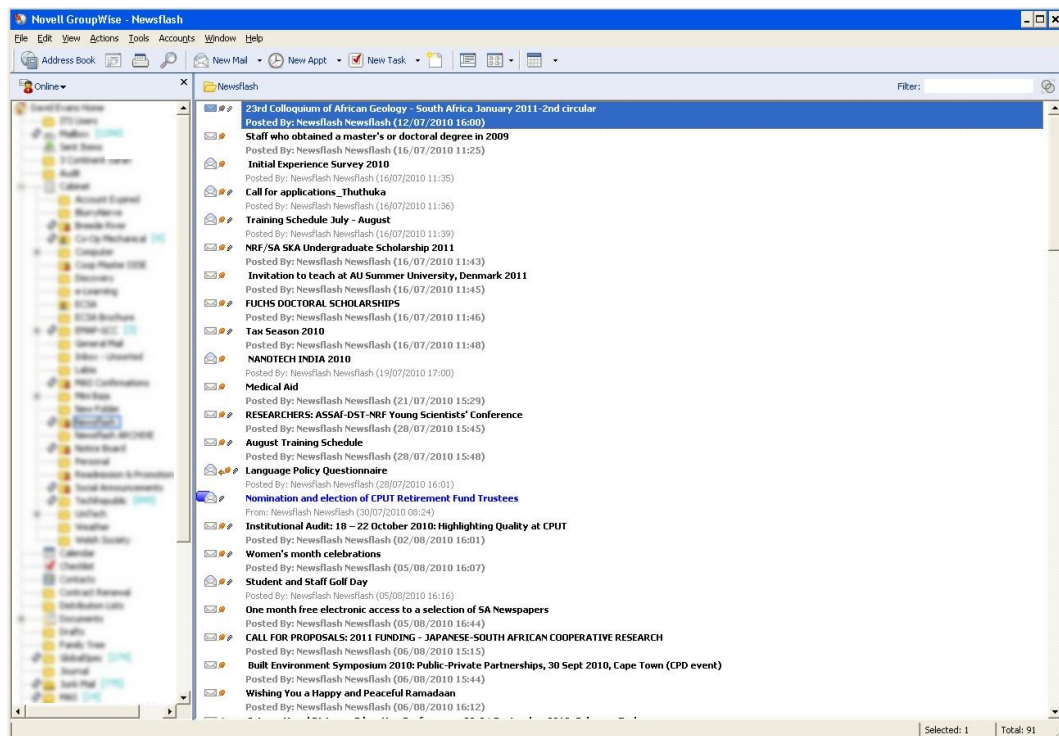
Figure 3.6: GroupWise interface with summary view (**Source:** Screen capture of GroupWise)

While there are many more functions available within GroupWise, only those relating directly to the sending and processing of e-mails are covered in this study.

3.6   SOFTWARE BLOAT

Software bloat can be defined as an increase in functions available, without adding to the effectiveness of the software. Williams, Sawyer, and Hutchison (1999:131), use the term 'bloatware' as a colloquial name to describe software that is so crowded, or bloated, with features, that it is "…afflicted with 'featuritis'…", so that it requires a powerful processor and large amounts of RAM to perform effectively.

Williams, Sawyer, and Hutchison (1999:81), are of the opinion that the reason for all these features is the software industry's strategy of planned obsolescence to make buyers abandon their old versions and to go out and buy new ones. They add features to make their software stand out in the market place and increase the perceived value of product. They go further and compare this software bloat with the outrageous fins on American cars in the 1950s, which although they were justified on grounds of adding stability, were more likely just a response to America's post-war fascination with the jet age. Software bloat has the unintended result of actually decreasing the ability of users to use the software effectively, as the increased time needed to find features cause frustration.

3.7   THE TECHNOLOGY ADOPTION LIFECYCLE

Not all staff begin to use technology at the same rate. Moore (1991:16), has identified five groups which make up the adopters of technology. The proportion of people who adopt new technology, when plotted over time, can be represented by a bell curve as graphically depicted in Figure 3.7.
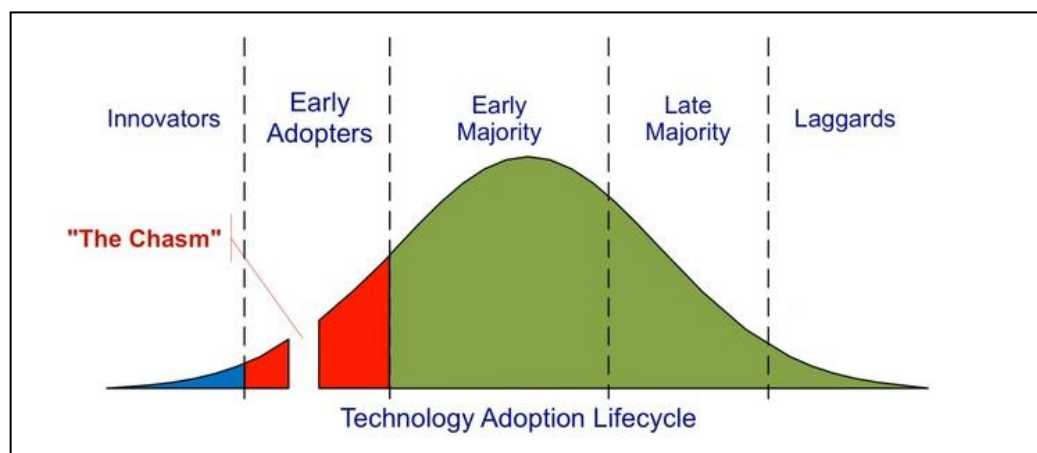
Figure 3.7: Technology adoption life-cycle (**Source:** Moore, 1991:16)

The following analogies can be drawn from Figure 3.7:

➢ **Innovators** are interested in and often use technology for its own sake. They can 'walk in the fog', without clear guides in terms of expectation or guidance.

➢ **Early adopters** are quick to see the possibilities and advantages offered by new technologies, and may often adopt technologies to better suit their own circumstances.

- ➢ **Early majority** are less likely to take chances, but are quick to see the value of new options and quickly adopt new initiatives. They are the first of the general market.

- ➢ **Late majority** represents the biggest group and are people less likely to change for the sake of change, but will adopt once convinced that the change is not a passing fad. Some individuals may not like technology, but appear to appreciate the advantages offered by innovation.

- ➢ **Laggards** will not use technology, but will often be able to list discrepancies between original technological claims and existing practice.

While these distinctions may not apply directly to current users of productivity software, they could be applied to both the effectiveness of use of features, as well as the overall use of the software itself. The innovators would be those who would actively seek out additional functionality, and may even go to the extreme point of downloading new versions of the productivity software, such as Microsoft Office 2010 Beta version, which was released to the public as a Beta version for users to test, prior to its official public sale.

I suggest that Moore's model could be modified for current users of productivity software to include the following categories:

- ➢ **Innovators** are interested in and often use software for its own sake, explore new ways of doing tasks, and actively seek out new ways of solving problems. Will often download Beta versions of software prior to release.

- ➢ **Early adopters** are quick to see the possibilities and advantages offered by productivity software. Will upgrade as soon as new software is available.

- ➢ **Early majority** are less likely to take chances, but are quick to see the value of productivity software. Will upgrade when they have seen the benefits that other users have gained.

- ➢ **Late majority** represents the biggest individual group and are people less likely to use productivity software, but will adopt once convinced that the change is not a passing fad. Are not likely to easily upgrade to a newer version.

> **Laggards** will use productivity software grudgingly, or not at all. Likely to be many versions behind the current version. They may justify using the older version by saying that it performs the functions that they require.

3.8 THE CHASM

There is a clear division between the first two groups (innovators and early adopters) and the rest of the group (Moore, 1991:16). Moore terms this division the 'chasm', and represents the longer time needed to convince the latter group of the value of technology. The first groups are much more likely to start using technology easily and enthusiastically, while the latter need much more persuasion. The analogy can be made with staff using productivity software, in that some will enthusiastically use features, while others will have to be convinced of their value.

3.9 MOTIVATION OF STAFF

Different people are motivated by different factors. Steyn (2001:48-49), summarises Csikszentmihalyi's (1988), theories on flow, and claims that people react to different situations with one of three experiences, namely anxiety, enjoyment or boredom. Steyn (2001:48-49), adds the factors of 'skill' and 'challenge' to Csikszentmihalyi's model, which is depicted in Figure 3.8.
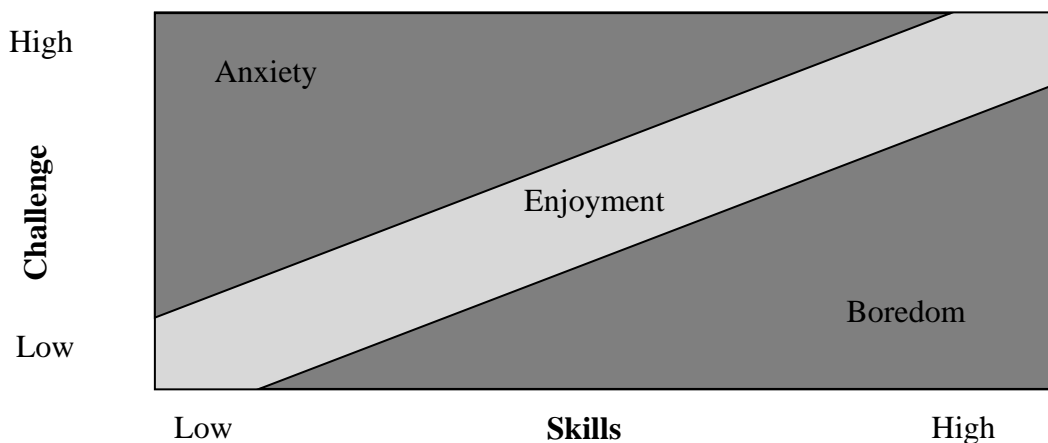
Figure 3.8: The effects of skill and challenge on enjoyment. (**Source:** Csikszentmihalyi (1988) as cited by Steyn (2001:48-49)**)**

In a given situation, one person may be bored, another less skilled person may experience anxiety, while a small number will experience enjoyment. The point where enjoyment is experienced is therefore a dynamic one, which depends on

both the skill level of the individual, as well as the challenge level of the activity. Steyn (2001: 48-49), explains that the individuals' experience in relation to their perception of the size of the challenge as compared to their current skills will affect whether the result will be enjoyment or boredom. This state of enjoyment should not be seen as just pleasure, as it is during these enjoyment periods that flow is achieved. Positive feedback from each flow experience strengthens the self, and more attention is freed up to deal with the outer and inner environment. As a result, the amount of change that can be dealt with is limited by the individual's ability to deal with change without being forced into anxiety.

Malone (1981:333-369), proposes a three factor motivational theory, which includes challenge, curiosity and fantasy. Of these three, only the first two are considered, as the use of fantasy, such as role-playing in IT related training, may be limited.

➢ **Challenge** represents the most important principle in that the challenge should be adjusted to the individual, and that work should not bore or frighten people. While trainers are not in control of the level of perceived difficulty that staff members experience during training, it is important to note that extremes in terms of challenge may adversely affect the level of motivation amongst staff members.

➢ **Curiosity** can be seen in two ways: Malone distinguishes between sensory curiosity and cognitive curiosity. Sensory curiosity is aroused by visual or auditory effects which are surprising or which attract attention. Cognitive curiosity is aroused by information which is surprising in that the information conflicts with the [individual's] existing knowledge or expectation, is contradictory or is in some way incomplete.

Steyn (2001:51), goes on to say that the visual curiosity may not be as important, but as a changing situation most often includes large quantities of information, which conflict with the user's existing knowledge, the motivational effect of cognitive curiosity should be taken into consideration and used.

3.10   PREREQUISITES FOR AN OPTIMAL LEARNING EXPERIENCE

Csikszentmihalyi (1990:6), defines flow as "... the way people describe their state of mind when consciousness is harmoniously ordered, and they want to pursue whatever they are doing for its own sake". This behaviour is analogous to McGregor's (1966:15-16), 'Type Y' personality, which sees 'work as play'. Most people would not view working with Microsoft Excel as play but if one is in the 'flow' then one may in fact not be conscious of working, to the point that one would have to actively tear oneself away from the computer, rather than constantly watch the clock.

Csikszentmihalyi and Csikszentmihalyi (1988:323), identify the following eight factors that make such absorption or 'flow' possible, if one or more of them are met:

➢ Challenge is optimised.
➢ Attention is completely absorbed in the activity.
➢ The activity has clear goals.
➢ The activity provides clear and consistent feedback as to whether one is reaching the goals.
➢ The activity is so absorbing that it frees the individual, at least for the moment, from other worries and frustrations.
➢ The individual feels completely in control of the activity.
➢ All feelings of self-consciousness disappear.
➢ Time is transformed during the activity (e.g. hours pass without being noticed).

Since flow is conducive to quality learning, any successful training programme should incorporate as many of these as possible, in order to remain within the enjoyment channel.

Csikszentmihalyi (1990:149-150), describes the 'Autotelic personality' as being one that can create flow experiences in even the most inhumane workplace. He relates the example of a welder in the harsh environment of a railroad plant, who despite these conditions enjoys his work, while others around him despise it. At a

university this could similarly be compared to staff who view routine work on computers as mundane, while others may be able to reach 'flow' and enjoy the experience.

From Csikszentmihalyi's model (1990:74), shown in Figure 3.9, one can see that a person who is not in a flow condition (point A2 or A3) has to either increase the challenge of a task (A2 → A4) or increase their skill level at that task (A3 → A4).
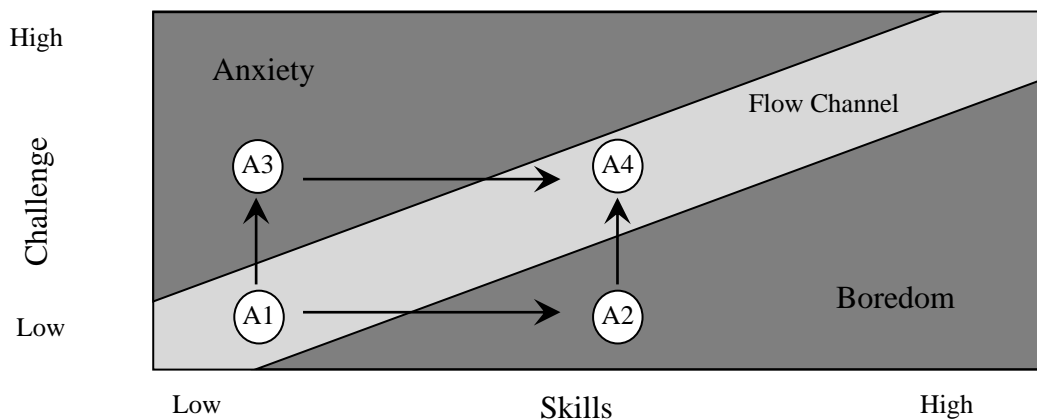
Figure 3.9: Csikszentmihalyi's original Flow model. **(Source:** Csikszentmihalyi (1990:74))

While they may have limited control over the level of challenge that they face, which would most likely be defined by their job, and the associated tasks, they would have control over the skills that they acquire, either directly as part of a formal training course, or indirectly through informal means. At point A1 the person would in fact be in the flow, but at such a low challenge and skill level that this could not be maintained for long.

Csikszentmihalyi (1990:75-76), warns that point A4 does not necessarily represent a stable condition, and the person may become bored by the lack of opportunities at that level, or anxious and frustrated by his level of skill. If they are sufficiently motivated to get back into the flow again, then they may push harder to get back in, but this time at an even higher level than before. He further explains that this dynamic feature explains why flow activities lead to growth and discovery, as one cannot enjoy doing the same thing at the same level for too long. This does seem to contradict his example of the welder in the railroad plant,

who has been in the same position for all his life (for over 30 years) and had even declined several promotions, but is nonetheless able to find challenge, and is considered as "... the most important person in the entire factory" even though he stood on the lowest rung. He has mastered every phase of the plants operation, and is able to take the place of any of the other workers if the need arises.

One interesting aspect of Csikszentmihalyi's flow theory is that one should be aware of assuming that just because a person is 'in the flow' that they will have the appropriate experience. He goes on to say: "It is not skills we actually have that determine how we feel, but the ones we think we have" (Csikszentmihalyi, 1990:75).

From the employer's point of view, it is a desirable state to have their staff members in the flow channel. Flow is not necessarily only achieved in doing pleasurable things. Csikszentmihalyi (1990:74), explains that: "The best moments usually occur when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile".

3.11   CHALLENGES TO STAFF TRAINING

Current training courses at CPUT are formal and are generally offered on a rigid training schedule as reflected in Annexure 3, which does not necessarily fit into the academic schedule, and which is cyclic in nature. Workload for the academic staff and administrative staff who provide support, follows very rigid year or semester cycles, with the following tasks, in addition to their lecturing load:

➢ **Registration**: At the beginning of the semester or year.

➢ **Test periods**: These consist of either set weeks allocated to tests, or ad-hoc tests sessions, generally within certain periods.

➢ **Examination or Final Assessment period**: Held at the end of the semester or year.

➢ **Marking of scripts:** Physical marking of examination papers/tests.

➢ **Re-assessments**: Either for sick exams, or for borderline students.

➢ **Marks calculations**: Faculty Office staff compute the student's final marks, before being discussed in departmental marks review sessions.

- ➢ **Marks review**: Held after the final marks are computed, but before the final results are posted.
- ➢ **Subject review**: Held near the beginning of the subsequent year or semester, to review the performance of overall subject results in the previous semester or year.
- ➢ **Regular meetings**: The regular departmental meetings, as well as planning meetings, and subject reviews.

As all these tasks are fairly rigid in nature, there is very little scope for the academics to fit into rigid training schedules. Training sessions can also be run on demand from departments, as long as there are sufficient numbers of staff available. These are also difficult to arrange at a departmental level, as they require a minimal attendance of 12 staff members.

3.12   ATTITUDES OF STAFF TOWARDS TRAINING

The most prevalent attitude amongst staff trained by the author, is that it will take longer to find out how to do the task than do it manually, or by traditional means.

Staff can be divided into two categories – those who will tend to go on training, and those who will tend not to. Very often the skills required are for a task that needs to be completed to an imminent deadline. If a colleague assists the staff member to solve the immediate problem, then it is unlikely that any effective learning will take place due to the additional pressures of the deadline, and the staff member will not be able to solve the problem again by him or herself in the future.

One possible reason for staff attending the training courses, or attending the correct level of training, is the naming of the course levels. Usually courses are named basic, intermediate, advanced. In the authors opinion, most staff would not want to be seen as incompetent, so would not want to enrol for the basic course. They probably use the software daily, so would not like to be seen going on a basic course that covers skills that they should already have. Unfortunately in attending an intermediate course, they would miss out on the scaffolding which

basic training builds, and most likely slow down the more advanced classes that they do attend.

Another reason given for staff not attending training, is lack of time. Given the length of the training sessions, this could be legitimate. Using the technology correctly, through training however, should assist with getting tasks done more effectively, thereby releasing time that was previously wasted in doing tasks manually.

3.13   CONCLUSION

From the literature cited in the preceding chapter, it is clear that there are many impediments to the training of staff, and the efficient use of productivity software by staff, while at the same time many benefits to be had from effective use of productivity software. Munro *et al.* (1992:53), does caution however that it is the competence level of the user that is measured, not the effectiveness of their computer use. In the next chapter questionnaire design and methodology will be discussed in more detail.

CHAPTER 4:
RESEARCH DESIGN AND METHODOLOGY

"I do not fear computers. I fear the lack of them"

Isaac Asimov

4.1 AIM OF THIS CHAPTER

The aim of this chapter and the survey instrument are to determine the impact of underutilising productivity software within the target groups at CPUT. The survey environment and the target population will be articulated, as well as the survey instrument.

The statement of the research problem reads as follows: "Staff do not use productivity software optimally, which has an adverse affect on productivity".

4.2 THE SURVEY ENVIRONMENT

The staff of the Engineering Faculty of CPUT perform a wide variety of functions, but can be broadly divided up into the following areas:

➢ **Academic staff**: Staff such as Heads of Departments, lecturers, and research supervisors directly involved in the training of students.

➢ **Administrative staff**: Staff who consist of secretaries, administrative assistants, and technicians who are directly or indirectly involved in the training of students.

➢ **Technical Staff**: Maintenance staff such as plumbers, electricians, painters, etc, who fall under service departments, and not the faculties.

This research study will only look at the category of administrative staff, in the secretarial group within academic departments as well as in the Faculty Office staff which are both highlighted with a dotted line on the organogram of the Engineering Faculty structure (See Annexure 2). The category of administrative staff can be further sub-divided into:

➢ **Group A**: Department Secretarial staff within each academic department, as well as the Energy Research Unit and the Dean's secretary. These staff serve

the administrative needs of the departments, as well as some contact with students.

➢ **Group B**: Faculty Office staff, whose main role is to work with the academic structure, using the institution's database, as well as to assist students with academic queries, fees, and problems with registration data.

Most of these individuals use productivity software to some varying degree in their daily work, but how effectively they use it, would vary considerably.

4.3   THE TARGET POPULATION

With any survey, it is a vital to define the target population clearly, which Collis and Hussey (2003:155-160), define as a body of people under consideration for the purpose of research.

The target population for this study will be the two groups within the administrative staff in the Faculty of Engineering at CPUT. As can be seen from the organogram (Annexure 2) the total group consists of 33 staff, of which 19 are in the department secretarial group, and 14 in the Faculty Office staff group. All of these individuals use productivity software to some varying degree in their daily work. The difference in requirements of the two different groups is also considerable, and there may also be differences within the groups, as the tasks they are required to do may be very diverse. When the surveys were distributed, an additional 8 staff were added, which consisted of administrative staff in niche areas within the departments such as the Maritime Survival Centre, and additional contract staff being employed. One staff member was transferred out of the Engineering Faculty, although they were subsequently transferred back and included in the study.

Leedy and Ormrod (2001:207), are of the opinion that when sampling, the larger the sample, the better. They give the following guidelines for determining sample sizes:

➢ **Small populations (less than 100):** The entire population
➢ **Around 500:** 50% of the population
➢ **Around 1500:** 20% of the population

➢ **Around 5000 or more:** Sample size of at least 400

As this is a fairly small group it was decided to target the entire group. Surveys were distributed to all staff personally, and staff were requested to return the surveys within two weeks. A total of 41 surveys were distributed, and 40 were returned completed.

This high response rate could be attributed to the close working relationship of these staff with the author, as well as the possible benefit from any conclusions and recommendations from the study. A possible result could be training sessions, aimed at specific skills that are needed by a specific group of the staff. This would also be a possible extension of this study.

4.4 MEASUREMENT SCALES

This survey will use a combination of check boxes for data such as age, education and Lickert scales. According to Emery and Cooper (1995:180-181), the advantages of using the Lickert scale is that it is:

➢ Easy and quick to construct
➢ Each item meets an empirical test for discriminating ability
➢ The Lickert scale is also treated as an interval scale

4.5 SURVEY DESIGN

Collis and Hussey (2003:60-66) are of the opinion that it is vital that research is conducted in an organised manner, and that if it is to provide a reliable outcome, then it must be conducted systematically using the appropriate methods. A survey should be designed according to the following stages:

➢ **Stage one:** Identify the topic to be surveyed and set objectives.
➢ **Stage two:** Pilot a draft of the questionnaire in order to find out what people know and what the important issues are.
➢ **Stage three:** List the areas of information required and refine the objectives.
➢ **Stage four:** Review the responses to the pilot.
➢ **Stage five:** Finalise the objectives.
➢ **Stage six:** Draw up the questionnaire.
➢ **Stage seven:** Re-pilot the questionnaire.

➢ **Stage eight:** Finalise the questionnaire.

➢ **Stage nine:** Code the questionnaire.

Particular care was taken to avoid bias in the formulation of the questions. Each of the statements in the survey have been designed with the following in mind:

➢ Avoiding double-barrelled statements.

➢ Keeping all positive responses consistent (high to the left, low to the right).

➢ Avoiding double-negative statements.

➢ Avoiding prestige bias.

➢ Avoiding leading statements.

➢ Avoiding the assumption of prior knowledge.

The same questionnaire was used for both the department secretarial group, and the Faculty Office staff, as the software used was the same, even though their personal skill level and job requirements may vary considerably. Samples of the type of questions used in Section A of the survey are shown in Table 4.1 below. The full questionnaire is included in Annexure 1.

Table 4.1: Sample survey questions for Section A (**Source:** Own source)

1. Rate *your level of knowledge* in the following types of software:	Very weak	Weak	Average	Quite good	Excellent	N/A
1.a Microsoft Office - Word	○	○	○	○	○	○
1.b Microsoft Office - Excel	○	○	○	○	○	○
1.c Novell GroupWise (e-Mail)	○	○	○	○	○	○

3. Indicate how much do you feel that you *need to improve* in the following areas:	Very much	A little	Moderate	Very Little	None	N/A
3.a Microsoft Office - Word	○	○	○	○	○	○
3.b Microsoft Office - Excel	○	○	○	○	○	○
3.c Novell GroupWise (e-Mail)	○	○	○	○	○	○

In addition to the more general information in section A, specific questions were asked about specific functions with the three productivity software programs in Section B.

These functions were sorted from the easiest (such as question 12.a and b) to the most complex (12.u and v). Even though more advanced functions were included

it is not expected that all staff would be able to complete all of them. There might also be staff who would be able to complete the advanced functions in one of the areas, but not others. A sample of these questions is shown in shown in Table 4.2

Table 4.2: Sample survey questions for Section B (**Source**: Own source)

12. For **Microsoft Office – Word,** rate your ability in the following: (You may select more than one)	I can't do this	I avoid / don't use this often	I am competent at this		I need this to do my job **effectively**	I need training in this
12.a Insert symbol	○	○	○		○	○
12.b Insert page break	○	○	○		○	○
12.u Insert automatic table of contents	○	○	○		○	○
12.v Mail Merge / merge to e-mail	○	○	○		○	○

4.6   DATA VALIDITY AND RELIABILITY

According to Janesick (1998:44), citing Yin (1994), a fatal flaw in case studies is to conceive of statistical generalization as a method of generalizing the results of the case. This flaw exists because cases are not 'sampling units', and should not be chosen for this reason. The researcher thus acknowledges that results obtained from the research should not be generalized. According to Babbie (2005:285), survey research is generally weak on validity and strong on reliability. According to Denzin (1998:328), qualitative research is biased, because interpretation produces understandings which are shaped by class, gender, race, and ethnicity. Malterud (1998:329-330), expresses the view that qualitative research presents a perspective that is always partial, and findings that represent only a temporary and limited view.

Leedy and Ormrod (2001:97-98), caution that the researcher should be aware of the Hawthorne effect, where the respondents change their response or behaviour because they know that they are in a research study. When this questionnaire was distributed, the staff were told that a possible outcome of the research could be specialised training for the participants, but that the training would only be of value if they answered truthfully. It is hoped that this encouragement persuaded them to answer truthfully.

4.7 CONCLUSION

In this chapter the survey environment was described, and the target population and size of sample defined. The details of the type of questions included in the questionnaire were given, and the survey design and methodology were addressed. The results of the survey will be addressed in the following chapter.

CHAPTER 5:
DATA ANALYSIS AND INTERPRETATION

"There are three kinds of lies: lies, damned lies, and statistics"

Benjamin Disraeli

5.1   INTRODUCTION

Data analysis is "the process of bringing order, structure and meaning to the mass of collected data" (de Vos 2002, 339). This chapter discusses the statistical analysis of the questionnaire compiled to gather data on use of productivity software. The aim of this study is to determine whether optimal use of productivity software affect productivity. In this chapter the data obtained from the completed questionnaires will be presented and analysed.

In most social research the analysis entails three major steps done in the following order:
➤ Cleaning and organising the information that was collected, which is called the data preparation step,
➤ Describing the information collected (Descriptive Statistics); and
➤ Testing the assumptions made through hypothesis and modelling (Inferential Statistics).

The responses to the questionnaire are for the purpose of obtaining information regarding the use of productivity software with specific reference to the current skill levels of staff in their use of productivity software; the skills that have a negative effect on staff effectiveness; and the skill areas the staff need to improve in order to do their jobs more effectively. The responses were analysed by using SAS software.

5.2   METHOD OF ANALYSIS

5.2.1   Validation of survey results

A descriptive analysis of the survey results are reflected below. The responses to the questions obtained through the questionnaires are indicated in table format for ease of reference. Data validation is the process of ensuring that a program

operates on clean, correct and useful data. The construct validation however can only be taken to the point where the questionnaire measures what it is suppose to measure. Construct validation should be addressed in the planning phases of the survey and when the questionnaire is developed.

5.2.2 Data format

The data was received in the form of questionnaires which were coded and captured on a database that was developed on Microsoft Access for this purpose. These questionnaires were captured twice and then the two datasets compared to make sure that the information was correctly captured. When the database was developed use was made of rules with respect to the questionnaire that set boundaries for the different variables (questions). For instance one of the scales used is as follows:

➢ Very weak is coded as 1
➢ Weak is coded as 2
➢ Average is coded as 3
➢ Quite good is coded as 4
➢ Excellent is coded as 5
➢ N/A is coded as 6.

A boundary was set on Microsoft Access as less than 7, meaning if 7 or more is captured an error will show until a number less than 7 is captured. It was then imported into SAS-format through the SAS ACCESS module. This information was double checked for correctness and then analysed.

The measurements of the ability of the staff with respect to the productivity software were not mutually exclusive (respondents could select more than one of the categories) per task and thus each of the options was coded so that if the respondent selected the option the coding would indicate 'yes'. If the option was not selected the coding would indicate 'no'. Each of the options per task would indicate a dichotomous variable.

5.2.3 Preliminary analysis

The reliability of the statements in the questionnaire posed to the respondents from the Engineering Faculty of CPUT in the Western Cape were measured by using the Cronbach Alpha tests. (See paragraph 5.3.1). A Uni-variate descriptive analysis was performed on all the original variables; displaying frequencies, percentages, cumulative frequencies and cumulative percentages. These descriptive statistics were discussed and displayed in paragraphs 5.3.2 and 5.3.3. (See also computer printout in Annexure 6).

5.2.4 Inferential statistics

Inferential statistics used were:

➢ **Cronbach Alpha test**. Cronbach's Alpha is an index of reliability associated with the variation accounted for by the true score of the 'underlying construct'. Construct is the hypothetical variables that are being measured (Cooper and Schindler, 2001:216-217). An alternative explanation would be that Cronbach's alpha measures how well a set of items (or variables) measures a single uni-dimensional latent construct. When data has a multidimensional structure, Cronbach's Alpha will usually be low.

➢ **Chi-square tests for nominal data**. The Chi-square (two-sample) test is probably the most widely used nonparametric test of significance that is useful for tests involving nominal data, but it can be used for higher scales as well, such as cases where persons, events or objects are grouped in two or more nominal categories, for example 'yes-no' or cases A, B, C or D. The technique is used to test for significant differences between the observed distribution of data among categories and the expected distribution based on the null hypothesis. It has to be calculated with actual counts rather than percentages (Cooper and Schindler, 2001:499).

➢ **The SAS software** computes a P-value (Probability value) that measures statistical significance when comparing variables with each other, determining relationship between variables or determining association between variables. Results will be regarded as significant if the p-values are smaller than 0.05, because this value presents an acceptable level on a 95% confidence interval ($p \leq 0.05$). The p-value is the probability of observing a

sample value as extreme as, or more extreme than, the value actually observed, given that the null hypothesis is true. This area represents the probability of a Type 1 error that must be assumed if the null hypothesis is rejected (Cooper and Schindler, 2001:509).

➢ The p-value is compared to the significance level (α) and on this basis the null hypothesis is either rejected or not rejected. If the p value is less than the significance level, the null hypothesis is rejected (if p value $<\alpha$, reject null). If the p value is greater than or equal to the significance level, the null hypothesis is not rejected (if p value $\geq\alpha$, do not reject null). Thus with $\alpha=0.05$, if the p value is less than 0.05, the null hypothesis will be rejected. The p value is determined by using the standard normal distribution. The small p value represents the risk of rejecting the null hypothesis.

➢ A difference has statistical significance if there is good reason to believe the difference does not represent random sampling fluctuations only. Results will be regarded as significant if the p-values are smaller than 0.05, because this value is used as cut-off point in most behavioural science research.

5.3   ANALYSIS

In total 41 respondents in the engineering faculty of CPUT in the Western Cape completed the questionnaire out of a total of 42. Descriptive statistics were given for each variable and only the respondents who completed the entire questionnaire were utilized in the inferential statistics.

5.3.1   Reliability testing

Reliability tests (Cronbach's Alpha Coefficient) were done on the questions/statements (which is the measuring instrument in this case) posed to the productivity software users in the Engineering Faculty of CPUT in the Western Cape.

The results of the Cronbach Alpha tests for the variables in section A of questionnaire are shown in Due to the voluminous nature of Table 5.1, and the variables in Section A and B are attached in Annexure 5. It shows the correlation between the respective item and the total sum score (without the respective item)

and the internal consistency of the scale (coefficient alpha) if the respective item is deleted. By deleting the items (statements) one by one each time with the statement with the highest Cronbach Alpha value, the Alpha value will increase. In the right-most column of Due to the voluminous nature of Table 5.1, it can be seen that the reliability of the scale would be higher if any of these statements is deleted. For instance if statement Q7E_3 is deleted from this measuring scale then the Cronbach Alpha Coefficient will increase to 0.9304. This however is not needed as the alpha for each item is greater than 0.70.

Due to the voluminous nature of Table 5.1 it is for ease of reference contained within the ambit of Annexure 5. The Cronbach's Alpha Coefficients for each item are more than 0.70 which is the acceptable level according to Nunnally (1978:245), and thus these items (statements) in the questionnaire prove to be reliable and consistent for all the items in the scale.

5.3.2 Descriptive statistics

Table 5.2 shows the descriptive statistics for all the categorical demographic variables, as well as the variables measuring the usage of productivity software and ability to use the software, together with the frequencies in each category and the percentage out of total number of questionnaires. Take note that the descriptive statistics are based on the total sample. These descriptive statistics are also shown in Annexure 6.

Table 5.2: Descriptive statistics for Section A statements

Statement	Category	Microsoft Office - Word		Microsoft Office - Excel		Novell GroupWise	
		Freq	%	Freq	%	Freq	%
1. Rate your level of knowledge in the following types of software.	Very weak	0	0.0%	1	2.4%	0	0.0%
	Weak	0	0.0%	3	7.3%	0	0.0%
	Average	10	0.0%	17	41.5%	15	36.6%
	Quite good	19	24.4%	13	31.7%	16	39.0%
	Excellent	12	46.3%	6	14.6%	10	24.4%
	N/A	0	0.0%	1	2.4%	0	0.0%
	Unknown	0	0.0%	0	0.0%	0	0.0%
2. How much has your current knowledge negatively affected the ability to do your	Very much	0	0.0%	1	2.4%	0	0.0%
	A little	6	14.6%	9	22.0%	4	9.8%
	Moderate	2	4.9%	5	12.2%	3	7.3%
	Very little	13	31.7%	10	24.4%	13	31.7%

	job effectively?	None	16	39.0%	12	29.3%	16	39.0%
		N/A	1	2.4%	1	2.4%	0	0.0%
		Unknown	3	7.3%	3	7.3%	5	12.2%
3.	Indicate how much do you feel that you need to improve in the following areas?	Very much	5	12.2%	12	29.3%	5	12.2%
		A little	11	26.8%	12	29.3%	9	22.0%
		Moderate	7	17.1%	8	19.5%	7	17.1%
		Very little	12	29.3%	7	17.1%	14	34.2%
		None	5	12.2%	2	4.9%	6	14.6%
		N/A	0	0.0%	0	0.0%	0	0.0%
		Unknown	1	2.4%	0	0.0%	0	0.0%
4.	Rate how often you have been unable to complete a task effectively because of your lack of skills.	Very often	0	0.0%	2	4.9%	0	0.0%
		Occasionally	3	7.3%	4	9.8%	3	7.3%
		Some of the time	7	17.1%	15	36.6%	4	9.8%
		Very rarely	17	41.5%	10	24.4%	20	48.8%
		None	13	31.7%	10	24.4%	12	29.3%
		N/A	0	0.0%	0	0.0%	0	0.0%
		Unknown	1	2.4%	0	0.0%	2	4.9%
5.	Indicate the highest level of formal training courses you have completed for each of the areas.	None	4	9.8%	9	22.0%	14	34.2%
		Beginner	8	19.5%	10	24.4%	5	12.2%
		Intermediate	17	41.5%	16	39.0%	14	34.2%
		Advanced	11	26.8%	5	12.2%	7	17.1%
		Unknown	1	2.4%	1	2.4%	1	2.4%
Type of informal training / assistance:								
6.1	Websites	Yes	9	22.0%	6	14.6%	5	12.2%
		No	32	78.0%	35	85.4%	36	87.8%
6.2	Colleague / Friend	Yes	17	41.5%	22	53.7%	21	51.2%
		No	24	58.5%	19	46.3%	20	48.8%
6.3	Service / Helpdesk	Yes	4	9.8%	2	4.9%	8	19.5%
		No	37	90.2%	39	95.1%	33	80.5%
6.4	IT staff	Yes	10	24.4%	8	19.5%	13	31.7%
		No	31	75.6%	33	80.5%	28	68.3%
6.5	CDs / Books	Yes	7	17.1%	7	17.1%	0	0.0%
		No	34	92.9%	34	82.9%	41	100.0%
6.6	N/A	Yes	7	17.1%	5	12.2%	5	12.2%
		No	34	92.9%	36	87.8%	36	87.8%
Type of training prefer to have:								
7.a	Formal training	Yes	12	29.3%	18	43.9%	9	22.0%
		No	29	70.7%	23	56.1%	32	78.0%
7.b	Short training sessions	Yes	13	31.7%	16	39.0%	9	22.0%
		No	28	68.3%	25	61.0%	32	78.0%
7.c	Formal - Help/Service desk	Yes	4	9.8%	7	17.1%	9	22.0%
		No	37	90.2%	34	82.9%	32	78.0%
7.d	Informal - IT staff	Yes	9	22.0%	11	26.8%	15	36.6%
		No	32	78.0%	30	73.2%	26	63.4%
7.e	Informal - colleagues	Yes	11	26.8%	13	31.7%	12	29.3%
		No	30	73.2%	28	68.3%	29	70.7%
7.f	e-Learning courses / Internet	Yes	6	14.6%	12	29.3%	14	34.2%
		No	35	85.4%	29	70.7%	27	65.8%

Table 5.3: Descriptive statistics for Section A - Biographic variables

Variables	Categories	Frequency	Percentage out of total
Section A: Biographic variables.			
8. Age	20's	9	22.0%
	30's	16	39.0%
	40's	10	24.4%
	50's	3	7.3%
	60's	1	0.0%
	Unknown	2	7.3%
9. Highest qualification	St 8 / Matric	8	19.5%
	Certificate / Diploma	22	53.7%
	B Tech / Bachelors degree	8	19.5%
	Honours degree	1	2.4%
	Masters degree	1	2.4%
	Doctorate	0	0.0%
	Unknown	1	2.4%
10. Area that you work in.	Faculty Administration	17	41.5%
	Department Administration	24	58.5%
11. Gender	Male	8	19.5%
	Female	33	80.5%

Due to the voluminous nature of Table 5.4: "Descriptive statistics for Section B statements", it is contained within the ambit of Annexure 5 for ease of reference.

5.3.3   Uni-variate graphs
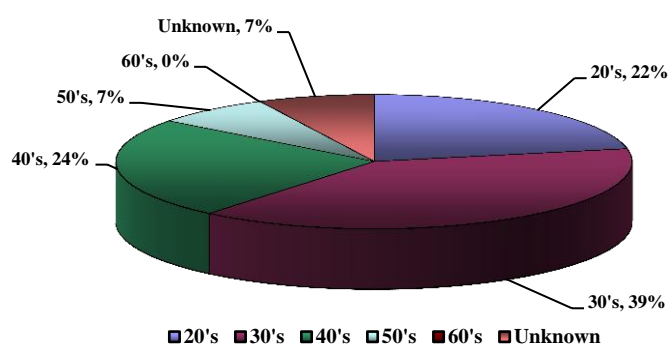
Figure 5.1: Age distribution

More than a third of the respondents are in their 30s, nearly a quarter are in their 40s and just over a fifth are in their 20s.
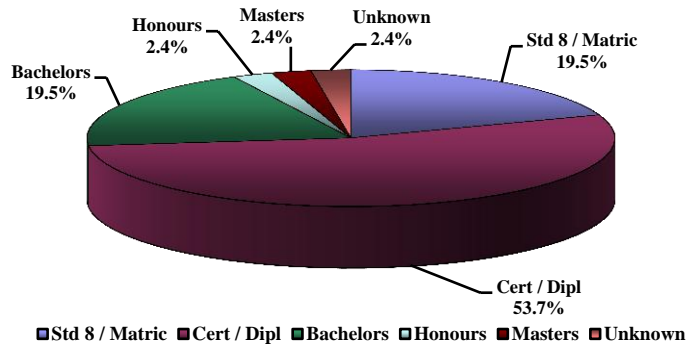
Figure 5.2: Highest qualification

More than half of the respondents have a certificate or diploma as highest qualification. Nearly 20% have at least Std 8 or Matric, and nearly 20% have a bachelors degree.
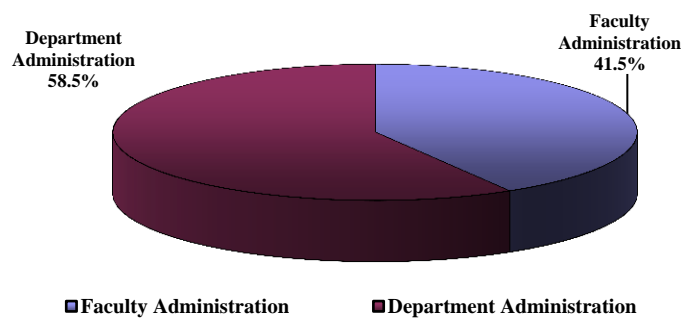
Figure 5.3: Number of employees in each department

Nearly 60% of the respondents were staff in the Academic Department Administration, while just over 40% were Faculty Office staff.
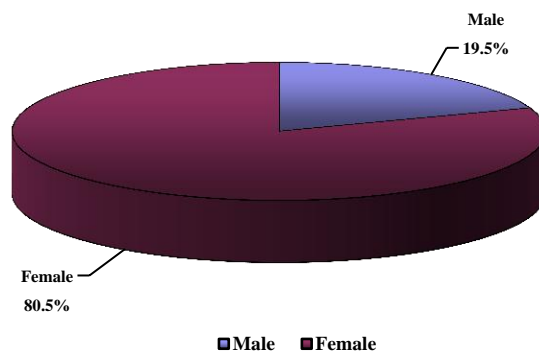
Figure 5.4: Gender distribution

Most of the respondents (80.5%) were female, and only 19.5% male.
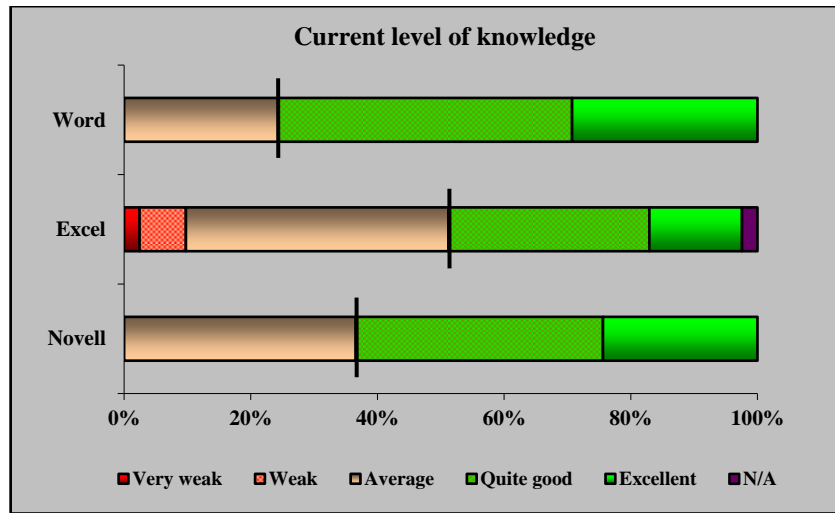
Figure 5.5: Current level of knowledge

It seems that the respondents have a higher level of knowledge with respect to Word than to Novell GroupWise or Excel. For ease of reference, a vertical marker has been placed between 'average' and 'quite good' in order to show the more highly skilled from the less skilled.
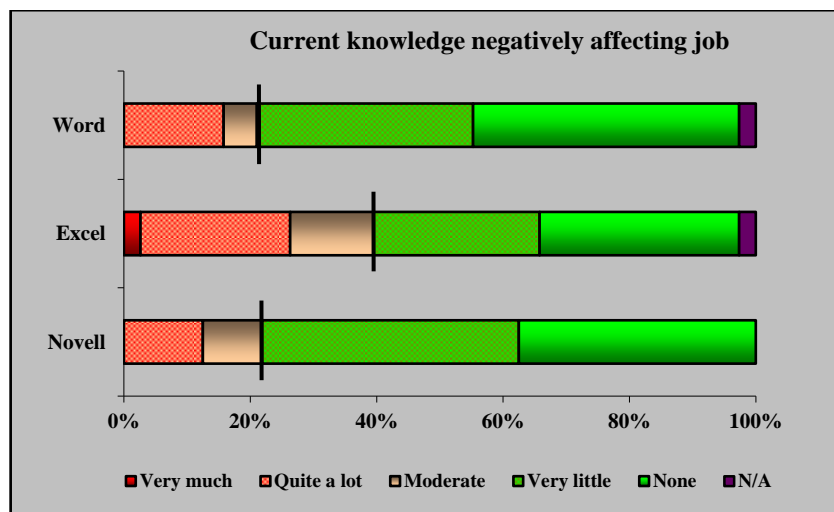
Figure 5.6: Current level affecting job

The respondents report that their current knowledge of these products does not negatively affect or has very little negative effect on the ability of the respondent to do their job well; the current knowledge of Excel is the product which most negatively affects their ability to do their job well. For ease of reference a vertical marker has been placed between 'moderate' and 'very little' in order to show where the level of knowledge is most affecting their job.
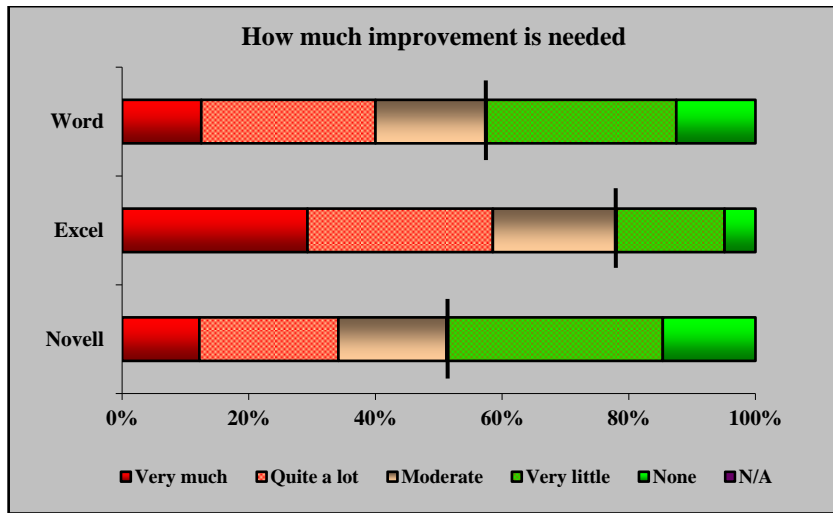
Figure 5.7: How much improvement is needed

Excel is the product the need more training than the other two products. This is consistent with the level of knowledge of Excel being the lowest, as well as Excel affecting job performance the most of the three. For ease of reference, a vertical marker has been placed between 'moderate' and 'very little' in order to show where the most improvement is needed.
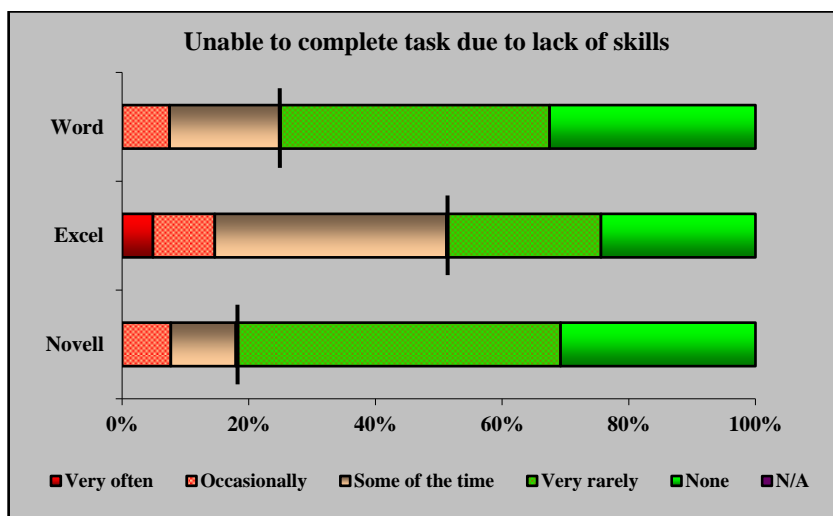
Figure 5.8: Unable to complete tasks due to lack of skills

It is clear that Excel is the most problematic for the respondents with regard to lack of skill. For ease of reference, a vertical marker has been placed between 'some of the time' and 'very rarely' in order to show where staff have been unable to complete tasks due to lack of skills.
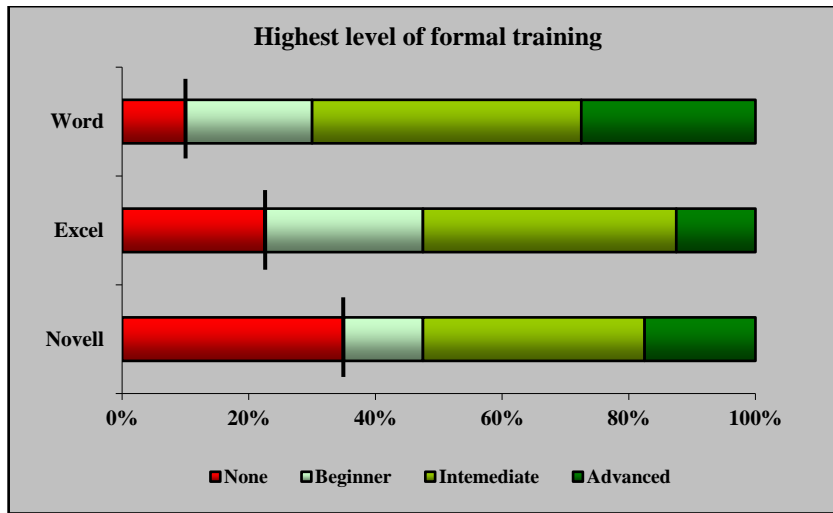
Figure 5.9: Highest level of formal training

Slightly more than a third of the respondents have no formal training in Novell GroupWise, and 22% of the respondents have no formal training in Excel.
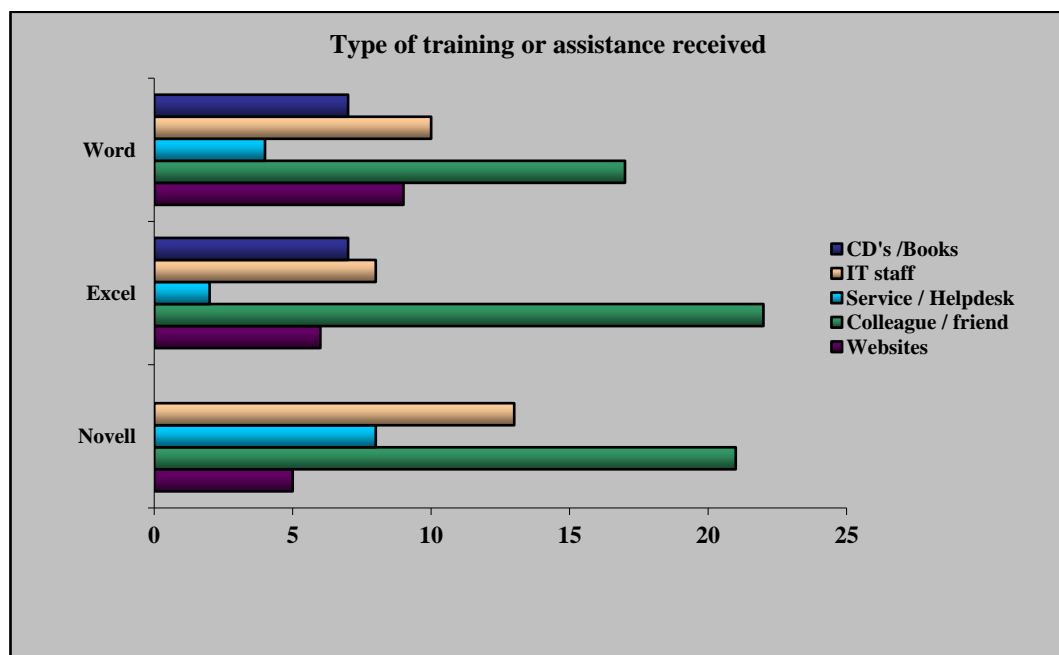
Figure 5.10: Type of training or assistance received

It appears that the most common type of informal training that the respondents received was help received from colleagues or friends for all the products.
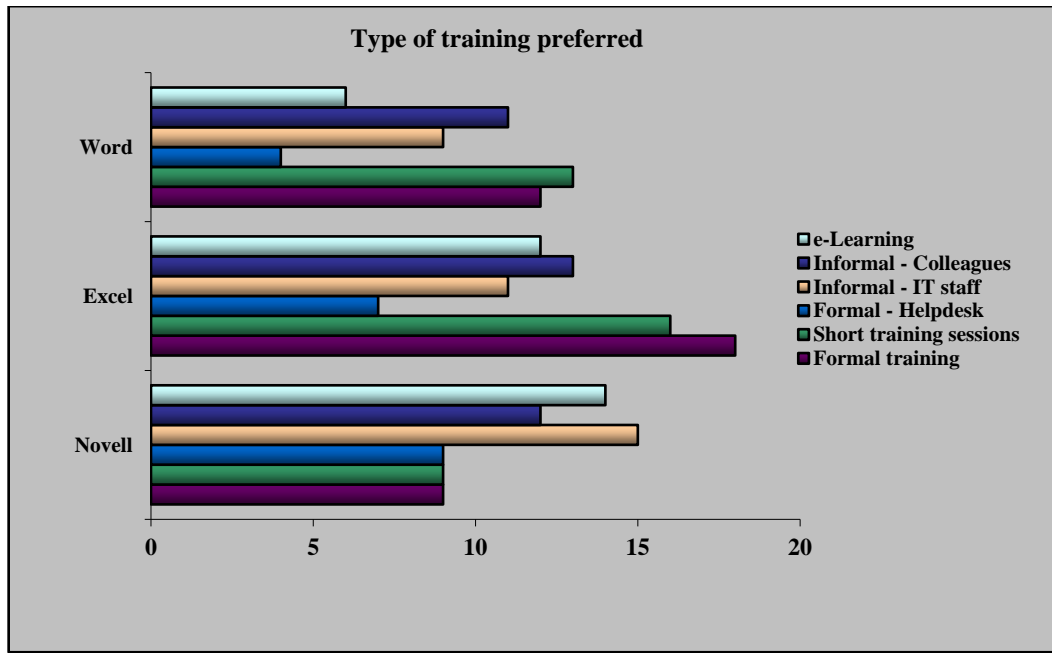
Figure 5.11: Type of training preferred

The respondents prefer formal or short training sessions for Excel and Word; whereas they prefer IT staff to help them informally or e-learning for Novell GroupWise. The respondents also have a high preference for colleagues to help them in the use of all the products.

In Figure 5.12 and Figure 5.13 the following tasks in Word are the tasks that the respondents feel to be the **least competent** in and that they **most need training** for:

➤ Mail merge / merge to e-mail.
➤ Use / modify built in styles.
➤ Track edit changes / mark up.
➤ Insert automatic table of contents.
➤ Set / move tabs.
➤ Find word count of document.
➤ Use format painter.
➤ Creating superscript text.
➤ Insert watermark.
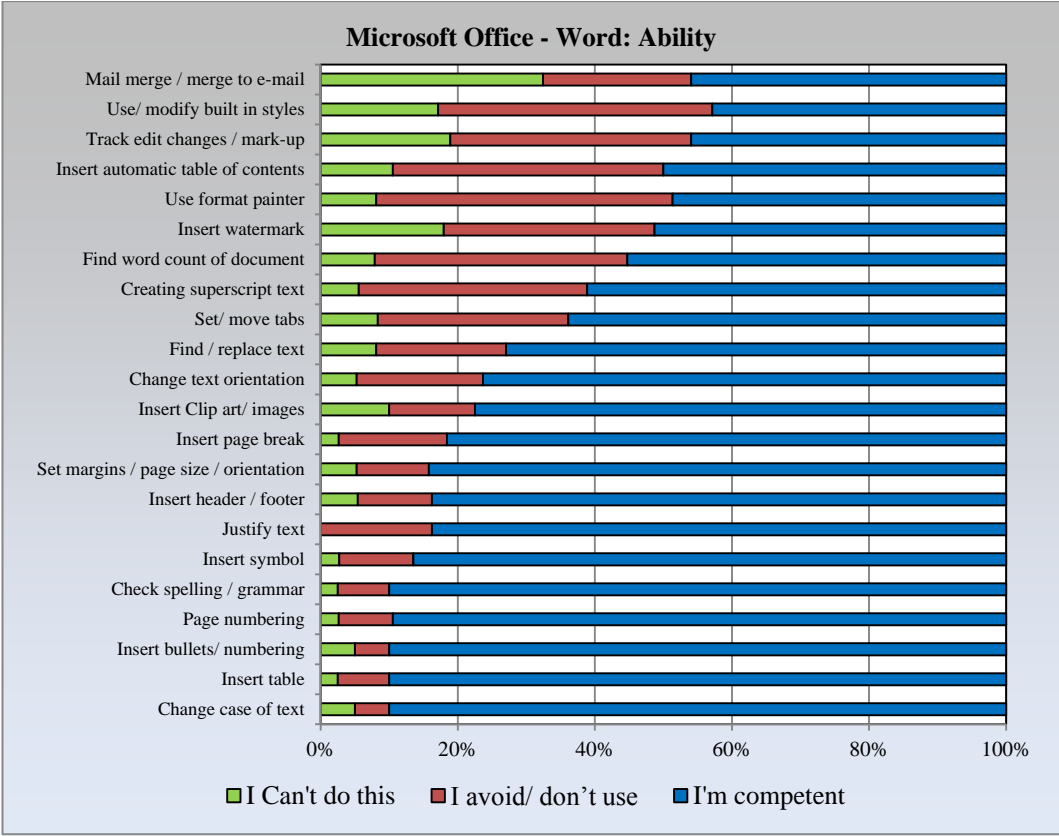
Figure 5.12: Microsoft – Word ability
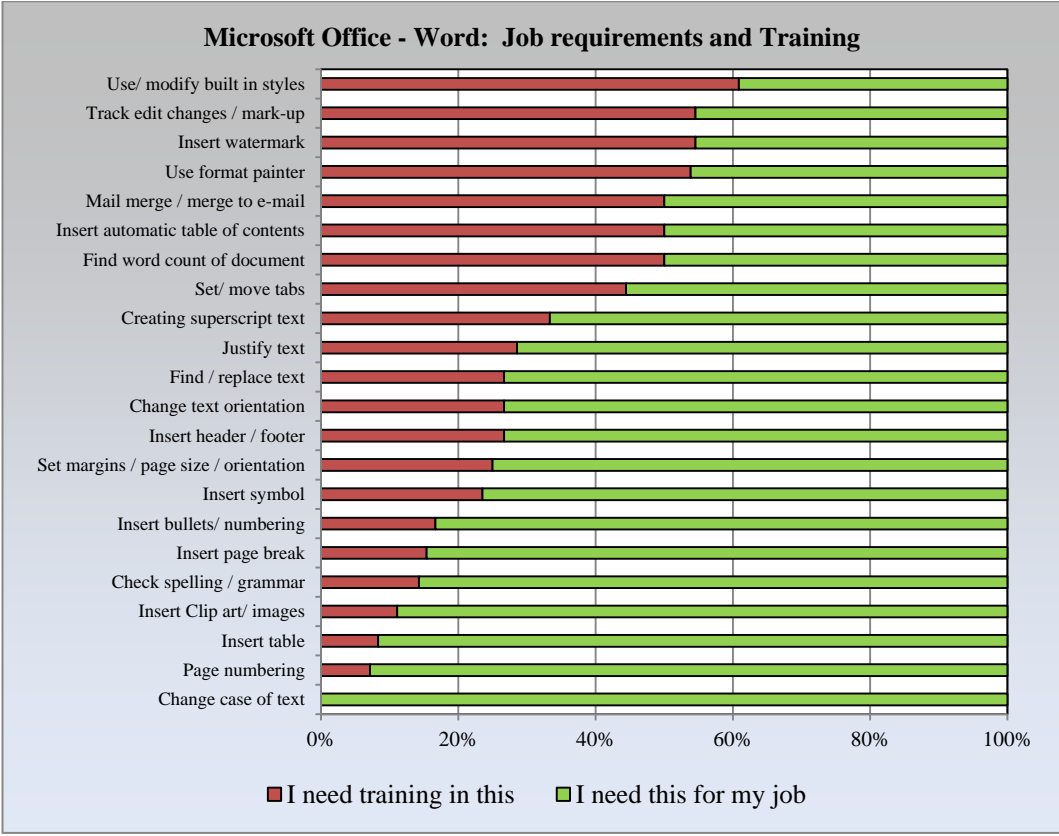
Figure 5.13: Microsoft Office - Word: Job requirements and Training

63

In Figure 5.14 and Figure 5.15 the following tasks in Excel are the tasks that the respondents feel to be the **least competent** in and that they **most need training** for:

➢ Insert Pivot tables.
➢ Change relative or absolute reference.
➢ Enter automatic formulas.
➢ Enter manual formulas.
➢ Link data between worksheets.
➢ Link data between different workbooks.
➢ Add automatic subtotals to data.
➢ Print row / column headings on each page.
➢ Remove or highlight duplicate data.
➢ Filter and sort data.
➢ Conditional formatting
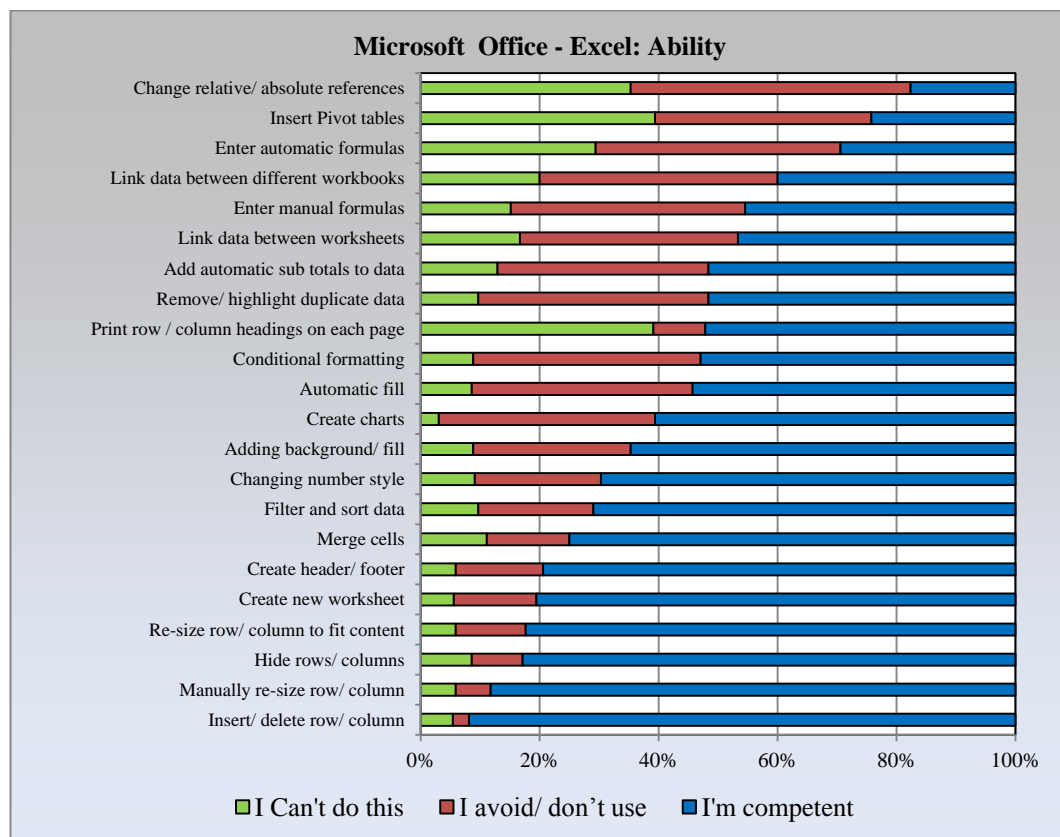
Figure 5.14: Microsoft - Excel ability
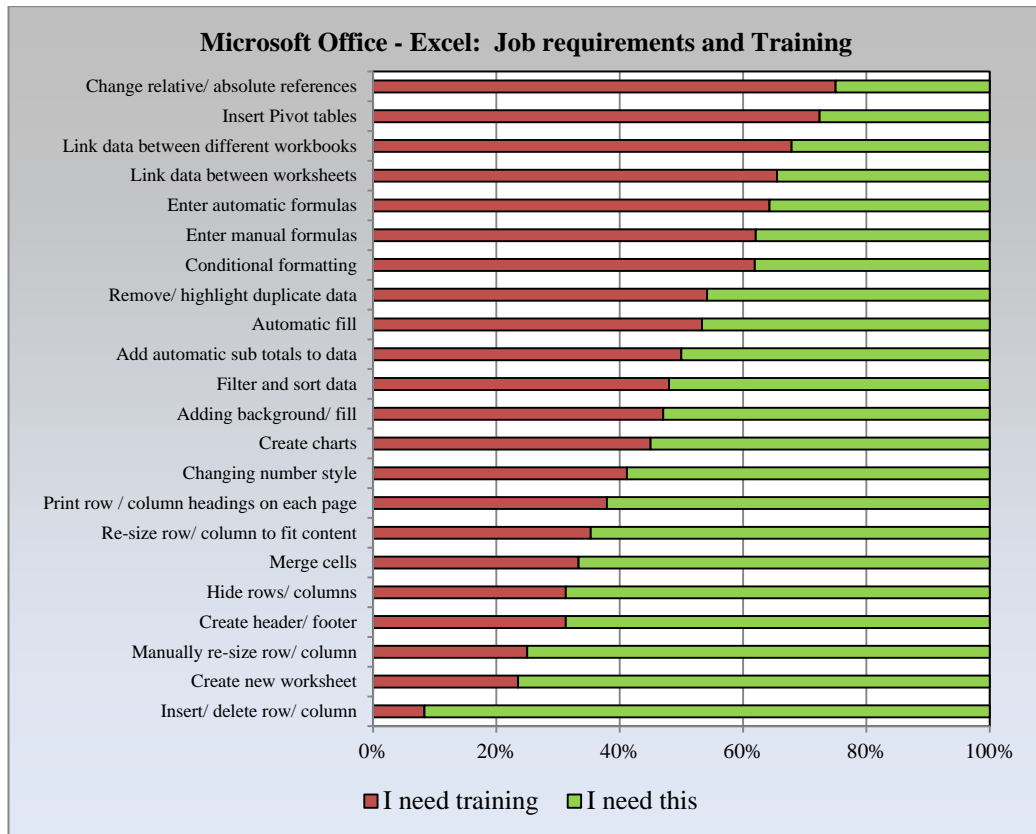
Figure 5.15: Microsoft Office - Excel: Job requirements and Training

In Figure 5.16 and Figure 5.17 the following tasks in Novell GroupWise are the tasks that the respondents feel to be the **least competent** in and that they **most need training** for:

- ➢ Caching mode.
- ➢ Creating a routing item.
- ➢ Remote mode.
- ➢ Setting up of vacation / out-of-office reply rules.
- ➢ Online mode.
- ➢ Delaying the sending of e-mails.
- ➢ Creating a shared folder.
- ➢ Setting up proxy access.
- ➢ Setting up mail rules.
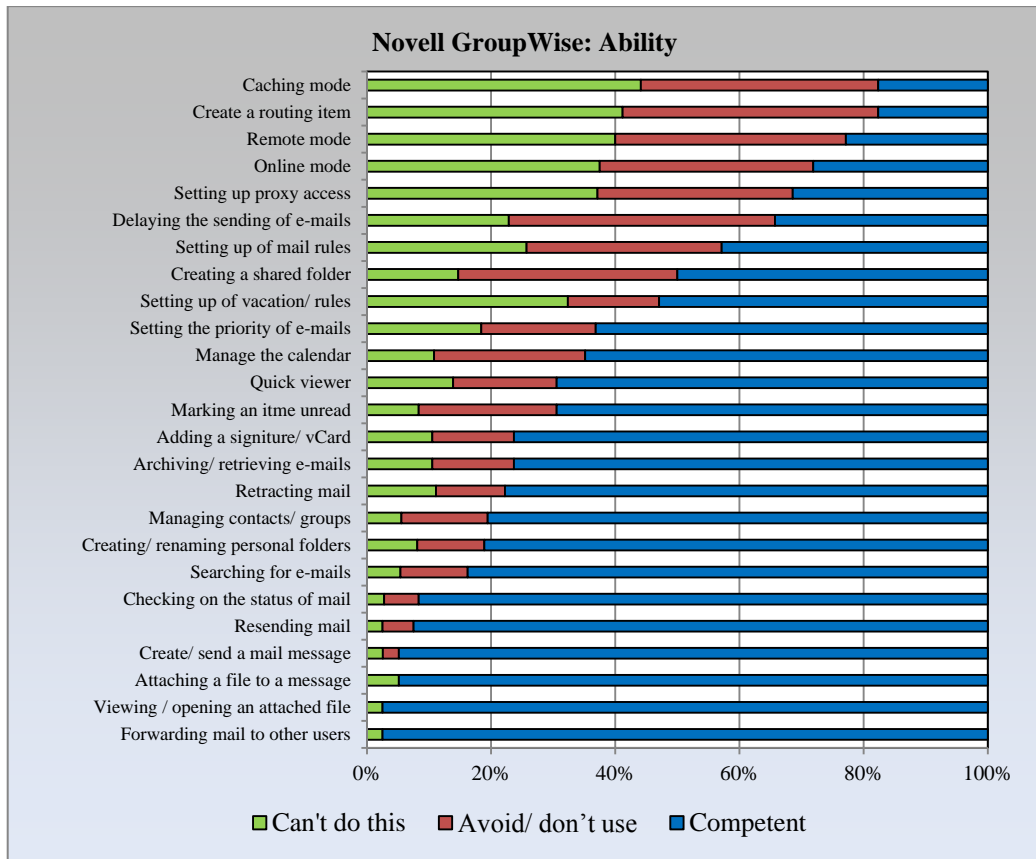
Figure 5.16: Novell GroupWise ability
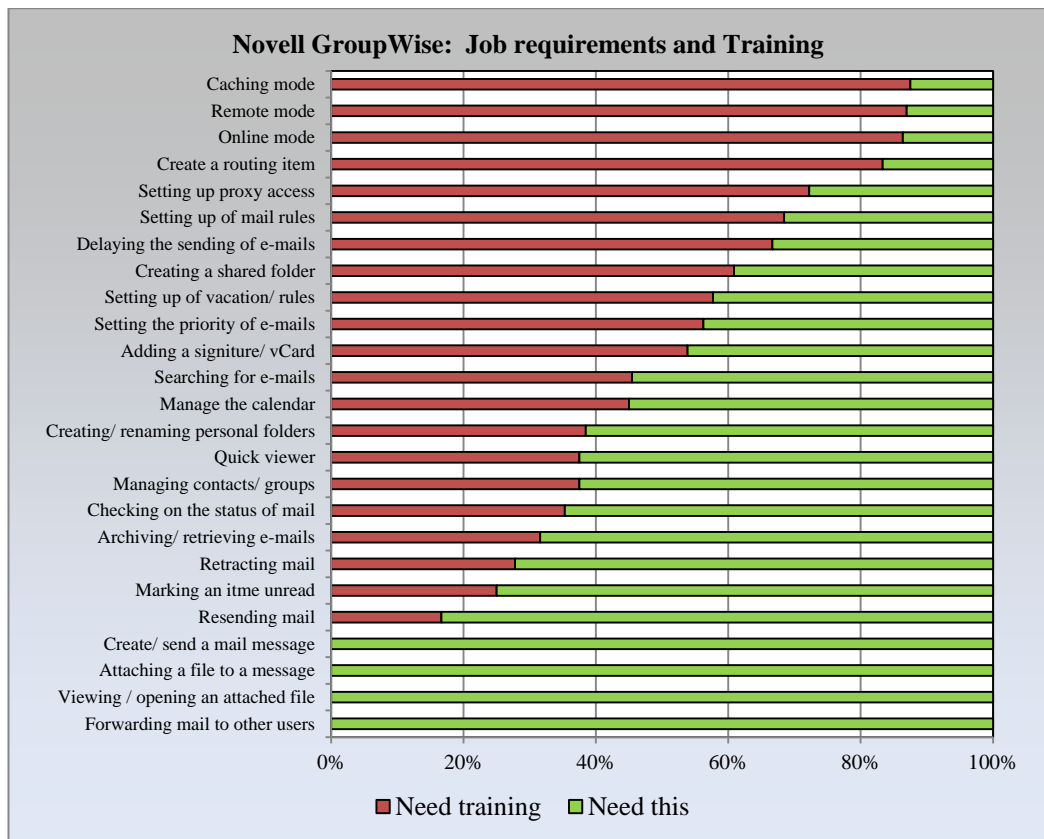
Figure 5.17: Novell GroupWise: Job requirements and Training

66

5.3.4 Inferential statistics

Due to the fact that this study only requires descriptive statistics a comparison was made whether the proportion of respondents who agreed with a statement is different from the proportion who did not agree with a statement.

The hypothesis being tested will then be as follows:

➤ H_0 = There is no difference between the proportion who agreed to the statements and the proportion who did not agree with the statements.

➤ H_1 = There is a difference between the proportion who agreed to the statements and the proportion who did not agree with the statements.

The Pearson chi-square test is used to determine whether the proportions were equal and is shown in Annexure 6 & 7. However if association between two variables is tested, the hypothesis being tested will then be as follows:

➤ H_0 = There is no association between the variables in questions.

➤ H_1 = There is an association between the variables in question.

The tests which showed statistically significant differences between the proportions or statistically significant associations between variables will be discussed in the next paragraph, keeping the investigative questions in mind.

When doing these comparisons using the existing scale the chi-square test becomes invalid because of expected frequencies of less than 5 in some of the cells. To overcome the problem, categories with similar meanings were aggregated. For instance the categories 'Very weak', 'Weak' and 'Average' and the categories 'Quite good' and 'Excellent' were grouped together to form the categories 'Very weak to average' and 'Quite good to Excellent' respectively. The category 'N/A' was omitted from the analysis.

5.3.4.1 How does the level of training relate to the current level of knowledge?

Since the expected counts in some of the table cells are small, PROC FREQ gives a warning that the asymptotic chi-square tests may not be appropriate. In this case, the exact tests are appropriate and shown in Table 5.5.

Table 5.5: Statistically significant Chi-square test for association between knowledge and training

Question / Statement	Sample Size	Chi-Square	DF	P-Value
1. Word	40	14.8235	3	0.0018**
2. Excel	39	27.6544	3	0.0249*
3. Novell	40	9.4629	3	0.0203*

 * *Statistically significant at level 0.05*

 ** *Statistically significant at level 0.01*

Table 5.6: Contingency table - Distribution of responses: Word

Frequency / Row percentage	None	Beginner	Intermediate	Advanced	Total
Very weak to Average	1 10.0%	6 60.0%	3 30.0%	0 0.0%	10 25.0%
Quite good to excellent	3 10.0%	2 6.7%	14 46.7%	11 36.7%	30 75.0%
TOTAL	4 10.0%	8 20.0%	17 42.5%	11 27.5%	40 100.0%

As the P-Value suggests in Table 5.5, there is a statistically significant association between formal training received and the current knowledge of Word. The weaker the levels of knowledge with respect to Word, the lower the level of training.
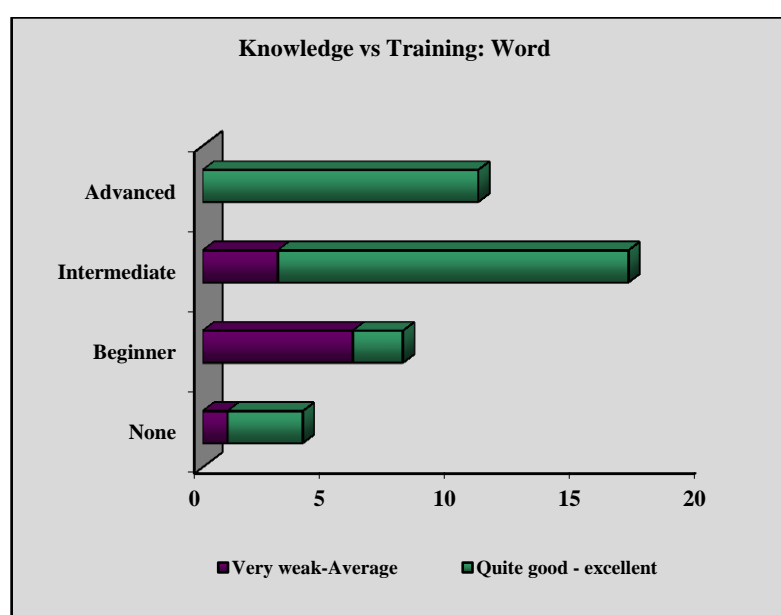
Figure 5.18: Knowledge vs Training for Word

Table 5.7: Contingency table - Distribution of responses: Excel

Frequency / Row percentage	None	Beginner	Intermediate	Advanced	Total
Very weak to Average	5 25.0%	8 40.0%	7 35.0%	0 0.0%	20 51.3%
Quite good to excellent	3 15.8%	2 10.5%	9 47.4%	5 26.3%	19 48.7%
TOTAL	8 20.5%	10 25.6%	16 41.0%	5 12.8%	39 100.0%
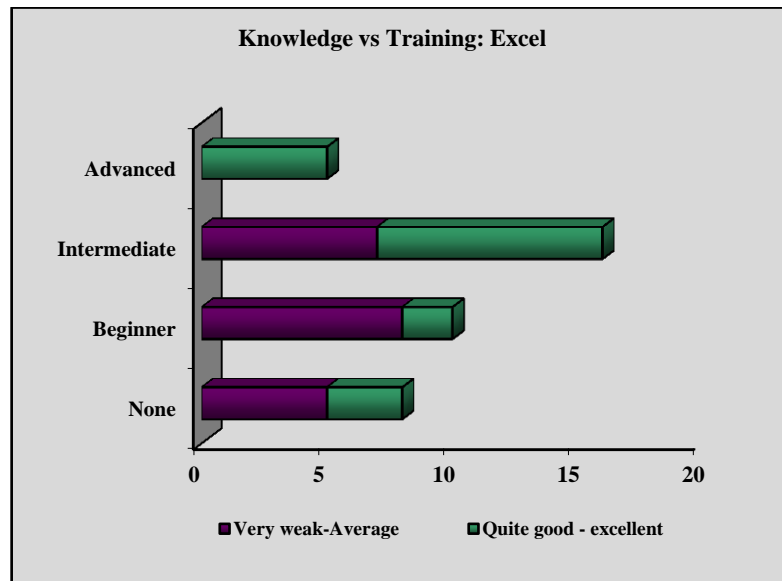
Figure 5.19: Knowledge vs Training for Excel

As the P-Value suggests in Table 5.5, there is a statistically significant association between formal training received and the current knowledge of Excel. The weaker the levels of knowledge with respect to Excel, the lower the level of training.

Table 5.8: Contingency table - Distribution of responses: Novell GroupWise

Frequency / Row percentage	None	Beginner	Intermediate	Advanced	Total
Very weak to Average	7 46.7%	4 26.7%	4 26.7%	0 0.0%	15 37.5%
Quite good to excellent	7 28.0%	1 4.0%	10 40.0%	7 28.0%	25 62.5%
TOTAL	14 35.0%	1 4.0%	10 35.0%	7 17.5%	40 100.0%
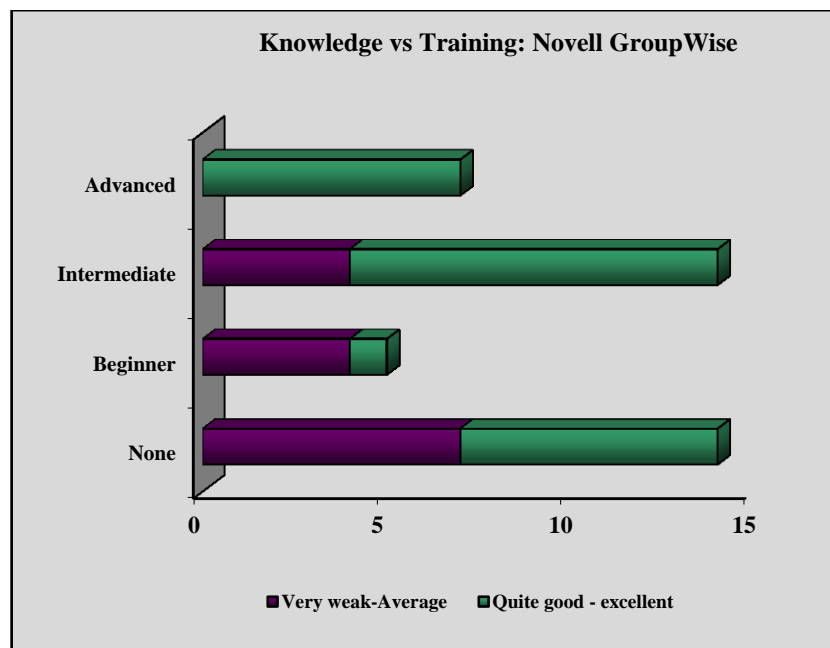
Figure 5.20: Knowledge vs Training for Novell GroupWise

As the P-Value suggests in Table 5.5, there is a statistically significant association between formal training received and the current knowledge of Novell GroupWise. The weaker the levels of knowledge with respect to Novell GroupWise the lower the level of training.

5.3.4.2 What is the current ability of staff in their use of productivity software?

To determine the current ability of the staff with respect to Word, Excel and Novell GroupWise it is necessary to look at how competent the respondents rated themselves with respect to the tasks presented in the questionnaire. If the percentage of respondents who rated themselves as competent is significantly higher statistical terms than those who did not rate themselves as competent, it is assumed that the staff are able to use the specific software. The following tables will show the statistically significant tests for higher proportion of competency.

Table 5.9: Statistically significant Chi-square test for higher proportion of the competency ratings

Question / Statement	Higher competency proportion	Sample Size	Chi-Square	DF	P-Value
Microsoft Word					
12a. Insert symbol.	78.1%	41	12.9024	1	0.0003***
12b. Insert page break	75.6%	41	10.7561	1	0.0010**

Question / Statement	Higher competency proportion	Sample Size	Chi-Square	DF	P-Value
12c. Insert table.	87.8%	41	23.4390	1	<0.0001***
12d. Insert clip art / images	75.6%	41	10.7561	1	0.0010**
12f. Insert header / footer.	75.6%	41	10.7561	1	0.0010**
12h. Justify text.	75.6%	41	10.7561	1	0.0010**
12i. Find / replace text.	65.8%	41	4.1220	1	0.0423*
12j. Change text orientation.	70.7%	41	7.0488	1	0.0079**
12k. Change case of text.	87.8%	41	23.4390	1	<0.0001***
12m. Insert bullets / numbering.	87.8%	41	23.4390	1	<0.0001***
12n. Page numbering.	82.9%	41	17.7805	1	<0.0001***
12o. Set margins / page size / orientation.	78.1%	41	12.9024	1	0.0003***
12r. Check spelling / grammar.	87.8%	41	23.4390	1	<0.0001***
Microsoft Excel					
13b. Insert or delete row/column	82.9%	41	17.7805	1	<0.0001***
13c. Hide rows / columns	70.7%	41	7.0488	1	0.0079**
13d. Manually re-size row / column	73.2%	41	8.8049	1	0.0030**
13e. Re-size row / column to fit contents.	68.3%	41	5.4878	1	0.0191*
13l. Merge cells.	65.8%	41	4.1220	1	0.0423*
13m. Create header / footer.	65.8%	41	4.1220	1	0.0423*
12p. Use format painter.	70.7%	41	7.0488	1	0.0079**
Novell GroupWise					
14a. Create / send mail message.	90.2%	41	26.5610	1	<0.0001***
14b. Attaching a file to a message.	90.2%	41	26.5610	1	<0.0001***
14c. Viewing / opening and attached file.	95.1%	41	33.3902	1	<0.0001***
14d. Checking on the status of mail.	80.5%	41	15.2439	1	<0.0001***
14e. Resending mail.	90.2%	41	26.5610	1	<0.0001***
14f. Retracting mail.	68.3%	41	5.4878	1	0.0191*
14g. Forwarding mail to other users.	95.1%	41	33.3902	1	<0.0001***
14j. Creating / renaming personal folders.	73.2%	41	8.8049	1	0.0030**
14m. Managing contact / groups.	70.7%	41	7.0488	1	0.0079**
14n. Adding a signature / vCard.	70.7%	41	7.0488	1	0.0079**
14o. Searching for e-mails. / contents of mails.	75.6%	41	10.7561	1	0.0010**
14y. Archiving / retrieving e-mails.	70.7%	41	7.0488	1	0.0079**

Statistically significant at level 0.05

**Statistically significant at level 0.01*

***Statistically significant at level 0.001*

The tasks displayed in Table 5.9 are the tasks in which the staff are competent in.

5.3.4.3 What effect does the current knowledge have on the ability to the job effectively?

Since the expected counts in some of the table cells are small, PROC FREQ gives a warning that the asymptotic chi-square tests may not be appropriate. In this case, the exact tests are appropriate and shown in Table 5.10.

Table 5.10: Statistically significant Chi-square test for association between knowledge and ability to do job effectively

Question / Statement	Sample Size	Chi-Square	DF	P-Value
1. Word	37	9.2940	2	0.0096**
2. Excel	36	5.8444	2	0.0603
3. Novell	36	14.9063	2	<.0001***

** Statistically significant at level 0.01

*** Statistically significant at level 0.001

Table 5.11: Contingency table - Distribution of responses: Word

Frequency / Row percentage	A little to very much	Very little to moderate	None	Total
Very weak to Average	3 33.3%	6 66.7%	0 0.0%	9 24.3%
Quite good to excellent	3 10.7%	9 32.1%	16 57.1%	28 75.7%
TOTAL	6 16.2%	15 40.5%	16 43.2%	37 100.0%

The P-Value suggests in Table 5.10, there is a statistically significant association between the current knowledge of Word and the ability to do their job effectively. The weaker the levels of knowledge with respect to Word the more negative the ability to do the job effectively.
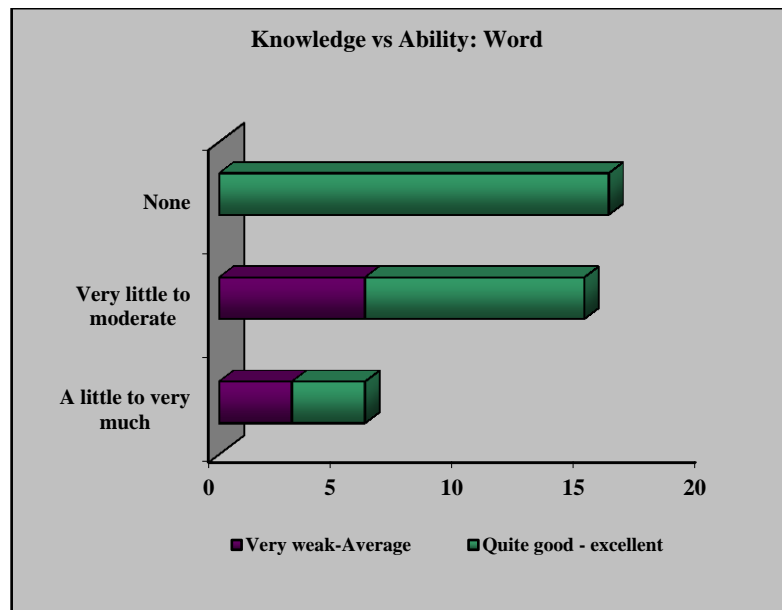
Figure 5.21: Knowledge vs Ability for Word

The association with respect to Excel is not statistically significant.

Table 5.12: Contingency table - Distribution of responses: Novell

Frequency / Row percentage	A little to very much	Very little to moderate	None	Total
Very weak to Average	3 25.0%	9 75.0%	0 0.0%	12 33.3%
Quite good to excellent	1 4.2%	7 29.2%	16 66.7%	24 66.7%
TOTAL	4 11.1%	16 44.4%	16 44.4%	37 100.0%

The P-Value suggests in Table 5.10, there is a statistically significant association between the current knowledge of Novell GroupWise and the ability to do the job effectively. The weaker the levels of knowledge with respect to Novell GroupWise, the more negative the ability to do the job effectively.
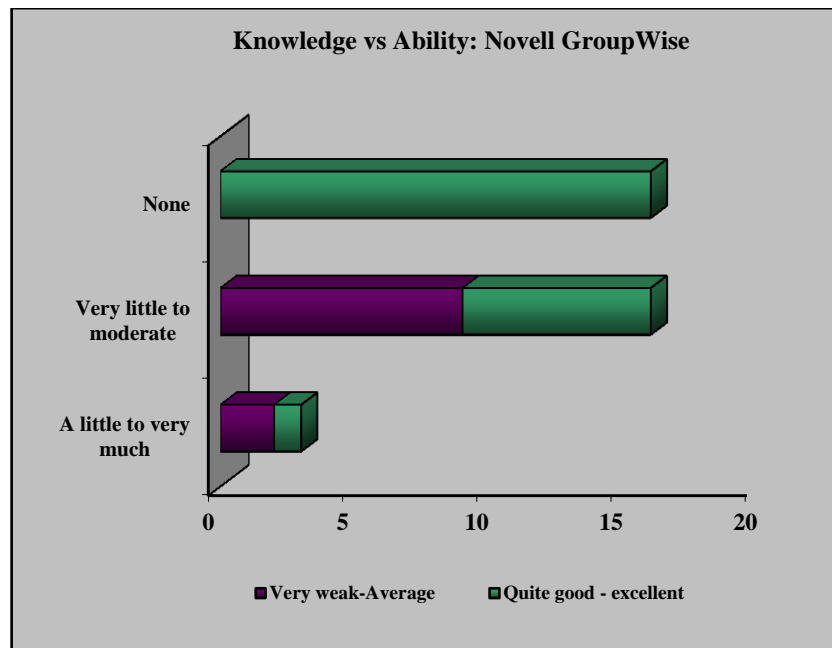
Figure 5.22: Knowledge vs Training for Novell

5.3.4.4 What tasks are staff not capable of doing, which leads to lower productivity?

To determine which tasks staff are not able to do with respect to Word, Excel and Novell GroupWise it is necessary to look at the proportion of the staff who indicated they cannot do the task in relation to the total number of the sample. If the percentage of respondents who rated themselves as 'cannot do this' is significantly higher in statistical terms than those who did not rate themselves as 'cannot do this' it is assumed that the staff was not able to that task in using the specific software.

Although there were no statistically significant higher proportions of respondents who indicated that they are incapable rather than capable of doing a specific task in this survey, there are certain tasks as shown in the descriptive statistics which a higher proportion of respondents indicated as being incapable of doing.

5.3.4.5 What additional skills do the staff need to improve their productivity?

To determine which additional skills the staff need to improve their productivity with respect to Word, Excel and Novell GroupWise, it is necessary to look at the proportion of the staff who indicated they 'Need this to do their job effectively' with respect to the total number of the sample. If the percentage of respondents

who rated their ability as 'I need this to do my job effectively' is significantly higher in statistical terms than those who did not rate themselves as 'I need this to do my job effectively', it is assumed that it is the additional skills that the staff need to do their job effectively and thus improve their productivity.

Although there were no statistically significant higher proportions of respondents who indicated that they need a certain task to do their jobs more effectively there are certain tasks as shown in the descriptive statistics which have a higher proportion of respondents indicated as 'Need this to do their job effectively'.

5.3.4.6 What type of training did the staff receive and what types do they want?

To determine what training the staff received with respect to Word, Excel and Novell GroupWise, it is necessary to look at which type of training a higher proportion of the staff has chosen. It is also necessary to determine what type of training they want.

When looking at the descriptive statistics which describe the type of informal training / assistance the staff has for each kind of productivity software, it is clear that the staff are mostly helped by their colleagues and secondly by the IT staff. The descriptive statistics also show that the respondents prefer formal/ short training sessions for Excel and Word, and that they prefer the IT staff to help them informally or e-learning for Novell GroupWise. There is also a preference that their friends and colleagues help them.

CHAPTER 6:

CONCLUSION AND RECOMENDATIONS

"To err is human, but to really foul things up you need a computer."

Paul Ehrlic

6.1   THE RESEARCH THUS FAR

In chapter one, the scope of the research was elaborated on. In chapter two, a holistic perspective of the background to the research problem was provided. In chapter three, the literature review was conducted on productivity software and the related issues around productivity, types of software available, features under consideration and staff motivation and training. In chapter four, the survey environment and target population were defined, and the survey methods were elaborated on. In chapter five an analysis of the data obtained from the survey was presented. In this chapter analogies will be drawn and recommendations made to mitigate the research problem.

6.2   ANALOGIES DRAWN FROM THE DATA ANALYSIS

As for the results obtained through this survey on whether staff that do not use productivity software optimally has an adverse effect of productivity the following analogies can be drawn from this research:

➢ The sample consists mainly of respondents between 20 and 50 years of age.

➢ The distribution of highest qualification of this sample is mainly respondents with a diploma or certificate. However less prominent are the respondents who have a bachelors degree, and respondents with some schooling. Higher qualifications are hardly represented in this sample.

➢ The sample was fairly equally distributed between Departmental Administration and Faculty Office Administration.

➢ The sample was mainly female respondents.

➢ There is a higher level of knowledge for the productivity software Microsoft Word, followed by Novel GroupWise and then Microsoft Excel.

➢ Respondents have the least knowledge of Microsoft Excel, and although the current knowledge of it does not necessary negatively affect the ability of the

respondent to do their jobs effectively; it does so more than Novel GroupWise or Microsoft Word.

➢ Microsoft Excel is also the package in which respondents feel they need the most improvement.

➢ Lack of skill in Microsoft Excel is more often why respondents do not complete a task effectively, than the other two packages.

➢ The respondents have more advanced and intermediate formal training in Microsoft Word than in the other two products.

➢ The type of informal training or assistance that mostly happens is firstly from colleagues or friends and secondly from IT staff for all of the productivity products.

➢ The types of training preferred for Microsoft Word and Excel are formal training and short training sessions covering a small range of topics. However for Novell GroupWise, informal help from IT staff or e-Learning is preferred as problems occur.

➢ Levels of knowledge of the software are associated with level of training. More advanced training indicates higher levels of knowledge for Word, Excel and Novell GroupWise.

➢ The levels of knowledge of the productivity software Microsoft Word and Novell GroupWise are associated with whether current knowledge negatively affects the ability to do their job effectively. The weaker levels of knowledge with respect to Word and Novell GroupWise are associated with how much this knowledge negatively affect doing the job effectively.

The respondent's responses for **Microsoft Word** are listed below:

Most competent	Least ability and need training
➢ Insert table.	➢ Mail merge / merge to e-mail.
➢ Change case of text.	➢ Use / modify built in styles.
➢ Insert bullets / numbering.	➢ Track edit changes / mark up.
➢ Check spelling / grammar.	➢ Insert automatic table of contents.
➢ Page numbering.	➢ Set / move tabs.

- Insert symbol.
- Set margins / page size / orientation.
- Insert page break.
- Insert clip art / images.
- Insert header / footer.
- Justify text.
- Change text orientation.
- Find / replace text.

- Find word count of document.
- Use format painter.
- Creating superscript text.
- Insert watermark.

The respondent's responses for **Microsoft Excel** are listed below:

Most competent	Least ability and need training
- Insert or delete row/column.	- Insert Pivot tables.
- Manually re-size row / column.	- Change relative or absolute reference.
- Hide rows / columns.	- Enter automatic formulas.
- Create new worksheet.	- Enter manual formulas.
- Re-size row / column to fit contents.	- Link data between worksheets.
- Merge cells.	- Add automatic subtotals to data.
- Create header / footer.	- Link data between different workbooks.
	- Print row / column headings on each page.
	- Remove or highlight duplicate data.
	- Filter and sort data.

The respondent's responses for **Novell GroupWise** are listed below:

Most competent	Least ability and need training
➢ Insert table.	➢ Mail merge / merge to e-mail.
➢ Forwarding mail to other users.	➢ Caching mode.
➢ Viewing / opening and attached file.	➢ Creating a routing item.
➢ Create / send mail message.	➢ Remote mode.
➢ Attaching a file to a message.	➢ Setting up mail rules.
➢ Resending mail.	➢ Online mode.
➢ Checking on the status of mail.	➢ Delaying the sending of e-mails.
➢ Searching for e-mails. / contents of mails.	➢ Creating a shared folder.
➢ Creating / renaming personal folders.	➢ Setting up of vacation / out-of-office reply rules.
➢ Managing contact / groups.	➢ Setting up proxy access.
➢ Adding a signature / vCard.	
➢ Archiving / retrieving e-mails.	

6.3   ANALOGIES DRAWN FROM THE LITERATURE REVIEW

Huff, Munro and Marcolin (1992:1-10), conceptualise user competence as consisting of three independent dimensions, namely breadth which refers to the extent or variety, of different user skills or knowledge; depth representing the completeness of the user's knowledge of a particular software package, and finesse being the ability to creatively apply end user computing and an extension of depth. The ways to which a user can customise or 'tune' the interface to suit their particular need fits in with the definition of a user's *depth* in the use of software, as well as their *finesse* (Huff, *et al*, 1992:1-10).

There has been much discussion about the relative merits of self-efficacy versus actual usage. Bandura (1994:71-81), states that it is people's beliefs about their own capabilities to perform. Munro, Huff, Marcolin, and Compaeu (1992:49),

also define it as an individual's perception about their ability. However Munro *et al.* (1992:53), caution that it is the competence level of the user that is measured, not the effectiveness of their computer use. Actual usage may be measured quantitatively using a hands-on test to measure the actual capabilities of the staff member, and Gravill, Compeau and Marcolin (2005:388), have found that there is very little correlation between subjective knowledge self-assessment and procedural knowledge.

Gravill, Compeau, and Marcolin (2006:378), state that for organisations to use their information infrastructure effectively, they need to ensure that their staff are keeping pace with changing technology, through continuous learning.

6.3.1   Software

According to Williams, Sawyer, and Hutchison (1999:18-19), software can be divided into two types, namely system software, such as Windows 7, MacOS X and Linux, which can be defined as controlling the usage of hardware resources and enabling the applications software to run, and application software, which is software that has been developed to solve a particular problem, to perform useful work on specific tasks, or to provide entertainment. They divide application software into the five categories of Entertainment, Home/personal software, Education/reference software, Productivity software and Speciality software. Although there is a wide variety of software used at CPUT only Microsoft Office Word and Excel, as well as Novell GroupWise is included. There is also a wide variety of software such as Computer Aided Design software (CAD) or Web design software that will not be covered.

For Microsoft Word, Excel and Novell GroupWise a wide variety of sources such as training manuals were consulted in order to build up a list of features to be included in the questionnaire. From these sources, a number of features were selected from the most basic to advanced features, representing the range of functions that staff would be reasonably expected to carry out in their day-to-day jobs.

The interface of Microsoft Office 2007, has substantially changed from the previous version, (Jelen, 2006:9), the biggest visual changes are the introduction of the 'Ribbon User Interface', and 'Mini Toolbar'. Jelen (2006:8-9), mentions that in the data that Microsoft collected using their 'Customer Experience Improvement Program' found that the majority of customers used the toolbar option, instead of mouse or keyboard shortcuts. The data collected using this program, which collected data from 1.3 billion user sessions clearly showed that even though there were more effective ways of accessing functions, most users were doing it the traditional way. Martin, Puls and Hennig (2008:4), explain that the paradigm shift from hierarchical menu structure to some new sort of interface was inevitable, as the number of new features increased due to the sheer number of features available.

Jelen (2006:8-9), states that in Microsoft's usability studies, people often asked for features that were already available, and in many cases, had already been included in older versions. Clearly there was a problem with the way that people were using the menus which Microsoft has tried to address with the new 'Ribbon User Interface' in the latest version of Office 2007.

Software bloat can be defined as an increase in functions available, without adding to the effectiveness of the software, or the adding of functionality to 'increase value of product'. Williams, Sawyer, and Hutchison (1999:131), use the term 'bloatware' as a colloquial name to describe software that is bloated with features.

6.3.2   The Technology Adoption Lifecycle

Not all staff begin to use technology at the same rate, and Moore (1991:16), has identified five groups which make up the adopters of technology, namely Innovators, Early adopters, Early majority, Late majority and the Laggards. While these distinctions may not apply directly to users currently using productivity software, Moore's model of technology adoption could be modified to apply to both the effectiveness of use of features, as well as the overall use of the software itself. The Innovators would be those who would actively seek out additional

functionality and explore new ways of doing tasks, and actively seek out new ways of solving problems, and the Laggards will use productivity software grudgingly, or not at all.

There is a clear division between the first two groups (innovators and early adopters) and the rest of the group (Moore, 1991:16). This division is called the 'chasm', and represents the longer time needed to convince the latter group of the value of technology. The first groups are much more likely to easily and enthusiastically start using technology, while the latter need much more persuasion. The analogy can be made with staff using productivity software, in that some will enthusiastically use features, while others will have to be convinced of their value

6.3.3   Training Of Staff

Different people are motivated by different factors. Steyn (2001:48-49), summarises Csikszentmihalyi's (1988), theories on flow, and claims that people react to different situations with one of three experiences, namely anxiety, enjoyment or boredom.

Steyn (2001:48-49), adds the factors of 'skill' and 'challenge' to Csikszentmihalyi's model. The point where enjoyment is experienced is therefore a dynamic one, which depends on both the skill level of the individual, as well as the challenge level of the activity. Steyn (2001: 48-49), explains that the individuals' experience in relation to their perception of the size of the challenge as compared to their current skills will affect whether or not the result will be enjoyment or boredom. This state of enjoyment should not be seen as just pleasure, as it is during these enjoyment periods that flow is achieved. Positive feedback from each flow experience strengthens the self, and more attention is freed up to deal with the outer and inner environment. As a result, the amount of change that can be dealt with is limited by the individual's ability to deal with change without being forced into anxiety.

Csikszentmihalyi (1990:6), defines flow as "... the way people describe their state of mind when consciousness is harmoniously ordered, and they want to pursue whatever they are doing for its own sake". This behaviour is analogous to McGregor's (1966:15-16), 'Type Y' personality, which sees 'work as play'. Most people would not view working with Microsoft Excel as play but if one is in the 'flow' then one may in fact not be conscious of working to the point that one would have to actively tear one's self away from the computer, rather than constantly watch the clock. Csikszentmihalyi (1990:149-150), describes the 'Autotelic personality' as being one that can create flow experiences in any workplace, and at a university this could be compared to staff who view the everyday work on computers as mundane, while others may be able to reach 'flow' and enjoy the work. Flow is not necessarily only achieved in doing pleasurable things. Csikszentmihalyi (1990:74), explains that: "The best moments usually occur when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile".

There are many challenges to staff training, such as the formal nature of training courses at CPUT, which do not necessarily fit into the academic schedule. This involves such tasks as registration, exams, marking as well as regular meetings. Although training sessions can also be run 'on demand' specifically for departments, this does rely on sufficient staff being available.

The most prevalent attitude amongst staff that the author has assisted is that it will take longer to find out how to do the task than do it manually, or by traditional means. One possible reason for staff not attending training, or not going on the correct level of training, is the naming of the course levels and staff may not want to be seen as incompetent and would not like to be seen going on a basic course that covers skills that they should already have. Unfortunately they would miss out on the scaffolding on which further training builds, and most likely slow down the more advanced classes that they do attend.

Another reason this is often a reason given by staff for not going on training is the lack of time, and given the length of the training sessions, this could be legitimate. Using the technology correctly though, through training however, should assist

with getting tasks done more effectively, thereby releasing time that was previously wasted in doing tasks manually.

6.4 THE RESEARCH PROBLEM REVISITED

The research problem, which was formulated in Chapter 1, paragraph 12 reads as follows: "Staff do not use productivity software optimally, which has an adverse affect on productivity".

From the results of the survey it can be seen that there are definite areas of functions that staff are not able to use effectively. Excel is noted as being the software most problematic, in terms of the lowest level of knowledge, most affecting the ability of staff to do their job, needing the most improvement, and staff being unable to complete tasks due to lack of skills.

Overall the results of the survey were fairly positive, and in fact were higher than expected, compared to the author's day-to-day experience with the staff. This could either be because of staff being of a higher skill level than the author expected them to be, or the staff were reporting themselves to be at a higher skill level than they actually were. This could be attributed to the Hawthorne Effect (Leedy and Ormrod, 2001:97-98) where respondents give responses that they think the researcher wants. When the survey was conducted an attempt was made to reduce this by explaining that it was vital to answer truthfully, as any training given after the survey results were compiled would be tailored towards problem areas, and 'incorrect' answers would result in the training not being appropriate. It was also emphasised that the survey was anonymous. One method of verifying whether the answers were accurate would be to conduct a test of the staff's ability, which would have the additional advantage of ruling out any inaccuracy in the staff members reporting their skill level inaccurately.

In all the types of software tested by far the highest type of assistance that is currently received is that of colleagues or friends. Although it is not asked in the survey, it is assumed that this would be when the function was needed to complete a task, and may not be the best method of training, as staff are trying to complete

a task, and their focus is not on the training itself, which would be different from a formal training session. It is not known if any of the assistance from colleagues or friends was in the form of formal training, as opposed to formal training by the HR department. As expected the staff with only 'beginner' level training had the lowest levels of knowledge, and as the training levels increased the staff member's skill level increased. A notable exception to this is Novell GroupWise, where there was a large group of 14 staff members (34% of all staff) who had no formal training in GroupWise, yet 50% of this group consider themselves to be 'average, 43% 'quite good', and 7% to be 'excellent'.

6.5 THE RESEARCH QUESTION REVISITED

The research question, which was formulated in Chapter 1, paragraph 13 reads as follows: "How can the utilisation of productivity software be improved?". Listed below are some possible solutions to the research question.

6.5.1 Skill sets

Using the data obtained from the questionnaire, specific groups of skills areas could be be drawn up for each of the staff groups: the academic departmental staff (Group A), as well as in the Faculty Office staff (Group B). This can be then used to provide small targeted skill sets for a specific group of functions that are presented in short sessions of approximately an hour each. The value from these sessions could be enhanced by testing before, immediately after and much later to evaluate the effectiveness of the training. If the groups being trained are of a similar skill level for the functional groups and the groups kept small the training would be maximised. If staff bring along examples of their files (such as Word documents or Excel spreadsheets) then this may be highly beneficial as they would be working on documents that are significant to their daily work.

This would not be meant as a substitute for formal training courses, but instead be aimed at improving the specific skills that are needed by the specific group once the initial formal training has been done by the HR department. In addition a set of skills could be drawn up, per job area, so that staff who are new to the job, are able to learn the specific skill sets that are required for their new job quickly.

As a starting point, compulsory testing and training for new staff could be introduced. The emphasis could be placed on the positive, instead of being a negative factor and could be promoted as an opportunity for personal development, instead of being a punitive measure or a threat.

6.5.2 Recording of usage patterns

Another possible extension of this study could be a Usage Diary kept next to their PC, in which staff record their daily frustrations or issues that they have in the use of productivity software. This data would be collected over a reasonable period of time, and could then be collated and analysed for trends and common problem areas. This would differ from the questionnaire method in that it would much more accurate, as the staff member would not have to rely on memory to complete the forms. Provided staff fill in the diary at the time of the problem or issue, it would provide a very accurate record of areas where staff are having problems.

6.5.3 Comparative methods

A system for comparing the old method with the new method could be developed using the time taken for the old method, and relating that to the time needed to learn the new method, added to the time taken to perform the function afterwards. If this is multiplied by the approximate number of times that the function is used per month, then this can be combined to give a savings factor. This could be presented in the form of a ratio e.g. 3.6 or 0.83 to give 'hard evidence' of the time that can be saved by training, as shown in Table 6.1.

Table 6.1: Function time saving factor

Function 'A'		Function 'B'		Function 'C'	
Time before	- 5 min	Time before	- 5 min	Time before	- 5 min
Training	- 10 min	Training	- 20 min	Training	- 20 min
Time after	- 1 min	Time after	- 1 min	Time after	- 3 min
Used / month	- 25 times	Used / month	- 4 times	Used / month	- 50 times
Before: 25*5	= 125 min	Before: 4*5	= 20 min	Before: 50*5	= 250 min
After: (25*1)+10	= 35 min	After: (4*1)+20	= 24 min	After: (50*3)+10	= 160 min
Factor : 125 / 35	**= 3.6**	Factor : 20 / 24	**= 0.83**	Factor: 250 / 160	**= 1.6**

The higher the number, the more time saving it would represent, with a number lower than 1 representing more time taken in training than in saving of time. This would not necessarily mean that no training should be done, but that it may not represent an effective use of training time.

Also if a function is used very rarely, it may often be forgotten about before it needs to be used again. As the academic cycles in the Engineering faculty at CPUT are generally 6 months long (a semester) many functions are only used at certain times e.g. at the beginning or end of a semester, which could affect the effectiveness of learning.

6.6   INVESTIGATIVE SUB-QUESTIONS REVISITED

The investigative sub-questions, which were formulated in Chapter 1, paragraph 14 are as follows:

6.6.1.1 What is the current ability of staff in their use of productivity software?

As can be seen from Figure 5.5 on page 59 the current ability of staff varies widely across the different productivity software packages, with users reporting that they have the highest level of knowledge in Microsoft Word. For Microsoft Word no users reported that they were either 'weak' or 'very weak', with about a quarter 'average' and about half 'quite good'.

In the survey question: "Rate your level of knowledge in the following types of software" no distinction was made between the user's level of knowledge in those functions that they use daily, and those the full set of functions available within the software package. Thus a user who uses a very limited scope of functions, but does those very well may report themselves as 'excellent', while a user who is familiar with a much wider range of functions may rate themselves as only 'quite good'. Unfortunately as these levels are self reported, there is no way of knowing with any degree of certainty if they are accurate. A weaker staff member may consider themselves as 'quite good', while a very experienced user

might evaluate themselves as 'average'. Unfortunately without a practical test this limitation cannot be overcome.

In Novell GroupWise, just over a third consider themselves 'average', with the rest either 'quite good' or 'excellent', and no-one describing themselves as either 'very weak' or weak'. Microsoft Excel is the weaker of the three, with 10% of users reporting that they are either 'very weak' or 'weak', and just over half consider themselves 'quite good' or excellent'.

6.6.2 What effect does their current knowledge have on their ability to do their job effectively?

As can be seen in the users' reports their level of ability in Word and GroupWise has very little negative impact on their ability to perform their job effectively, while for Excel a substantial percentage (40%) feel that their ability to perform their job effectively was affected by their current level of ability.

Given that the users report that Excel is their weakest software package, it is not surprising that it has the highest effect on their ability to perform their job effectively.

6.6.3 How does their level of training relate to their current level of knowledge?

As the P-Values in Table 5.5 indicate there is a statistically significant association between formal training received and the current knowledge. The weaker the levels of knowledge, the lower the level of training. If the variable of training and current level of knowledge in the three software packages are plotted as in Figure 6.1, Figure 6.2 and Figure 6.3, it can be seen that there is a large variation of staff knowledge vs training. (The relative size of each point indicates the number of responses.)
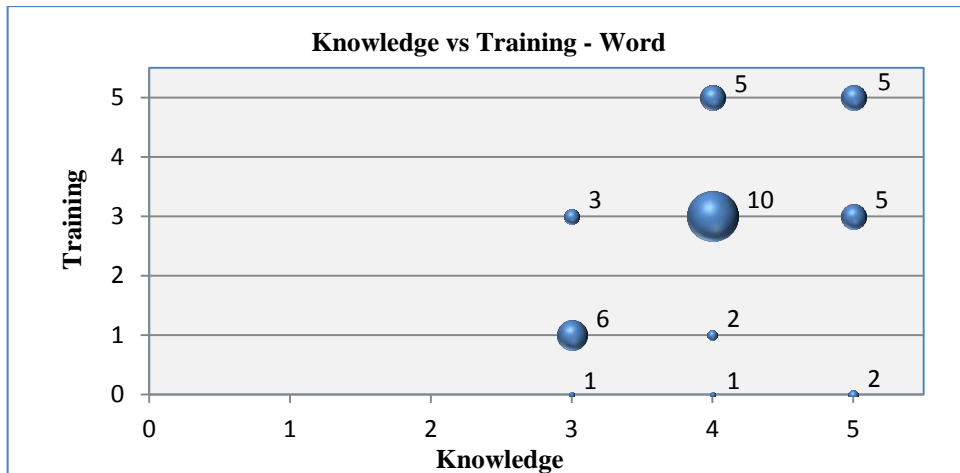
Figure 6.1: Knowledge vs Training for Microsoft Word

Figure 6.2: Knowledge vs Training for Microsoft Excel
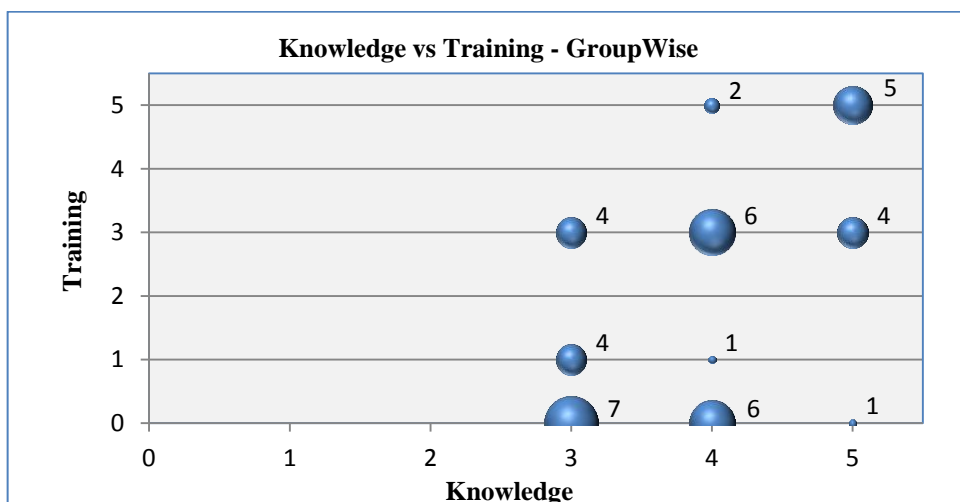
Figure 6.3: Knowledge vs Training for Novell GroupWise

What does stand out is that there is a significant number of staff who consider themselves 'excellent', but have never received any formal training, but it is not known of these staff are actually very competent users, or whether they are simply reporting themselves as such. Further testing would be useful in ascertaining this.

6.6.4 What tasks are staff incapable of doing, which leads to lower productivity?

From the results of the questionnaire, it can be seen that the functions that feel that they have the least ability and need training are listed in Table 6.2.

Table 6.2: Least competent and need training

Microsoft Word	Microsoft Excel	Novell GroupWise
Mail merge / merge to e-mail.	Insert Pivot tables.	Mail merge / merge to e-mail.
Use / modify built in styles.	Change relative or absolute reference.	Caching mode.
Track edit changes / mark up.	Enter automatic formulas.	Creating a routing item.
Insert automatic table of contents.	Enter manual formulas.	Remote mode.
Set / move tabs.	Link data between worksheets.	Setting up mail rules.
Find word count of document.	Add automatic subtotals to data.	Online mode.
Use format painter.	Link data between different workbooks.	Delaying the sending of e-mails.
Creating superscript text.	Print row / column headings on each page.	Creating a shared folder.
Insert watermark.	Remove or highlight duplicate data.	Setting up of vacation / out-of-office reply rules.
	Filter and sort data.	Setting up proxy access.

The productivity of staff could be significantly improved, as time could be saved, as well as frustration reduced, by focusing training on these particular areas. Further in-depth analysis could also be done to determine whether there are areas within the two categories of Departmental and Faculty administration, to see if there are specific groupings that could be focused on which are specific to these groups.

6.6.5 What additional skills do staff need to improve their productivity?

As listed in the previous section in Table 6.2, there are certain functions that the staff have indicated in which they would like training. A short training course,

such as that described in section 6.5.1, could be set up to provide a these specific skills to staff of the target groups. This possible training was also mentioned to the staff when the questionnaire was handed out, as an incentive for the staff to fill in the questionnaire as truthfully as possible.

6.6.6   What forms of training have staff received, and what forms of training would they like to receive?

As shown in Figure 5.10 and Figure 5.11, it can be seen that the most common type of informal training that the respondents received was mostly help that they received from their colleagues or friends for all the products, followed by IT Staff.

It seems that the respondents prefer formal or short training sessions for Excel and Word; whereas they prefer IT staff to help them informally or e-learning for Novell GroupWise. The respondents also have a high preference for their colleagues to help them in the use of all the products.

The responses for Excel would fit in well with the planned training sessions for the staff who participated in the survey, as this is format that is planned.

6.7   KEY RESEARCH OBJECTIVES REVISITED

The research objectives, which were formulated in Chapter 1, paragraph 15 reads as follows:

6.7.1   To identify the current skill levels of staff in their use of productivity software.

From the data obtained from the questionnaire it is clear that there is a mixture of skill levels in all areas of productivity software. The overall level of knowledge is listed in Figure 5.5, and the individual levels of ability for functions are given in Figure 5.12, Figure 5.14 and Figure 5.16.

6.7.2 To identify skills that are having a negative effect on staff effectiveness.

From the data obtained it can be seen that the areas have a negative effect on effectiveness in the use of productivity software are as follows, and are the functions that require the most training:

- ➢ **Microsoft Word**: Mail merge / merge to e-mail, Use format painter, Use / modify built in styles, Set / move tabs, Find word count of document, and Track edit changes / mark up.
- ➢ **Microsoft Excel**: Enter manual and automatic formulas, Change relative or absolute references, Add automatic subtotals to data, Remove or highlight duplicate data, Filter and sort data, and Insert Pivot tables.
- ➢ **Novell GroupWise**: Mail merge / merge to e-mail, Setting up mail rules, Online mode, Creating a shared folder, Setting up proxy access, Setting up of vacation / out-of-office reply rules.

6.7.3 To identify the skills areas that staff need to improve, in order to do their jobs more effectively.

Figure 5.13, Figure 5.15 and Figure 5.17 give the areas where staff require training. From the data in these Figures the following groups have been drawn up for each of the productivity software packages covered.

- ➢ **Microsoft Word**: Mail merge / merge to e-mail, Use format painter, Use / modify built in styles, Set / move tabs, Find word count of document, and Track edit changes / mark up.
- ➢ **Microsoft Excel**: Enter manual and automatic formulas, Change relative or absolute references, Add automatic subtotals to data, Remove or highlight duplicate data, Filter and sort data, and Insert Pivot tables.
- ➢ **Novell GroupWise**: Mail merge / merge to e-mail, Setting up mail rules, Online mode, Creating a shared folder, Setting up proxy access, Setting up of vacation / out-of-office reply rules.

6.8   FINAL CONCLUSION

This research was conducted on a small group of the administrative staff in the Engineering faculty at the Cape Peninsula University of Technology.

The accuracy of the results depended on the staff members accurately reporting their skill levels and shortcomings, and also relied on staff being able to correctly and accurately assess their own skill levels. Given more time and resources it is recommended that a more in-depth assessment be carried out, involving actual testing of staff members on the skills that were reported in this study. In this way a much more accurate picture of the skill levels and requirements might be gained. Unfortunately this would require greater resources, and is beyond the scope of the current study.

From this study it is hoped that an insight has been gained into the areas of productivity software that are deficient in order to provide a sound base in order to improve the capacity of staff in the use of productivity software.

BIBLIOGRAPHY

Babbie, E. 2005. *The basics of social research*. Belmont: Thomson Wadsworth.

Bandura, A. (1994). *Self-efficacy. In V. S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81)*. New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

Cape Peninsula University of Technology. 2010a. *Service Desk Call Log for the Engineering Faculty*. Cape Town. Unpublished.

Cape Peninsula University of Technology. 2010b. (**Online**: Learner Management System). *Microsoft - Office 2007*. http://eclassroom.cput.ac.za.

Cape Peninsula University of Technology. 2010c. *CPUT website – History of CPUT.* [**Online**]. http://www.cput.ac.za/institution/history.php
[Accessed on 23/08/2010].

Collis, J. and Hussey, R. 2003. *Business Research: A practical guide for undergraduate and postgraduate students*. Houndmills: Macmillan Palgrave.

Csikszentmihalyi M. 1990. *Flow: The Psychology of Optimal Experience*. New York: Harper and Row.

Csikszentmihalyi, M. and Csikszentmihalyi, I.S., 1988. *Psychological studies of flow in consciousness*. Cambridge: Cambridge University Press.

Danish Technological Institute. 2007. *Digital Literacy - a definition*. [**Online**]. Document ID: 20663 Approved 2007-12-06 Available from http://www.digital-literacy.eu/20663 [Accessed on 22/03/2010].

De Vos, A.S. (2002). *Scientific theory and professional research. in de Vos, A.S. Strydom, H. Fouché, C.S.L. & Delport, C.S.L. (eds) Research at grass roots: for the social sciences and human service professions. 2nd edition.* Pretoria: Van Schaik.

Denzin, N. K. 1998. *The art and politics of interpretation*. USA: Sage Publications Inc.

Digitalnative. 2010. *Glossary of terms relating to Digital Natives*. [**Online**]. Hosted by the Berkman Center for Internet & Society (Harvard, United States) and the Research Center for Information Law at the University of St.Gallen, Switzerland. http://www.digitalnative.org/wiki/Glossary.
[Accessed on 23/03/2010].

Emery, C.W. and Cooper, D.R. 1996. *Business Research Methods*. Fifth Edition. Irwin: Homewood

European International Computer Driving Licence. 2010. *ECDL/ICDL Sample Test Papers*. [**Online**] http://www.ecdl.com/programmes/index.jsp?p=108&n=208 & http://www.ecdl.com/programmes/index.jsp?p=109&n=185.

Gravill, J.I, Compeau, D.R, and Marcolin, B.L. 2006. *Experience effects on the accuracy of self-assessed user competence.* Information and Management 43:378-394.

Huff, S. L, Munro M. C, and Marcolin, B. L. 1992. *Modelling and measuring end user sophistication*. In the proceedings of the 1992 ACM SIGCPR Conference, April 5-7. Cincinnati, Ohio.

Investment and Business News. 2010 [**Online**]. *Graph of Moore's Law*. http://www.investmentandbusinessnews.co.uk/headline/the-two-words-economists-forget/
[Accessed on 10/09/2010]

Janesick, V. J. 1998. *The dance of research design; metaphor, methodology, and meaning.* USA: Sage Publications Inc.

Jelen, B. 2006. *Special Edition Using Microsoft Office Excel 2007*. Indianapolis: Que Publishing.

Leedy, P.D. & Ormrod, J.E. 2001. *Practical research*. New Jersey: Merrill Prentice Hall.

Malone, T.W. 1981. *Towards a theory of intrinsically motivating instruction.* London: Cognitive Science, 4.

Malterud, K. 1998. *Making changes with key questions in medical practices; studying what makes a difference. Doing qualitative research.* USA: SAGE Publications Inc.

Martin, R., Puls, K. & Hennig, T. 2008. *RibbonX: Customizing the Office 2007 Ribbon.* Wiley Publishing: Indiana .

McGregor D, 1966. *Leadership and Motivation*. Cambridge: MIT Press.

Microsoft. 2010a. *Microsoft Office Specialist: Microsoft Office Excel 2007 Exam Requirements.* [**Online**]. http://www.microsoft.com/learning/en/us/exam.aspx?ID=77-602&locale=en-us
[Accessed on 18/08/2010].

Microsoft. 2010b. *Microsoft Office Specialist: Microsoft Office Word 2007 Exam Requirements.* [**Online**]. http://www.microsoft.com/learning/en/us/exam.aspx?ID=77-601&locale=en-us
[Accessed on 18/08/2010].

Moore, G. A. 1991. *Crossing the Chasm: Marketing and Selling High-Tech Goods to Mainstream Customers.* New York: Harper Business.

Munro, M. C., Huff, S. L., Marcolin, B. L. & Compaeu, D. R. 1992. *Understanding and measuring user competence*. Information and management 33:45-47.

Novell. 2010a. *GroupWise Windows Client User Guide*. [**Online**] http://www.novell.com/documentation/gw7/pdfdoc/gw7_userwin/gw7_userwin.pdf [Accessed on 08/08/2010].

Novell. 2010b. *GroupWise Client Frequently Asked Questions (FAQ).* [**Online**] http://www.novell.com/documentation/gw7/pdfdoc/gw7_userfaq/gw7_userfaq.pdf [Accessed on 08/08/2010].

Nunnally, J.C. (1978). *Psychometric theory (2nd ed.).* New York. McGraw-Hill.

Palfrey, J. & Gasser, U. 2008. *Born Digital: Understanding the First Generation of Digital Natives.* Basic Books: New York.

Pillay, P. 2010. *Computing with Microsoft Office 2007 Excel, Access and Publisher*. Cape Town: The Business Zone.

Pillay, P. 2010. *Computing with Microsoft Office 2007 File Management, Internet, Word, PowerPoint*. Cape Town: The Business Zone.

Remenyi, D., Williams B., Money A. & Swartz, E. 2002. *Doing research in business and management*. London: Sage.

Robertson, A. s.a. *Reference Manual: Microsoft Excel. Freelance Automation Consulting CC.* Self published: Cape Town.

Robertson, A. s.a. *Reference Manual: Microsoft GroupWise. Freelance Automation Consulting CC.* Self published: Cape Town.

Robertson, A. s.a. *Reference Manual: Microsoft Word. Freelance Automation Consulting CC.* Self published: Cape Town.

Rockart, J. F. & Flannery, L. 1983. *The management of end user computing*. Communications of the Association for Advanced Computing, 26(10).

Saunders, M. N. K., Lewis, P. & Thornhill, A. 2000. *Research methods for business students.* Edinburgh Gate: Pearson Education.

Schindler, D.R. & Cooper, P.S. 2001/2003. *Business Research Methods*. Seventh/Eight Edition. New York, NY. McGraw-Hill.

Scholtz, J. 2006. *Metrics for evaluating human information interaction systems. Interacting with Computers* 18: 507-527.

Steyn, A. B. 2001. *Creating a Learning Organisation using Information Technology*. A Thesis submitted in fulfilment of the requirements for the degree

of Doctor Philosophiae in the Faculty of Engineering, the Built Environment and Information Technology at the University of Pretoria.

Williams, B.K, Sawyer, S.C, Hutchison, S.E. 1999. *Using Information Technology: A practical guide to Computers and communication*. United States: Irwin/McGraw-Hill.

Yin, R. K. 1994. *Case Study Research: Design and Methods*. Sage: Thousand Oakes.

ANNEXURE 1: Software Utilisation Questionnaire

Software Utilisation Survey – Section A

IMPORTANT NOTE: - Please make sure that the circle is completely filled like this ● Do *not* just put a tick or cross in the circle. If you change an answer, put a big cross through it, ✖ then mark the correct answer.

1. Rate *your level of knowledge* in the following types of software:

		Very weak	Weak	Average	Quite good	Excellent	N/A
1.a	Microsoft Office - Word	○	○	○	○	○	○
1.b	Microsoft Office - Excel	○	○	○	○	○	○
1.c	Novell GroupWise (e-Mail)	○	○	○	○	○	○

2. How much has your *current knowledge* **negatively affected** the *ability to do your job* effectively?

		Very much	A little	Moderate	Very Little	None	N/A
2.a	Microsoft Office - Word	○	○	○	○	○	○
2.b	Microsoft Office - Excel	○	○	○	○	○	○
2.c	Novell GroupWise (e-Mail)	○	○	○	○	○	○

3. Indicate how much do you feel that you *need to improve* in the following areas:

		Very much	A little	Moderate	Very Little	None	N/A
3.a	Microsoft Office - Word	○	○	○	○	○	○
3.b	Microsoft Office - Excel	○	○	○	○	○	○
3.c	Novell GroupWise (e-Mail)	○	○	○	○	○	○

4. Rate how often you have been *unable to complete a task effectively* because of your *lack of skills* (Software usage)

		Very often	Occasion-ally	Some of the time	Very rarely	None	N/A
4.a	Microsoft Office - Word	○	○	○	○	○	○
4.b	Microsoft Office - Excel	○	○	○	○	○	○
4.c	Novell GroupWise (e-Mail)	○	○	○	○	○	○

5. Indicate the *highest level* of *formal* training courses you have completed for each of the areas:

		None	Beginner	Intermediate	Advanced
5.a	Microsoft Office - Word	○	○	○	○
5.b	Microsoft Office - Excel	○	○	○	○
5.c	Novell GroupWise (e-Mail)	○	○	○	○

6. Select the *type of informal training / assistance* you have had for each of the areas: *(You may select more than one)*

		Websites	Colleague /Friend	Service/ Helpdesk	IT Staff	CDs / Books	N/A
6.a	Microsoft Office - Word	○	○	○	○	○	○
6.b	Microsoft Office - Excel	○	○	○	○	○	○
6.c	Novell GroupWise (e-Mail)	○	○	○	○	○	○

7. Select the types of training that you *would prefer* to have: *(You may select more than one)*

		Microsoft Word	Microsoft Excel	Novell GroupWise
7.a	Formal training (one lecturer & many students) – whole or ½ day	○	○	○
7.b	Short training sessions covering a small range of topics relevant to your job (one lecturer / small group of students) – less than 1 hour	○	○	○
7.c	Formal help from Help / Service desk – telephonically or in person	○	○	○
7.d	Informal help (peer help) from IT staff (as problems occur)	○	○	○
7.e	Informal help from colleagues (as problems occur)	○	○	○
7.f	e-Learning courses / Internet	○	○	○

8. Age

20's	○
30's	○
40's	○
50's	○
60's	○

9. Highest qualification

Std 8 / Matric	○
Certificate / Diploma	○
BTech / Bachelors Degree	○
Masters Degree	○
Doctorate	○

10. List the area that you work in:

Administration (Secretarial / P.A.)	○
Technical (Technician)	○

11. Gender

Male	○
Female	○

Thank you for participating in this survey. Your responses will remain confidential.

Cape Peninsula
University of Technology

12. For Microsoft Office – Word, rate your ability in the following:
(You may select more than one)

		I can't do this	I avoid / don't use this often	I am competent at this	I need this to do my job **effectively**	I need training in this
12.a	Insert symbol	○	○	○	○	○
12.b	Insert page break	○	○	○	○	○
12.c	Insert table	○	○	○	○	○
12.d	Insert clip art / images	○	○	○	○	○
12.e	Insert watermark	○	○	○	○	○
12.f	Insert header /footer	○	○	○	○	○
12.g	Set / move tabs	○	○	○	○	○
12.h	Justify text	○	○	○	○	○
12.i	Find / replace text	○	○	○	○	○
12.j	Change text orientation	○	○	○	○	○
12.k	Change case of text (Uppercase / sentence case)	○	○	○	○	○
12.l	Creating superscript text	○	○	○	○	○
12.m	Insert bullets / numbering	○	○	○	○	○
12.n	Page numbering	○	○	○	○	○
12.o	Set margins / page size / orientation	○	○	○	○	○
12.p	Use format painter	○	○	○	○	○
12.q	Find word count of document	○	○	○	○	○
12.r	Check spelling / grammar	○	○	○	○	○
12.s	Track edit changes / mark-up	○	○	○	○	○
12.t	Use / modify built in styles	○	○	○	○	○
12.u	Insert automatic table of contents	○	○	○	○	○
12.v	Mail Merge / merge to e-mail	○	○	○	○	○

13. For Microsoft Office – Excel, rate your ability in each of the following:
(You may select more than one)

		I cannot do this	I avoid / don't use this often	I am competent at this	I need this to do my job **effectively**	I need training in this
13.a	Changing number style (percent / decimal)	○	○	○	○	○
13.b	Insert or delete row/column	○	○	○	○	○
13.c	Hide rows / columns	○	○	○	○	○
13.d	Manually re-size row/column	○	○	○	○	○
13.e	Re-size row/column to fit contents	○	○	○	○	○
13.f	Adding background/fill	○	○	○	○	○
13.g	Automatic fill	○	○	○	○	○
13.h	Conditional formatting	○	○	○	○	○
13.i	Enter manual formulas	○	○	○	○	○
13.j	Change relative / absolute references	○	○	○	○	○
13.k	Enter automatic formulas (e.g. Max/Ave/VLOOKUP)	○	○	○	○	○
13.l	Merge cells	○	○	○	○	○
13.m	Create header / footer	○	○	○	○	○
13.n	Create charts	○	○	○	○	○
13.o	Print row / column headings on each page	○	○	○	○	○
13.p	Create new worksheet	○	○	○	○	○
13.q	Link data between worksheets	○	○	○	○	○
13.r	Link data between different workbooks	○	○	○	○	○
13.s	Filter and sort data	○	○	○	○	○
13.t	Add automatic subtotals to data	○	○	○	○	○
13.u	Remove / highlight duplicate data automatically	○	○	○	○	○
13.v	Insert PivotTables	○	○	○	○	○

14. For **Novell GroupWise,** rate your ability in each of the following topics: (*You may select more than one*)

		I can't do this	I avoid / don't use this often	I am competent at this	I need this to do my job **effectively**	I need training in this
14.a	Create / send mail message	○	○	○	○	○
14.b	Attaching a file to a message	○	○	○	○	○
14.c	Viewing / opening an attached file	○	○	○	○	○
14.d	Checking on the status of mail	○	○	○	○	○
14.e	Resending mail	○	○	○	○	○
14.f	Retracting mail	○	○	○	○	○
14.g	Forwarding mail to other users	○	○	○	○	○
14.h	Quick viewer	○	○	○	○	○
14.i	Marking an item unread	○	○	○	○	○
14.j	Creating / renaming personal folders	○	○	○	○	○
14.k	Creating a shared folder	○	○	○	○	○
14.l	Manage the calendar	○	○	○	○	○
14.m	Managing contacts / groups	○	○	○	○	○
14.n	Adding a signature / vCard	○	○	○	○	○
14.o	Searching for e-mails / contents of e-mails	○	○	○	○	○
14.p	Delaying the sending of e-mails	○	○	○	○	○
14.q	Setting the priority of e-mails	○	○	○	○	○
14.r	Setting up of mail rules	○	○	○	○	○
14.s	Setting up of vacation / out-of-office reply rules	○	○	○	○	○
14.t	Setting up proxy access	○	○	○	○	○
14.u	Create a routing item	○	○	○	○	○
14.v	Online mode	○	○	○	○	○
14.w	Caching mode	○	○	○	○	○
14.x	Remote mode	○	○	○	○	○
14.y	Archiving / retrieving e-mails	○	○	○	○	○

ANNEXURE 2: Faculty Organogram

FACULTY MANAGEMENT & SUPPORT STAFF

ACTING POSITIONS / SECONDMENTS / TO BE FILLED

Updated: 23 July 2010 v2.0 - D Evans

DEAN: ENGINEERING — Nawaaz Mohamed x6612

DEANS SECRETARY — Shirley Williams x6612 (A)

Faculty Manager — Niven Cloete x6632

ASSOCIATE DEAN — Keith Jacobs x6757

ASSOCIATE DEAN — Ben Groenewald x6455

ENERGY RESEARCH UNIT — Nico Beute x3657
- Ernst Uken x3127
- SECRETARY — Mel Sisam x3660

CONSOLIDATED HOD: MECHANICAL — Modify Kaunda x6496
- CO-ORDINATORS — TAP vd Schyff x3010, Zweli Ngewana x6378
- SECRETARIES — Nawaal Jones x3010, Thando Mtombeni x6496, Chantley Lintnaar x 6713, Zulfah Ebrahim x3011

HOD: MARITIME — Edward Snyders 440 5755
- SECRETARY — Douglas Dyers 440 5752

CONSOLIDATED HOD: INDUSTRIAL & SYSTEMS — Pat McLaren x6225
- SECRETARY — Zinzi Nxopo x6600

CONSOLIDATED HOD: ELECTRICAL — Ben Groenewald x6455
- CO-ORDINATORS — Tom van Breda x6240, Trevor Lind x3081
- SECRETARIES — Judy Rogers x3083, Cyndi Johnson x6246, Zeb Tan x3094

ACTING HOD: CLOTHING & TEXTILES — Elspa Hovgard x6468
- SECRETARY — Charlene Parenzee x6466

CONSOLIDATED HOD: CIVIL AND SURVEYING — Ashadia Kamalie x6687
- CO-ORDINATOR — Raubie Raubenheimer x3054
- SECRETARIES — Laurina Khan x3046, Hilda van Zyl x6650, Vianney Irakoze x3045

CONSOLIDATED HOD: CHEMICAL — Daniel Ikhu-Omoregbe x6310 / 3172
- CO-ORDINATORS — Marshal Sheldon x3160, Greg Hangone x6399
- SECRETARIES — Elizma van Wyk x3159, Cindy Damons x6083

ACTING HOD: BUILT ENVIRONMENT — Toni Stringer x6629
- SECRETARIES — Julie Medhurst x3028, Charlene Daniels x6631

I.T. CO-ORDINATOR — David Evans x3626 / x6217

RESEARCH CO-ORDINATOR — Daniel Makinde x6666
- SECRETARY — Taylia Green x6666

LANGUAGE CO-ORDINATOR — Ken Barris x3734

T & L CO-ORDINATOR — Cecelia Jacobs x6437

Faculty Officer — Linda Goliath x3657 / x6773
- ASSISTANT FACULTY OFFICER — Jacqueline Thomas x3067
- ASSISTANT FACULTY OFFICER — Dianna Marcus x6653

FACULTY ASSISTANT — Melanie Graney x 440 5771 (Shared with Business (Granger Bay))

FACULTY ASSISTANT — Andre Burt 959 8484

FACULTY ASSISTANT — Antonio Farao x3414

FACULTY ASSISTANT — Vuyani Mtshikana x3255

FACULTY ASSISTANT — Nicolas Madonsela x

FACULTY ASSISTANT — Badroen Cassiem x3130

RECEPTIONIST — Jacky Souls x3673

2010 AUDIT — Nomfundo Ncoko

CO-OPERATIVE — Layaan van Wyk x3657

CO-OPERATIVE — Gouwa Stuurman x6653

(Dashed boxes labelled A and B)

ANNEXURE 3: Current training courses offered at CPUT (March 2010)

Training	Date	Targeted Audience	Brief Course Content	Campus and Venue
HIV/AIDS in the Work place	02 March	Academic Staff	This training is intended to inform delegates about the effects and affects of the HIV/Aids pandemic.	Cape Town Seminar Room 1 Atrium
Project Management (Theory)	03 – 04 March	All staff members that are engaged in planning of projects and / or those that would like to know more about proper project management	This course covers all the theoretical aspects of project management and will be followed up by the MS Project programme later.	Bellville Library Conference Room
Blackboard Learning Management System (Intermediate)	**05 March 09:00 – 12:00**	**Academic Staff**	**This programme assists course developers with tools like:** • **Manage "my files" system;** • **Quizzes and Surveys** **Syllabi / Study guides etc**	**Sanlam Lab. K10**
Narcotic Awareness	05 March	All Staff	This training is especially intended to sensitize participants around the impact and effects of narcotic use and abuse.	Bellville New Visitors Lounge Student Centre
Incident / Accident Reporting and Investigation	08 March	Staff who are responsible for accident investigations.	Purpose of the course is to provide delegates with the skills to investigate accidents and incidents so as to determine the root cause of the incident or accident. It will also touch on the compensation commissioner reporting.	Bellville New Visitors Lounge Student Centre
MS Word 2007	**09 March**	**All staff**	**The course will cover** • **Reviewing documents** • **Using Tables** • **Drawing on Word** • **Working with Columns**	**Cape Town Library Computer Room: 2nd Floor**
Interaction Skills	09 March	Library Attendants	Learn Skills how to interact with clients	Bellville New Visitors Lounge Student Centre
SPSS	**09 – 10 March**	**All staff**	**Develop skills to use SPSS effectively to process data.**	**Cape Town Library Computer Room: 2nd Floor**
Blackboard Learning Management System (Advanced)	**10 March 09:00 – 12:00**	**Academic Staff**	**This programme assists course developers with tools like:** • **Manage "my files" system;** • **Quizzes and Surveys** **Syllabus / Study guides etc**	**Sanlam Lab. K10**
Research Writing	10 March	Academic & Non-academic involved in post graduate studies	The programme deals with matters to equip Academics and Post-graduate staff members With proper research writing skills. Various techniques are applied and participants are exposed to the implementation of it.	Cape Town Seminar Room 1
GroupWise and Internet	**11 March**	**All Staff**	**This programme will guide participants to successfully master**	**Cape Town Library**

Searching			the Internet and will offer a thorough overview of the GroupWise environment as it covers all the important aspects of sending, receiving and forwarding mail	Computer Room: 2nd Floor
High Performance Management	11 – 12 March	All newly appointed Deans, Directors and Administrative Managers	This is a programme for all managers and supervisors. It deals with important issues such as The Employment contract, Probation, Corrective action in disciplinary action and building productive working relationships.	Bellville Library Conference Room
Health and Safety Representative	12 March	All elected Health and Safety Representatives	This programme gives an overview of the Occupational Health and Safety Act, compensation for injuries as well as implementation of an occupational safety system in your place of work.	Cape Town Seminar Room 1 Atrium
Basic Ergonomics	15 March	Staff who is in a supervisory or management position. Procurement staff should also find this course of particular interest.	This course will teach the delegates the basic of ergonomics, and how the principles of ergonomics can be used to enhance the work conditions of people in the workplace.	Bellville New Visitors Lounge Student Centre
Performance Management	16 March	Non-Academic and Academic staff members	Staff is trained how to effectively manage the performance of subordinates in order to enhance productivity and induce desired human behaviour in the workplace.	Cape Town Library Computer Room: 2nd Floor
Performance Management	16 March	Non-Academic and Academic staff members	Staff is trained how to effectively manage the performance of subordinates in order to enhance productivity and induce desired human behaviour in the workplace.	Bellville Library Computer Room
Understanding Assistive Technology for Disabled People	16 March	Staff with disabilities	Software Training for physically challenged staff members	Bellville Room 3.11 IT Centre
Interaction Skills	17 March	Library Staff	This course is intended to equip you with the tools to bring about positive change. It focuses on getting effective communication operating at all levels of the organisation.	Bellville Library Conference Room
ITS Interface	**17 March**	**All ITS Users**	**This programme will cover matters such as Logging onto ITS; Entry Screen; Menu Structure & Navigation; Online Help ; and Reports**	**Bellville Room 3-11 IT Centre**
MS Project	**18 March**	**All Administrative and Academic Staff**	**Participants will be exposed to the MS Project software**	**Cape Town Library Computer Room: 2nd Floor**
MS Word 2007 (Advanced)	**18 March**	**All staff**	**The course will cover** • **Sorting and Merging Text and Data** • **Working with Formulas,**	**Bellville Library Computer Room**

			• **Worksheets and Data** • **Introduction to Macros** • **Enhancing Documents** • **Reviewing Documents**	
Fire Fighting	19 March	All fire marshals, evacuation and emergency wardens.	Fire prevention, search and rescue techniques, emergency scene management	Cape Town Seminar Room 1 Atrium
Personal Effectiveness (Secretarial Development programme)	24 March	Secretary Development	Plan and Organise your work, Establish and maintain working relationships, as well as files and records	Bellville Library Conference Room
MS PowerPoint 07 Foundation	**24 March**	**All staff**	**The course will cover** • **PowerPoint Basics** • **Creating a Presentation** • **Enhancing the Presentation** • **Creating Visual Impact**	**Cape Town Library Computer Room: 2nd Floor**
ITS Requisitions	**24 March**	**All ITS Users**	**This Programme will go on to cover matters such as Processing of Requisitions including store requisitions; Verifying status of requisitions; Printing of requisitions.**	**Bellville Room 3.11 IT Centre**
First Aid Level 2	24 – 26 March	All staff	These programmes are designed to give you extensive knowledge to apply first aid techniques in emergency situations.	Cape Town Seminar Room 1
Adobe Acrobat	**25 March**	**All staff**	**Accessing information in PDF documents, Creating PDF documents**	**Bellville Room 3-11 IT Centre**
Contractor Safety Induction	26 March	This training is for contractors that are working for CPUT.	The purpose of the training is to ensure that contractors are also adhering to health and Safety Requirements.	Bellville New Visitors Lounge Student Centre

ANNEXURE 4: Comparison of Acrobat Features

	Reader 9	Acrobat 9 Standard	Acrobat 9 Pro	Acrobat 9 Pro Extended
View, print, and search PDF files, including PDF Portfolios and PDF maps	●	●	●	●
Author, store, and share documents, and share your screen, using Acrobat.com services	●	●	●	●
Experience richer content and greater interactivity with native support for Adobe® Flash® technology	●	●	●	●
Create PDF documents from any application that prints		●	●	●
Convert Microsoft Word, Excel, PowerPoint, Publisher, and Access files to PDF with one-button ease*		●	●	●
Capture web pages as rich, dynamic PDF files for review and archiving		●	●	●
Archive e-mail or e-mail folders from Microsoft Outlook or Lotus Notes*		●	●	●
Scan paper documents to PDF and automatically recognize text with optical character recognition (OCR)		●	●	●
Save PDF files as Microsoft Word documents, retaining the layout, fonts, formatting, and tables, to facilitate reuse of content		●	●	●
Help protect PDF documents with 256-bit encryption		●	●	●
Apply restrictions on printing, copying, and altering PDF documents		●	●	●
Examine documents for hidden information and delete as needed		●	●	●
Merge files from multiple applications into a single PDF document		●	●	●
Assemble a wide range of content types in a polished, organized PDF Portfolio		●	●	●
Review documents using familiar commenting tools such as sticky notes, highlighting, lines, shapes, and stamps	🖳	●	●	●
Manage shared document reviews that allow review participants to see one another's comments		●	●	●
Enable real-time collaboration with synchronized document views and chat		●	●	●
Digitally sign PDF documents	🖳	●	●	●
Certify PDF documents using digital IDs		●	●	●
Easily create fillable PDF forms from paper or existing files using the Form Wizard		●	●	●
Distribute PDF forms to collect information and track their status†		●	●	●
Enable users of Adobe Reader® (version 8 or later) to fill in and save PDF forms locally		●	●	●
Convert documents to PDF/A for archiving with easy search and retrieval	●	●	●	●
Validate documents for conformance to ISO standards PDF/A, PDF/E, and PDF/X			●	●
Personalize a PDF Portfolio with customizable templates for navigation and branding			●	●
Permanently delete sensitive information, including specific text or illustrations, with redaction tools			●	●
Convert Autodesk® AutoCAD®, Microsoft Visio, and Microsoft Project files to PDF with one-button ease, preserving document layers in Visio and AutoCAD and object data in Visio*			●	●
Enable users of Adobe Reader (version 8 or later) to digitally sign PDF documents			●	●
Compare and highlight the differences between two versions of a PDF document			●	●
Create dynamic XML forms with Adobe LiveCycle® Designer ES (included)*			●	●
Preview, preflight, correct, and prepare PDF files for high-end print production and digital publishing			●	●
Create and validate accessible PDF documents			●	●
Insert FLV or H.264 video for direct playback in Adobe Acrobat® and Adobe Reader			●	●
Easily add audio, video, and quizzes to your PowerPoint slides and create rich, interactive presentations with Adobe Presenter (included)				●
Convert a variety of video formats to FLV for playback in PDF				●
Embed video in Microsoft Word or PowerPoint and convert to FLV in PDF				●
Convert 3D content to PDF for cross-platform sharing and collaboration				●
Combine multiple CAD formats in one assembly and save as PDF with Adobe 3D Reviewer (included)				●
Convert 2D and 3D designs from major CAD applications to PDF for use by extended teams without expensive CAD or viewer software				●
Create PDF maps by importing geospatial files that retain metadata and coordinates				●

🖳 When enabled by Acrobat Pro or Acrobat Pro Extended.

* Windows® only.

† For ad hoc forms distribution and data collection for up to 500 people.

ANNEXURE 5: Tables 5.1 and 5.4

Figure 5.1: Cronbach's Alpha Coefficient for Section A items forming the measuring instrument

Statements (Test all statements without current ones input)	Variable nr.	Correlation with total	Cronbach's Alpha Coefficient
Section A: Measuring instrument.			
1a. Rate your level of knowledge in the following types of software. - Word	Q1A	0.1854	0.9293
1b. Rate your level of knowledge in the following types of software. - Excel	Q1B	0.2545	0.9292
1c. Rate your level of knowledge in the following types of software. - Novell	Q1C	0.4562	0.9284
2a. How much has your current knowledge negatively affected the ability to do your job effectively? – Word	Q2A	0.3619	0.9287
2b. How much has your current knowledge negatively affected the ability to do your job effectively? - Excel	Q2B	0.4170	0.9285
2c. How much has your current knowledge negatively affected the ability to do your job effectively? - Novell	Q2C	0.3338	0.9288
3a. Indicate how much do you feel that you need to improve in the following areas? – Word	Q3A	0.2913	0.9292
3b. Indicate how much do you feel that you need to improve in the following areas? - Excel	Q3B	0.5561	0.9277
3c. Indicate how much do you feel that you need to improve in the following areas? - Novell	Q3C	0.5155	0.9279
4a. Rate how often you have been unable to complete a task effectively because of your lack of skills. – Word	Q4A	0.2001	0.9294
4b. Rate how often you have been unable to complete a task effectively because of your lack of skills. - Excel	Q4B	0.5166	0.9279
4c. Rate how often you have been unable to complete a task effectively because of your lack of skills. - Novell	Q4C	0.5655	0.9279
5a. Indicate the highest level of formal training courses you have completed for each of the areas. - Word	Q5A	0.3592	0.9287
5b. Indicate the highest level of formal training courses you have completed for each of the areas. - Excel	Q5B	0.3882	0.9286
5c. Indicate the highest level of formal training courses you have completed for each of the areas. - Novell	Q5C	0.5573	0.9277
6.1a Type of informal training / assistance: Websites – Word.	Q6A_1	0.0324	0.9296
6.2a Type of informal training / assistance: Colleague / Friend – Word.	Q6A_2	0.4540	0.9286

Statements (Test all statements without current ones input)		Variable nr.	Correlation with total	Cronbach's Alpha Coefficient
6.3a	Type of informal training / assistance: Service / Helpdesk – Word.	Q6A_3	-0.1364	0.9297
6.4a	Type of informal training / assistance: IT staff – Word.	Q6A_4	0.0712	0.9295
6.5a	Type of informal training / assistance: CDs / Books – Word.	Q6A_5	-0.1525	0.9298
6.6a	Type of informal training / assistance: N/A – Word.	Q6A_6	-0.2118	0.9300
6.1b	Type of informal training / assistance: Websites – Excel.	Q6B_1	0.0551	0.9295
6.2b	Type of informal training / assistance: Colleague / Friend – Excel.	Q6B_2	0.2945	0.9290
6.3b	Type of informal training / assistance: Service / Helpdesk – Excel.	Q6B_3	-0.1601	0.9297
6.4b	Type of informal training / assistance: IT staff – Excel.	Q6B_4	0.1072	0.9294
6.5b	Type of informal training / assistance: CDs / Books – Excel.	Q6B_5	0.0248	0.9295
6.6b	Type of informal training / assistance: N/A – Excel.	Q6B_6	-0.2834	0.9300
6.1c	Type of informal training / assistance: Websites – Novell.	Q6C_1	-0.1529	0.9298
6.2c	Type of informal training / assistance: Colleague / Friend – Novell.	Q6C_2	0.2662	0.9291
6.3c	Type of informal training / assistance: Service / Helpdesk – Novell.	Q6C_3	0.1383	0.9293
6.4c	Type of informal training / assistance: IT staff – Novell.	Q6C_4	-0.0448	0.9298
6.6c	Type of informal training / assistance: N/A – Novell.	Q6C_6	-0.2255	0.9300
7.a1	Type of training prefers to have: Formal training – Word.	Q7A_1	0.2271	0.9292
7.b1	Type of training prefers to have: Short training sessions – Word.	Q7B_1	0.0320	0.9296
7.c1	Type of training prefers to have: Formal - Help/Service desk – Word.	Q7C_1	-0.0959	0.9297
7.d1	Type of training prefer to have: Informal - IT staff – Word.	Q7D_1	-0.1399	0.9299
7.e1	Type of training prefers to have: Informal – colleagues – Word.	Q7E_1	-0.1377	0.9299
7.f1	Type of training prefers to have: e-Learning courses / Internet – Word.	Q7F_1	0.0631	0.9294
7.a2	Type of training prefers to have: Formal training – Excel.	Q7A_2	0.1045	0.9294
7.b2	Type of training prefers to have: Short training sessions – Excel.	Q7B_2	0.1740	0.9293
7.c2	Type of training prefers to have: Formal - Help/Service desk – Excel.	Q7C_2	0.1024	0.9294

Statements (Test all statements without current ones input)		Variable nr.	Correlation with total	Cronbach's Alpha Coefficient
7.d2	Type of training prefer to have: Informal - IT staff – Excel.	Q7D_2	0.0710	0.9295
7.e2	Type of training prefers to have: Informal – colleagues – Excel.	Q7E_2	-0.3289	0.9304
7.f2	Type of training prefers to have: e-Learning courses / Internet – Excel.	Q7F_2	0.0734	0.9295
7.a3	Type of training prefers to have: Formal training – Novell.	Q7A_3	0.1478	0.9293
7.b3	Type of training prefers to have: Short training sessions – Novell.	Q7B_3	0.0096	0.9296
7.c3	Type of training prefers to have: Formal - Help/Service desk – Novell.	Q7C_3	0.2116	0.9292
7.d3	Type of training prefer to have: Informal - IT staff – Novell.	Q7D_3	-0.0315	0.9298
7.e3	Type of training prefers to have: Informal – colleagues – Novell.	Q7E_3	-0.3618	0.9304
7.f3	Type of training prefers to have: e-Learning courses / Internet – Novell.	Q7F_3	0.0734	0.9295
Cronbach's Coefficient Alpha for standardized variables				**0.9316**
Cronbach's Coefficient Alpha for raw variables				**0.9294**

Table 5.4: Descriptive statistics for Section B statements

Statement and Category		Statistic	I can't do this	I avoid / don't do this often	I am competent at this	I need this to do my job effectively	I need training in this
Microsoft Office – Word							
12a. Insert symbol.	Yes	Frequency	1	4	32	13	4
		Percentage	2.4%	9.8%	78.0%	31.7%	9.8%
	No	Frequency	40	37	9	28	37
		Percentage	97.6%	90.2%	22.0%	68.3%	90.2%
12b. Insert page break	Yes	Frequency	1	6	31	11	2
		Percentage	2.4%	14.6%	75.6%	26.8%	4.9%
	No	Frequency	40	35	10	30	39
		Percentage	97.6%	85.4%	24.4%	73.2%	84.1%
12c. Insert table.	Yes	Frequency	1	3	36	11	1
		Percentage	2.4%	7.3%	87.8%	26.8%	2.4%
	No	Frequency	40	38	5	30	40
		Percentage	97.6%	92.7%	12.2%	73.2%	97.6%
12d. Insert clip art / images	Yes	Frequency	4	5	31	8	1
		Percentage	9.8%	12.2%	75.6%	19.5%	2.4%
	No	Frequency	37	36	10	33	40
		Percentage	90.2%	87.8%	24.4%	80.5%	97.6%
12e. Insert watermark	Yes	Frequency	7	12	20	5	6
		Percentage	17.1%	29.3%	48.8%	12.2%	14.6%
	No	Frequency	34	29	21	36	35
		Percentage	82.9%	70.7%	51.2%	87.8%	85.4%

Statement and Category		Statistic	I can't do this	I avoid / don't do this often	I am competent at this	I need this to do my job effectively	I need training in this
12f. Insert header / footer.	Yes	Frequency	3	4	31	11	4
		Percentage	7.32%	9.8%	75.6%	26.8%	9.8%
	No	Frequency	38	37	10	30	37
		Percentage	92.7%	90.2%	24.4%	73.2%	90.2%
12g. Set / move tabs.	Yes	Frequency	3	10	23	10	8
		Percentage	7.3%	24.4%	56.1%	24.4%	19.5%
	No	Frequency	38	31	18	31	33
		Percentage	92.7%	75.6%	43.9%	75.6%	80.5%
12h. Justify text.	Yes	Frequency	0	6	31	10	4
		Percentage	0.0%	14.6%	75.6%	24.4%	9.8%
	No	Frequency	41	35	10	31	37
		Percentage	100.0%	85.4%	24.4%	75.6%	90.2%
12i. Find / replace text.	Yes	Frequency	3	7	27	11	4
		Percentage	7.3%	17.1%	65.8%	26.8%	9.8%
	No	Frequency	38	34	14	30	37
		Percentage	92.7%	82.9%	34.2%	73.2%	90.2%
12j. Change text orientation.	Yes	Frequency	2	7	29	11	4
		Percentage	4.9%	17.1%	70.7%	26.8%	9.8%
	No	Frequency	39	34	12	30	37
		Percentage	95.1%	82.9%	29.3%	73.2%	90.2%
12k. Change case of text.	Yes	Frequency	2	2	36	11	0
		Percentage	4.9%	4.9%	87.8%	26.8%	0.0%
	No	Frequency	39	39	5	30	41
		Percentage	95.1%	95.1%	12.2%	73.2%	100.0%
12l. Creating superscript text.	Yes	Frequency	2	12	22	10	5
		Percentage	4.9%	29.3%	53.7%	24.4%	12.2%
	No	Frequency	39	29	19	31	36
		Percentage	95.1%	70.7%	46.3%	75.6%	87.8%
12m. Insert bullets / numbering.	Yes	Frequency	2	2	36	10	2
		Percentage	4.9%	4.9%	87.8%	24.4%	4.9%
	No	Frequency	39	39	5	31	39
		Percentage	95.1%	95.1%	12.2%	75.6%	95.1%
12n. Page numbering.	Yes	Frequency	1	3	34	13	1
		Percentage	2.4%	7.3%	82.9%	31.7%	2.4%
	No	Frequency	40	38	7	28	40
		Percentage	97.6%	92.7%	17.1%	68.3%	97.6%
12o. Set margins / page size / orientation.	Yes	Frequency	2	4	32	12	4
		Percentage	4.9%	9.8%	78.0%	29.3%	9.8%
	No	Frequency	39	37	9	29	37
		Percentage	95.1%	90.2%	22.0%	70.7%	90.2%
12p. Use format painter.	Yes	Frequency	3	16	18	6	7
		Percentage	7.3%	39.0%	43.9%	14.6%	17.1%
	No	Frequency	38	25	23	35	34
		Percentage	92.7%	61.0%	56.1%	85.4%	82.9%
12q. Find word count of document.	Yes	Frequency	3	14	21	7	7
		Percentage	7.3%	34.2%	51.2%	17.1%	17.1%
	No	Frequency	38	27	20	34	34

Statement and Category		Statistic	I can't do this	I avoid / don't do this often	I am competent at this	I need this to do my job effectively	I need training in this
		Percentage	92.7%	65.8%	48.8%	82.9%	82.9%
12r. Check spelling / grammar.	Yes	Frequency	1	3	36	12	2
		Percentage	2.4%	7.3%	87.8%	29.3%	4.9%
	No	Frequency	40	38	5	29	39
		Percentage	97.6%	92.7%	12.2%	70.7%	95.1%
12s. Track edit changes / mark-up.	Yes	Frequency	7	13	17	10	12
		Percentage	17.1%	31.7%	41.5%	24.4%	29.3%
	No	Frequency	34	28	24	31	29
		Percentage	82.9%	68.3%	58.5%	75.6%	70.7%
12t. Use / modify build-in styles.	Yes	Frequency	6	14	15	9	14
		Percentage	14.6%	34.2%	36.6%	22.0%	34.2%
	No	Frequency	35	27	26	32	27
		Percentage	85.4%	65.8%	63.4%	78.0%	65.8%
12u. Insert automatic table of contents.	Yes	Frequency	4	15	19	11	11
		Percentage	9.8%	36.6%	46.3%	26.8%	26.8%
	No	Frequency	37	26	22	30	30
		Percentage	90.2%	63.4%	53.7%	73.2%	73.2%
12v. Mail merge / merge to e-mail.	Yes	Frequency	12	8	17	15	15
		Percentage	29.3%	19.5%	41.5%	36.6%	36.6%
	No	Frequency	29	33	24	26	26
		Percentage	70.7%	80.5%	58.5%	63.4%	63.4%
Microsoft Office – Excel							
13a. Changing number style.	Yes	Frequency	3	7	23	10	7
		Percentage	7.3%	17.1%	56.1%	24.4%	17.1%
	No	Frequency	38	34	18	31	34
		Percentage	92.7%	82.9%	43.9%	75.6%	82.9%
13b. Insert or delete row/column	Yes	Frequency	2	1	34	11	1
		Percentage	4.9%	2.4%	82.9%	26.8%	2.4%
	No	Frequency	39	40	7	30	40
		Percentage	95.1%	97.6%	17.1%	73.2%	97.6%
13c. Hide rows / columns	Yes	Frequency	3	3	29	11	5
		Percentage	7.3%	7.3%	70.7%	26.8%	12.2%
	No	Frequency	38	38	12	30	36
		Percentage	92.7%	92.7%	29.3%	73.2%	87.8%
13d. Manually re-size row / column	Yes	Frequency	2	2	30	12	4
		Percentage	4.9%	4.9%	73.2%	29.3%	9.8%
	No	Frequency	39	39	11	29	37
		Percentage	95.1%	95.1%	26.8%	70.7%	90.2%
13e. Re-size row / column to fit contents.	Yes	Frequency	2	4	28	11	6
		Percentage	4.9%	9.8%	68.3%	26.8%	14.6%
	No	Frequency	39	37	13	30	35
		Percentage	95.1%	90.2%	31.7%	73.2%	85.4%
13f. Adding background / fill.	Yes	Frequency	3	9	22	9	8
		Percentage	7.3%	22.0%	53.7%	22.0%	19.5%
	No	Frequency	38	32	19	32	33
		Percentage	92.7%	78.0%	46.3%	78.0%	80.5%
13g. Automatic fill.	Yes	Frequency	3	13	19	7	8

Statement and Category		Statistic	I can't do this	I avoid / don't do this often	I am competent at this	I need this to do my job effectively	I need training in this
		Percentage	7.3%	31.7%	46.3%	17.1%	19.5%
	No	Frequency	38	28	22	34	33
		Percentage	92.7%	68.3%	53.7%	82.9%	80.5%
13h. Conditional formatting.	Yes	Frequency	3	13	18	8	13
		Percentage	7.3%	31.7%	43.9%	19.5%	31.7%
	No	Frequency	38	28	23	33	28
		Percentage	92.7%	68.3%	56.1%	80.5%	68.3%
13i. Enter manual formulas.	Yes	Frequency	5	13	15	11	18
		Percentage	12.2%	31.7%	36.6%	26.8%	43.9%
	No	Frequency	36	28	26	30	23
		Percentage	87.8%	68.3%	63.4%	73.2%	56.1%
13j. Change relative / absolute references.	Yes	Frequency	12	16	6	7	21
		Percentage	29.3%	39.0%	14.6%	17.1%	51.2%
	No	Frequency	29	25	35	34	20
		Percentage	70.7%	61.0%	85.4%	82.9%	48.8%
13k. Enter automatic formulas.	Yes	Frequency	10	14	10	10	18
		Percentage	24.4%	34.2%	24.4%	24.4%	43.9%
	No	Frequency	31	27	31	31	23
		Percentage	75.6%	65.8%	75.6%	75.6%	56.1%
13l. Merge cells.	Yes	Frequency	4	5	27	12	6
		Percentage	9.8%	12.2%	65.8%	29.3%	14.6%
	No	Frequency	37	36	14	29	35
		Percentage	90.2%	87.8%	34.2%	70.7%	85.4%
13m. Create header / footer.	Yes	Frequency	2	5	27	11	5
		Percentage	4.9%	12.2%	65.8%	26.8%	12.2%
	No	Frequency	39	36	14	30	36
		Percentage	95.1%	87.8%	34.2%	73.2%	87.8%
13n. Create charts.	Yes	Frequency	1	12	20	11	9
		Percentage	2.4%	29.4%	48.8%	26.8%	22.0%
	No	Frequency	40	29	21	30	32
		Percentage	97.6%	70.7%	51.2%	73.2%	78.0%
13o. Print row / column headings on each page.	Yes	Frequency	2	12	18	11	11
		Percentage	4.9%	29.3%	43.9%	26.8%	26.8%
	No	Frequency	39	29	23	30	30
		Percentage	95.1%	70.7%	56.1%	73.2%	73.2%
13p. Create new worksheet.	Yes	Frequency	2	5	29	13	4
		Percentage	4.9%	12.2%	70.7%	31.7%	9.8%
	No	Frequency	39	36	12	28	37
		Percentage	95.1%	87.8%	29.4%	68.3%	90.2%
13q. Link data between worksheets.	Yes	Frequency	5	11	14	10	19
		Percentage	12.2%	26.8%	34.2%	24.4%	46.3%
	No	Frequency	36	30	27	31	22
		Percentage	87.8%	73.2%	65.8%	75.6%	53.7%
13r. Link data between different workbooks.	Yes	Frequency	6	12	12	9	19
		Percentage	14.6%	29.3%	29.3%	22.0%	46.3%
	No	Frequency	35	29	29	32	22
		Percentage	85.4%	70.7%	70.7%	78.0	53.7%

Statement and Category		Statistic	I can't do this	I avoid / don't do this often	I am competent at this	I need this to do my job effectively	I need training in this
13s. Filter and sort data.	Yes	Frequency	3	6	22	13	12
		Percentage	7.3%	14.6%	53.7%	31.7%	29.3%
	No	Frequency	38	35	19	28	29
		Percentage	92.7%	85.4%	46.3%	68.3%	70.7%
13t. Add automatic subtotals to data.	Yes	Frequency	4	11	16	14	14
		Percentage	9.8%	26.8%	39.0%	34.2%	34.2%
	No	Frequency	37	30	25	27	27
		Percentage	90.2%	73.2%	61.0%	65.8%	65.8%
13u. Remove / highlight duplicate data automatically.	Yes	Frequency	3	12	16	11	13
		Percentage	7.3%	29.3%	39.0%	26.8%	31.7%
	No	Frequency	38	29	25	30	28
		Percentage	92.7%	70.7%	61.0%	73.2%	68.3%
13v. Insert Pivot tables.	Yes	Frequency	13	12	8	8	21
		Percentage	31.7%	29.3%	19.5%	19.5%	51.2%
	No	Frequency	28	29	33	33	20
		Percentage	68.3%	70.7%	80.5%	80.5%	48.8%
Novell Group Wise							
14a. Create / send mail message.	Yes	Frequency	1	1	37	13	0
		Percentage	2.4%	2.4%	90.2%	31.7%	0.0%
	No	Frequency	40	40	4	28	41
		Percentage	97.6%	97.6%	9.8%	68.3%	100.0%
14b. Attaching a file to a message.	Yes	Frequency	2	0	37	12	0
		Percentage	4.9%	0.0%	90.2%	29.3%	0.0%
	No	Frequency	39	41	4	29	41
		Percentage	95.1%	100.0%	9.8%	70.7%	100.0%
14c. Viewing / opening and attached file.	Yes	Frequency	1	0	39	11	0
		Percentage	2.4%	0.0%	95.1%	26.8%	0.0%
	No	Frequency	40	41	2	30	41
		Percentage	97.6%	100.0%	4.9%	73.2%	100.0%
14d. Checking on the status of mail.	Yes	Frequency	1	2	33	11	6
		Percentage	2.4%	4.9%	80.5%	26.8%	14.6%
	No	Frequency	40	39	8	30	35
		Percentage	97.6%	95.1%	19.5%	73.2%	85.4%
14e. Resending mail.	Yes	Frequency	1	2	37	10	2
		Percentage	2.4%	4.9%	90.2%	24.4%	4.9%
	No	Frequency	40	39	4	31	39
		Percentage	97.6%	95.1%	9.8%	75.6%	95.1%
14f. Retracting mail.	Yes	Frequency	4	4	28	13	5
		Percentage	9.8%	9.8%	68.3%	31.7%	12.2%
	No	Frequency	37	37	13	28	36
		Percentage	90.2%	90.2%	31.7%	68.3%	87.8%
14g. Forwarding mail to other users.	Yes	Frequency	1	0	39	10	0
		Percentage	2.4%	0.0%	95.1%	24.4%	0.0%
	No	Frequency	40	41	2	31	41
		Percentage	97.6%	100.0%	4.9%	75.6%	100.0%
14h. Quick viewer.	Yes	Frequency	5	6	25	10	6
		Percentage	12.2%	14.6%	61.0%	24.4%	14.6%

Statement and Category		Statistic	I can't do this	I avoid / don't do this often	I am competent at this	I need this to do my job effectively	I need training in this
	No	Frequency	36	35	16	31	35
		Percentage	87.8%	85.4%	39.0%	75.6%	85.4%
14i. Marking an item unread.	Yes	Frequency	3	8	25	9	3
		Percentage	7.3%	19.5%	61.0%	22.0%	7.3%
	No	Frequency	38	33	16	32	38
		Percentage	92.7%	80.5%	39.0%	78.0%	92.7%
14j. Creating / renaming personal folders.	Yes	Frequency	3	4	30	8	5
		Percentage	7.3%	9.8%	73.2%	19.5%	12.2%
	No	Frequency	38	37	11	33	36
		Percentage	92.7%	90.2%	26.8%	80.5%	87.8%
14k. Creating a shared folder.	Yes	Frequency	5	12	17	9	14
		Percentage	12.2%	29.3%	41.5%	22.0%	34.2%
	No	Frequency	36	29	24	32	27
		Percentage	87.8%	70.7%	58.5%	78.0%	65.8%
14l. Manage the calendar.	Yes	Frequency	4	9	24	11	9
		Percentage	9.8%	22.0%	58.5%	26.8%	22.0%
	No	Frequency	37	32	17	30	32
		Percentage	90.2%	78.0%	41.5%	73.2%	78.0%
14m. Managing contact / groups..	Yes	Frequency	2	5	29	10	6
		Percentage	4.9%	12.2%	70.7%	24.4%	14.6%
	No	Frequency	39	36	12	31	35
		Percentage	95.1%	87.8%	29.4%	75.6%	85.4%
14n. Adding a signature / vCard.	Yes	Frequency	4	5	29	6	7
		Percentage	9.8%	12.2%	70.7%	14.6%	17.1%
	No	Frequency	37	36	12	35	34
		Percentage	90.2%	87.8%	29.4%	85.4%	82.9%
14o. Searching for e-mails. / contents of mails.	Yes	Frequency	2	4	31	12	10
		Percentage	4.9%	9.8%	75.6%	29.3%	24.4%
	No	Frequency	39	37	10	29	31
		Percentage	95.1%	90.2%	24.4%	70.7%	75.6%
14p. Delaying the send of e-mails.	Yes	Frequency	8	15	12	7	14
		Percentage	19.5%	36.6%	29.4%	17.1%	34.2%
	No	Frequency	33	26	29	34	27
		Percentage	80.5%	63.4%	70.7%	82.9%	65.8%
14q. Setting the priority of e-mails.	Yes	Frequency	7	7	24	7	9
		Percentage	17.1%	17.1%	58.5%	17.1%	22.0%
	No	Frequency	34	34	17	34	32
		Percentage	82.9%	82.9%	41.5%	82.9%	78.0%
14r. Setting up of mail rules.	Yes	Frequency	9	11	15	6	13
		Percentage	22.0%	26.8%	36.6%	14.6%	31.7%
	No	Frequency	32	30	26	35	28
		Percentage	78.0%	73.2%	63.4%	85.4%	68.3%
14s. Setting up of vacation / out of office reply rules.	Yes	Frequency	11	5	18	11	15
		Percentage	26.8%	12.2%	43.9%	26.8%	36.6%
	No	Frequency	30	36	23	30	26
		Percentage	73.2%	87.8%	56.1%	73.2%	63.4%
14t. Setting up	Yes	Frequency	13	11	11	5	13

Statement and Category		Statistic	I can't do this	I avoid / don't do this often	I am competent at this	I need this to do my job effectively	I need training in this
proxy access.		Percentage	31.7%	26.8%	26.8%	12.2%	31.7%
	No	Frequency	28	30	30	36	28
		Percentage	68.3%	73.2%	73.2%	87.8%	68.3%
14u. Create a routing item.	Yes	Frequency	14	14	6	4	20
		Percentage	34.2%	34.2%	14.6%	9.8%	48.8%
	No	Frequency	27	27	35	37	21
		Percentage	65.8%	65.8%	85.4%	90.2%	51.2%
14v. Online mode.	Yes	Frequency	12	11	9	3	19
		Percentage	29.3%	26.8%	22.0%	7.3%	46.3%
	No	Frequency	29	30	32	38	22
		Percentage	70.7%	73.2%	78.0%	92.7%	53.7%
14w. Caching mode.	Yes	Frequency	15	13	6	3	21
		Percentage	36.6%	31.7%	14.6%	7.3%	51.2%
	No	Frequency	26	28	35	38	20
		Percentage	63.4%	68.3%	85.4%	92.7%	48.8%
14x. Remote mode.	Yes	Frequency	14	13	8	3	20
		Percentage	34.2%	31.7%	19.5%	7.3%	48.8%
	No	Frequency	27	28	33	38	21
		Percentage	65.8%	68.3%	80.5%	92.7%	51.2%
14y. Archiving / retrieving e-mails.	Yes	Frequency	4	5	29	13	6
		Percentage	9.8%	12.2%	70.7%	31.7%	14.6%
	No	Frequency	37	36	12	28	35
		Percentage	90.2%	87.8%	29.3%	68.3%	85.4%

ANNEXURE 6: Cronbach Alpha Coefficients

```
                           Simple Statistics
Variable    N      Mean     Std Dev        Sum     Minimum     Maximum     Label
-----------------------------------------------------------------------------------
```

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
Q1A	33	4.09091	0.76500	135.00000	3.00000	5.00000	Q1A
Q1B	33	3.51515	0.97215	116.00000	1.00000	5.00000	Q1B
Q1C	33	3.93939	0.78817	130.00000	3.00000	5.00000	Q1C
Q2A	33	4.09091	1.04174	135.00000	2.00000	5.00000	Q2A
Q2B	33	3.63636	1.19421	120.00000	2.00000	5.00000	Q2B
Q2C	33	4.09091	1.01130	135.00000	2.00000	5.00000	Q2C
Q3A	33	3.12121	1.24392	103.00000	1.00000	5.00000	Q3A
Q3B	33	2.51515	1.25303	83.00000	1.00000	5.00000	Q3B
Q3C	33	3.27273	1.23168	108.00000	1.00000	5.00000	Q3C
Q4A	33	3.96970	0.91804	131.00000	2.00000	5.00000	Q4A
Q4B	33	3.51515	1.12142	116.00000	1.00000	5.00000	Q4B
Q4C	33	4.09091	0.80482	135.00000	2.00000	5.00000	Q4C
Q5A	33	2.87879	0.99240	95.00000	1.00000	4.00000	Q5A
Q5B	33	2.48485	1.03444	82.00000	1.00000	4.00000	Q5B
Q5C	33	2.33333	1.13652	77.00000	1.00000	4.00000	Q5C
Q6A_1	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q6A_1
Q6A_2	33	1.54545	0.50565	51.00000	1.00000	2.00000	Q6A_2
Q6A_3	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q6A_3
Q6A_4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q6A_4
Q6A_5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q6A_5
Q6A_6	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q6A_6
Q6B_1	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q6B_1
Q6B_2	33	1.42424	0.50189	47.00000	1.00000	2.00000	Q6B_2
Q6B_3	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q6B_3
Q6B_4	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q6B_4
Q6B_5	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q6B_5
Q6B_6	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q6B_6
Q6C_1	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q6C_1
Q6C_2	33	1.48485	0.50752	49.00000	1.00000	2.00000	Q6C_2
Q6C_3	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q6C_3
Q6C_4	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q6C_4
Q6C_6	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q6C_6
Q7A_1	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q7A_1
Q7A_2	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q7A_2
Q7A_3	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q7A_3
Q7B_1	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q7B_1
Q7B_2	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q7B_2
Q7B_3	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q7B_3
Q7C_1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q7C_1
Q7C_2	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q7C_2
Q7C_3	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q7C_3
Q7D_1	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q7D_1
Q7D_2	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q7D_2
Q7D_3	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q7D_3
Q7E_1	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q7E_1
Q7E_2	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q7E_2
Q7E_3	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q7E_3
Q7F_1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q7F_1
Q7F_2	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q7F_2
Q7F_3	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q7F_3
Q12a1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12a1
Q12a2	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12a2
Q12a3	33	1.15152	0.36411	38.00000	1.00000	2.00000	Q12a3
Q12a4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12a4
Q12a5	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12a5
Q12b1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12b1
Q12b2	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q12b2
Q12b3	33	1.21212	0.41515	40.00000	1.00000	2.00000	Q12b3
Q12b4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12b4
Q12b5	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12b5
Q12c1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12c1
Q12c2	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12c2
Q12c3	33	1.06061	0.24231	35.00000	1.00000	2.00000	Q12c3
Q12c4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12c4
Q12d1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12d1
Q12d2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12d2
Q12d3	33	1.18182	0.39167	39.00000	1.00000	2.00000	Q12d3
Q12d4	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q12d4
Q12d5	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12d5
Q12e1	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q12e1
Q12e2	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12e2
Q12e3	33	1.45455	0.50565	48.00000	1.00000	2.00000	Q12e3
Q12e4	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12e4
Q12e5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q12e5
Q12f1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12f1
Q12f2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12f2
Q12f3	33	1.21212	0.41515	40.00000	1.00000	2.00000	Q12f3
Q12f4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12f4
Q12f5	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12f5
Q12g1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12g1
Q12g2	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q12g2
Q12g3	33	1.42424	0.50189	47.00000	1.00000	2.00000	Q12g3
Q12g4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q12g4
Q12g5	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q12g5
Q12h2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12h2
Q12h3	33	1.18182	0.39167	39.00000	1.00000	2.00000	Q12h3
Q12h4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q12h4
Q12h5	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12h5
Q12i1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12i1
Q12i2	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q12i2
Q12i3	33	1.30303	0.46669	43.00000	1.00000	2.00000	Q12i3
Q12i4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12i4

Q12i5	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q12i5
Q12j1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12j1
Q12j2	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q12j2
Q12j3	33	1.24242	0.43519	41.00000	1.00000	2.00000	Q12j3
Q12j4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12j4
Q12j5	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12j5
Q12k1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12k1
Q12k2	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12k2
Q12k3	33	1.09091	0.29194	36.00000	1.00000	2.00000	Q12k3
Q12k4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12k4
Q12l1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12l1
Q12l2	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q12l2
Q12l3	33	1.39394	0.49620	46.00000	1.00000	2.00000	Q12l3
Q12l4	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q12l4
Q12l5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q12l5
Q12m1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12m1
Q12m2	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12m2
Q12m3	33	1.09091	0.29194	36.00000	1.00000	2.00000	Q12m3
Q12m4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q12m4
Q12m5	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12m5
Q12n1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12n1
Q12n2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12n2
Q12n3	33	1.15152	0.36411	38.00000	1.00000	2.00000	Q12n3
Q12n4	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q12n4
Q12n5	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12n5
Q12o1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12o1
Q12o2	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12o2
Q12o3	33	1.15152	0.36411	38.00000	1.00000	2.00000	Q12o3
Q12o4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12o4
Q12o5	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12o5
Q12p1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12p1
Q12p2	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q12p2
Q12p3	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q12p3
Q12p4	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q12p4
Q12p5	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q12p5
Q12q1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12q1
Q12q2	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q12q2
Q12q3	33	1.42424	0.50189	47.00000	1.00000	2.00000	Q12q3
Q12q4	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q12q4
Q12q5	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q12q5
Q12r1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12r1
Q12r2	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q12r2
Q12r3	33	1.09091	0.29194	36.00000	1.00000	2.00000	Q12r3
Q12r4	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q12r4
Q12r5	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q12r5
Q12s1	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q12s1
Q12s2	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q12s2
Q12s3	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q12s3
Q12s4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q12s4
Q12s5	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q12s5
Q12t1	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q12t1
Q12t2	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q12t2
Q12t3	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q12t3
Q12t4	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q12t4
Q12t5	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q12t5
Q12u1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q12u1
Q12u2	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q12u2
Q12u3	33	1.48485	0.50752	49.00000	1.00000	2.00000	Q12u3
Q12u4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q12u4
Q12u5	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q12u5
Q12v1	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q12v1
Q12v2	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q12v2
Q12v3	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q12v3
Q12v4	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q12v4
Q12v5	33	1.60606	0.49620	53.00000	1.00000	2.00000	Q12v5
Q13a1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13a1
Q13a2	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q13a2
Q13a3	33	1.36364	0.48850	45.00000	1.00000	2.00000	Q13a3
Q13a4	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q13a4
Q13a5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q13a5
Q13b1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q13b1
Q13b2	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q13b2
Q13b3	33	1.12121	0.33143	37.00000	1.00000	2.00000	Q13b3
Q13b4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13b4
Q13b5	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q13b5
Q13c1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q13c1
Q13c2	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q13c2
Q13c3	33	1.21212	0.41515	40.00000	1.00000	2.00000	Q13c3
Q13c4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13c4
Q13c5	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q13c5
Q13d1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q13d1
Q13d2	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q13d2
Q13d3	33	1.18182	0.39167	39.00000	1.00000	2.00000	Q13d3
Q13d4	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q13d4
Q13d5	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13d5
Q13e1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q13e1
Q13e2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13e2
Q13e3	33	1.27273	0.45227	42.00000	1.00000	2.00000	Q13e3
Q13e4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13e4
Q13e5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q13e5
Q13f1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q13f1
Q13f2	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q13f2
Q13f3	33	1.39394	0.49620	46.00000	1.00000	2.00000	Q13f3
Q13f4	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q13f4
Q13f5	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q13f5
Q13g1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q13g1
Q13g2	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13g2
Q13g3	33	1.45455	0.50565	48.00000	1.00000	2.00000	Q13g3
Q13g4	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q13g4

Q13g5	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q13g5
Q13h1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q13h1
Q13h2	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q13h2
Q13h3	33	1.51515	0.50752	50.00000	1.00000	2.00000	Q13h3
Q13h4	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q13h4
Q13h5	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q13h5
Q13i1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13i1
Q13i2	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q13i2
Q13i3	33	1.60606	0.49620	53.00000	1.00000	2.00000	Q13i3
Q13i4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13i4
Q13i5	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q13i5
Q13j1	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q13j1
Q13j2	33	1.54545	0.50565	51.00000	1.00000	2.00000	Q13j2
Q13j3	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q13j3
Q13j4	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q13j4
Q13j5	33	1.51515	0.50752	50.00000	1.00000	2.00000	Q13j5
Q13k1	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q13k1
Q13k2	33	1.60606	0.49620	53.00000	1.00000	2.00000	Q13k2
Q13k3	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q13k3
Q13k4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13k4
Q13k5	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q13k5
Q13l1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13l1
Q13l2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13l2
Q13l3	33	1.30303	0.46669	43.00000	1.00000	2.00000	Q13l3
Q13l4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13l4
Q13l5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q13l5
Q13m1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q13m1
Q13m2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13m2
Q13m3	33	1.30303	0.46669	43.00000	1.00000	2.00000	Q13m3
Q13m4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13m4
Q13m5	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q13m5
Q13n1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q13n1
Q13n2	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13n2
Q13n3	33	1.45455	0.50565	48.00000	1.00000	2.00000	Q13n3
Q13n4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13n4
Q13n5	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q13n5
Q13o1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q13o1
Q13o2	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13o2
Q13o3	33	1.48485	0.50752	49.00000	1.00000	2.00000	Q13o3
Q13o4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13o4
Q13o5	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q13o5
Q13p1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q13p1
Q13p2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13p2
Q13p3	33	1.24242	0.43519	41.00000	1.00000	2.00000	Q13p3
Q13p4	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q13p4
Q13p5	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13p5
Q13q1	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q13q1
Q13q2	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13q2
Q13q3	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q13q3
Q13q4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13q4
Q13q5	33	1.51515	0.50752	50.00000	1.00000	2.00000	Q13q5
Q13r1	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q13r1
Q13r2	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q13r2
Q13r3	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q13r3
Q13r4	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q13r4
Q13r5	33	1.54545	0.50565	51.00000	1.00000	2.00000	Q13r5
Q13s1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q13s1
Q13s2	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q13s2
Q13s3	33	1.39394	0.49620	46.00000	1.00000	2.00000	Q13s3
Q13s4	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q13s4
Q13s5	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q13s5
Q13t1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13t1
Q13t2	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13t2
Q13t3	33	1.54545	0.50565	51.00000	1.00000	2.00000	Q13t3
Q13t4	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q13t4
Q13t5	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q13t5
Q13u1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q13u1
Q13u2	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q13u2
Q13u3	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q13u3
Q13u4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13u4
Q13u5	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q13u5
Q13v1	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13v1
Q13v2	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q13v2
Q13v3	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q13v3
Q13v4	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q13v4
Q13v5	33	1.48485	0.50752	49.00000	1.00000	2.00000	Q13v5
Q14a1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14a1
Q14a3	33	1.06061	0.24231	35.00000	1.00000	2.00000	Q14a3
Q14a4	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q14a4
Q14b1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14b1
Q14b3	33	1.06061	0.24231	35.00000	1.00000	2.00000	Q14b3
Q14b4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q14b4
Q14c1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14c1
Q14c3	33	1.03030	0.17408	34.00000	1.00000	2.00000	Q14c3
Q14c4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q14c4
Q14d1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14d1
Q14d2	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14d2
Q14d3	33	1.15152	0.36411	38.00000	1.00000	2.00000	Q14d3
Q14d4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q14d4
Q14d5	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q14d5
Q14e1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14e1
Q14e2	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14e2
Q14e3	33	1.06061	0.24231	35.00000	1.00000	2.00000	Q14e3
Q14e4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q14e4
Q14e5	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14e5
Q14f1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q14f1
Q14f2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q14f2
Q14f3	33	1.24242	0.43519	41.00000	1.00000	2.00000	Q14f3
Q14f4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q14f4

Q14f5	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q14f5
Q14g1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14g1
Q14g3	33	1.03030	0.17408	34.00000	1.00000	2.00000	Q14g3
Q14g4	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q14g4
Q14h1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q14h1
Q14h2	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q14h2
Q14h3	33	1.36364	0.48850	45.00000	1.00000	2.00000	Q14h3
Q14h4	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q14h4
Q14h5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14h5
Q14i1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14i1
Q14i2	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q14i2
Q14i3	33	1.33333	0.47871	44.00000	1.00000	2.00000	Q14i3
Q14i4	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q14i4
Q14i5	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q14i5
Q14j1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q14j1
Q14j2	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q14j2
Q14j3	33	1.21212	0.41515	40.00000	1.00000	2.00000	Q14j3
Q14j4	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14j4
Q14j5	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q14j5
Q14k1	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14k1
Q14k2	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q14k2
Q14k3	33	1.54545	0.50565	51.00000	1.00000	2.00000	Q14k3
Q14k4	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14k4
Q14k5	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q14k5
Q14l1	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q14l1
Q14l2	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q14l2
Q14l3	33	1.39394	0.49620	46.00000	1.00000	2.00000	Q14l3
Q14l4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q14l4
Q14l5	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q14l5
Q14m1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14m1
Q14m2	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q14m2
Q14m3	33	1.24242	0.43519	41.00000	1.00000	2.00000	Q14m3
Q14m4	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q14m4
Q14m5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14m5
Q14n1	33	1.96970	0.17408	65.00000	1.00000	2.00000	Q14n1
Q14n2	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14n2
Q14n3	33	1.21212	0.41515	40.00000	1.00000	2.00000	Q14n3
Q14n4	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q14n4
Q14n5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14n5
Q14o1	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q14o1
Q14o2	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q14o2
Q14o3	33	1.24242	0.43519	41.00000	1.00000	2.00000	Q14o3
Q14o4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q14o4
Q14o5	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q14o5
Q14p1	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q14p1
Q14p2	33	1.60606	0.49620	53.00000	1.00000	2.00000	Q14p2
Q14p3	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q14p3
Q14p4	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14p4
Q14p5	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q14p5
Q14q1	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14q1
Q14q2	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q14q2
Q14q3	33	1.36364	0.48850	45.00000	1.00000	2.00000	Q14q3
Q14q4	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14q4
Q14q5	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q14q5
Q14r1	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q14r1
Q14r2	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q14r2
Q14r3	33	1.57576	0.50189	52.00000	1.00000	2.00000	Q14r3
Q14r4	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14r4
Q14r5	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q14r5
Q14s1	33	1.78788	0.41515	59.00000	1.00000	2.00000	Q14s1
Q14s2	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14s2
Q14s3	33	1.48485	0.50752	49.00000	1.00000	2.00000	Q14s3
Q14s4	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q14s4
Q14s5	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q14s5
Q14t1	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q14t1
Q14t2	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q14t2
Q14t3	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q14t3
Q14t4	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q14t4
Q14t5	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q14t5
Q14u1	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q14u1
Q14u2	33	1.60606	0.49620	53.00000	1.00000	2.00000	Q14u2
Q14u3	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14u3
Q14u4	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q14u4
Q14u5	33	1.48485	0.50752	49.00000	1.00000	2.00000	Q14u5
Q14v1	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q14v1
Q14v2	33	1.69697	0.46669	56.00000	1.00000	2.00000	Q14v2
Q14v3	33	1.75758	0.43519	58.00000	1.00000	2.00000	Q14v3
Q14v4	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q14v4
Q14v5	33	1.54545	0.50565	51.00000	1.00000	2.00000	Q14v5
Q14w1	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q14w1
Q14w2	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q14w2
Q14w3	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14w3
Q14w4	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q14w4
Q14w5	33	1.48485	0.50752	49.00000	1.00000	2.00000	Q14w5
Q14x1	33	1.66667	0.47871	55.00000	1.00000	2.00000	Q14x1
Q14x2	33	1.63636	0.48850	54.00000	1.00000	2.00000	Q14x2
Q14x3	33	1.81818	0.39167	60.00000	1.00000	2.00000	Q14x3
Q14x4	33	1.93939	0.24231	64.00000	1.00000	2.00000	Q14x4
Q14x5	33	1.51515	0.50752	50.00000	1.00000	2.00000	Q14x5
Q14y1	33	1.90909	0.29194	63.00000	1.00000	2.00000	Q14y1
Q14y2	33	1.87879	0.33143	62.00000	1.00000	2.00000	Q14y2
Q14y3	33	1.24242	0.43519	41.00000	1.00000	2.00000	Q14y3
Q14y4	33	1.72727	0.45227	57.00000	1.00000	2.00000	Q14y4
Q14y5	33	1.84848	0.36411	61.00000	1.00000	2.00000	Q14y5

```
                        Cronbach Coefficient Alpha
                        Variables          Alpha
                        --------------------------
                        Raw                0.929444
                        Standardized       0.931595

                Cronbach Coefficient Alpha with Deleted Variable
                        Raw Variables           Standardized Variables
Deleted     Correlation                     Correlation
Variable    with Total          Alpha       with Total          Alpha      Label
-------------------------------------------------------------------------------------
Q1A          0.185446         0.929340        0.073699         0.931632    Q1A
Q1B          0.254509         0.929189        0.237587         0.931315    Q1B
Q1C          0.456178         0.928359        0.346259         0.931104    Q1C
Q2A          0.361940         0.928718        0.250893         0.931289    Q2A
Q2B          0.417002         0.928478        0.300211         0.931194    Q2B
Q2C          0.333829         0.928843        0.228016         0.931333    Q2C
Q3A          0.291323         0.929227        0.161274         0.931463    Q3A
Q3B          0.556094         0.927679        0.479221         0.930845    Q3B
Q3C          0.515466         0.927921        0.409795         0.930981    Q3C
Q4A          0.200140         0.929388        0.067849         0.931643    Q4A
Q4B          0.516597         0.927933        0.464127         0.930875    Q4B
Q4C          0.565469         0.927934        0.474433         0.930855    Q4C
Q5A          0.359250         0.928719        0.328850         0.931138    Q5A
Q5B          0.388236         0.928589        0.371212         0.931056    Q5B
Q5C          0.557329         0.927710        0.562481         0.930683    Q5C
Q6A_1        0.032350         0.929562        0.094335         0.931592    Q6A_1
Q6A_2        0.453973         0.928622        0.470023         0.930863    Q6A_2
Q6A_3       -.136432          0.929714       -.137571          0.932038    Q6A_3
Q6A_4        0.071175         0.929492        0.143528         0.931417    Q6A_4
Q6A_5       -.152514          0.929830       -.150395          0.932062    Q6A_5
Q6A_6       -.211803          0.929975       -.210392          0.932177    Q6A_6
Q6B_1        0.055077         0.929494        0.142784         0.931498    Q6B_1
Q6B_2        0.294538         0.929000        0.308569         0.931177    Q6B_2
Q6B_3       -.160062          0.929684       -.164860          0.932090    Q6B_3
Q6B_4        0.107251         0.929405        0.081155         0.931617    Q6B_4
Q6B_5        0.024775         0.929548        0.020263         0.931735    Q6B_5
Q6B_6       -.283442          0.929986       -.259585          0.932271    Q6B_6
Q6C_1       -.152873          0.929787       -.133554          0.932030    Q6C_1
Q6C_2        0.266211         0.929064        0.263346         0.931265    Q6C_2
Q6C_3        0.138291         0.929345        0.139371         0.931505    Q6C_3
Q6C_4       -.044836          0.929773       -.036638          0.931844    Q6C_4
Q6C_6       -.225463          0.929952       -.202198          0.932162    Q6C_6
Q7A_1        0.227107         0.929162        0.172562         0.931441    Q7A_1
Q7A_2        0.104457         0.929443        0.133917         0.931515    Q7A_2
Q7A_3        0.147847         0.929327        0.134116         0.931515    Q7A_3
Q7B_1        0.032011         0.929600       -.028342          0.931828    Q7B_1
Q7B_2        0.174050         0.929279        0.159702         0.931466    Q7B_2
Q7B_3        0.009633         0.929607       -.024722          0.931821    Q7B_3
Q7C_1       -.095907          0.929659       -.117390          0.931999    Q7C_1
Q7C_2        0.102414         0.929402        0.087974         0.931604    Q7C_2
Q7C_3        0.211563         0.929198        0.219376         0.931350    Q7C_3
Q7D_1       -.139945          0.929907       -.163446          0.932088    Q7D_1
Q7D_2        0.071002         0.929484        0.040127         0.931696    Q7D_2
Q7D_3       -.031544          0.929758       -.071809          0.931912    Q7D_3
Q7E_1       -.137683          0.929903       -.166521          0.932093    Q7E_1
Q7E_2       -.328874          0.930358       -.359425          0.932462    Q7E_2
Q7E_3       -.361779          0.930392       -.365697          0.932474    Q7E_3
Q7F_1        0.063109         0.929445        0.062515         0.931653    Q7F_1
Q7F_2        0.036896         0.929553        0.055391         0.931667    Q7F_2
Q7F_3        0.073364         0.929488        0.076143         0.931627    Q7F_3
Q12a1        0.220582         0.929301        0.395349         0.931009    Q12a1
Q12a2        0.209204         0.929310        0.196194         0.931395    Q12a2
Q12a3       -.163002          0.929848       -.219240          0.932194    Q12a3
Q12a4        0.509560         0.928570        0.531401         0.930744    Q12a4
Q12a5       -.017543          0.929525       -.037868          0.931846    Q12a5
Q12b1        0.220582         0.929301        0.395349         0.931009    Q12b1
Q12b2        0.102414         0.929402        0.049464         0.931678    Q12b2
Q12b3       -.223138          0.930037       -.249564          0.932252    Q12b3
Q12b4        0.509560         0.928570        0.531401         0.930744    Q12b4
Q12b5        0.019155         0.929484        0.007181         0.931760    Q12b5
Q12c1        0.220582         0.929301        0.395349         0.931009    Q12c1
Q12c2        0.209204         0.929310        0.196194         0.931395    Q12c2
Q12c3       -.323175          0.929866       -.453379          0.932641    Q12c3
Q12c4        0.509560         0.928570        0.531401         0.930744    Q12c4
Q12d1        0.168247         0.929303        0.256769         0.931278    Q12d1
Q12d2        0.168247         0.929303        0.130610         0.931522    Q12d2
Q12d3       -.275629          0.930090       -.320330          0.932387    Q12d3
Q12d4        0.458735         0.928759        0.488040         0.930828    Q12d4
Q12d5        0.033027         0.929452        0.012603         0.931749    Q12d5
Q12e1       -.087455          0.929687       -.118856          0.932002    Q12e1
Q12e2        0.049290         0.929538        0.052589         0.931672    Q12e2
Q12e3       -.078067          0.929870       -.054943          0.931879    Q12e3
Q12e4        0.430286         0.928947        0.369130         0.931060    Q12e4
Q12e5        0.285037         0.929093        0.334535         0.931127    Q12e5
Q12f1        0.182507         0.929301        0.298702         0.931196    Q12f1
Q12f2       -.122927          0.929696       -.148581          0.932059    Q12f2
Q12f3       -.111768          0.929825       -.162221          0.932085    Q12f3
Q12f4        0.580571         0.928419        0.605812         0.930598    Q12f4
Q12f5        0.110565         0.929381        0.091132         0.931598    Q12f5
Q12g1        0.411889         0.929042        0.548270         0.930711    Q12g1
Q12g2        0.052808         0.929521        0.006735         0.931761    Q12g2
Q12g3       -.305816          0.930389       -.307774          0.932363    Q12g3
Q12g4        0.386296         0.928847        0.403175         0.930993    Q12g4
Q12g5        0.325065         0.928985        0.295753         0.931202    Q12g5
Q12h2        0.151276         0.929326        0.221438         0.931346    Q12h2
Q12h3       -.039425          0.929665       -.051567          0.931873    Q12h3
Q12h4        0.406954         0.928805        0.341400         0.931114    Q12h4
```

121

Q12h5	0.209001	0.929247	0.279375	0.931234	Q12h5
Q12i1	0.220582	0.929301	0.395349	0.931009	Q12i1
Q12i2	0.201855	0.929227	0.148973	0.931486	Q12i2
Q12i3	-.200220	0.930083	-.186335	0.932131	Q12i3
Q12i4	0.613907	0.928348	0.612389	0.930585	Q12i4
Q12i5	0.193075	0.929257	0.128388	0.931526	Q12i5
Q12j1	0.220582	0.929301	0.395349	0.931009	Q12j1
Q12j2	0.116016	0.929379	0.069025	0.931641	Q12j2
Q12j3	-.310541	0.930248	-.337989	0.932421	Q12j3
Q12j4	0.636149	0.928301	0.656173	0.930500	Q12j4
Q12j5	0.202207	0.929257	0.160866	0.931463	Q12j5
Q12k1	0.220582	0.929301	0.395349	0.931009	Q12k1
Q12k2	0.023234	0.929479	0.029629	0.931717	Q12k2
Q12k3	-.169260	0.929758	-.290864	0.932331	Q12k3
Q12k4	0.509560	0.928570	0.531401	0.930744	Q12k4
Q12l1	-.018057	0.929493	-.062476	0.931894	Q12l1
Q12l2	0.200900	0.929222	0.248042	0.931295	Q12l2
Q12l3	-.252141	0.930254	-.251873	0.932257	Q12l3
Q12l4	0.423610	0.928795	0.352256	0.931092	Q12l4
Q12l5	0.265921	0.929125	0.323215	0.931149	Q12l5
Q12m1	0.411889	0.929042	0.548270	0.930711	Q12m1
Q12m2	0.209204	0.929310	0.196194	0.931395	Q12m2
Q12m3	-.482118	0.930178	-.596464	0.932912	Q12m3
Q12m4	0.517331	0.928580	0.545274	0.930716	Q12m4
Q12m5	0.351532	0.929195	0.357741	0.931082	Q12m5
Q12n1	0.220582	0.929301	0.395349	0.931009	Q12n1
Q12n2	0.130917	0.929353	0.093393	0.931594	Q12n2
Q12n3	-.206235	0.929920	-.264112	0.932280	Q12n3
Q12n4	0.574176	0.928406	0.593670	0.930622	Q12n4
Q12n5	-.057769	0.929525	-.073524	0.931915	Q12n5
Q12o1	0.220582	0.929301	0.395349	0.931009	Q12o1
Q12o2	0.137544	0.929351	0.101726	0.931578	Q12o2
Q12o3	-.122431	0.929780	-.160764	0.932082	Q12o3
Q12o4	0.478538	0.928635	0.486264	0.930832	Q12o4
Q12o5	-.123444	0.929643	-.164601	0.932090	Q12o5
Q12p1	0.276620	0.929195	0.271751	0.931249	Q12p1
Q12p2	0.169709	0.929291	0.211237	0.931366	Q12p2
Q12p3	-.249104	0.930259	-.261207	0.932275	Q12p3
Q12p4	0.351978	0.929012	0.272079	0.931248	Q12p4
Q12p5	0.370701	0.928897	0.422495	0.930956	Q12p5
Q12q1	0.276620	0.929195	0.271751	0.931249	Q12q1
Q12q2	-.116438	0.929903	-.057462	0.931884	Q12q2
Q12q3	0.003759	0.929676	-.035510	0.931842	Q12q3
Q12q4	0.326028	0.929024	0.342929	0.931111	Q12q4
Q12q5	0.366986	0.928927	0.350282	0.931096	Q12q5
Q12r1	0.220582	0.929301	0.395349	0.931009	Q12r1
Q12r2	0.088529	0.929406	0.075819	0.931628	Q12r2
Q12r3	-.176007	0.929767	-.294550	0.932338	Q12r3
Q12r4	0.574176	0.928406	0.593670	0.930622	Q12r4
Q12r5	0.033027	0.929452	0.012603	0.931749	Q12r5
Q12s1	0.211350	0.929218	0.191269	0.931405	Q12s1
Q12s2	-.002390	0.929678	-.025679	0.931724	Q12s2
Q12s3	-.127769	0.929980	-.125347	0.932014	Q12s3
Q12s4	0.397772	0.928823	0.331139	0.931133	Q12s4
Q12s5	0.361808	0.928860	0.381111	0.931036	Q12s5
Q12t1	0.350641	0.928982	0.315817	0.931163	Q12t1
Q12t2	-.181783	0.930044	-.119827	0.932004	Q12t2
Q12t3	-.157167	0.930048	-.153504	0.932068	Q12t3
Q12t4	0.457319	0.928729	0.391874	0.931015	Q12t4
Q12t5	0.340946	0.928907	0.361702	0.931074	Q12t5
Q12u1	0.341663	0.929068	0.308812	0.931177	Q12u1
Q12u2	-.092066	0.929867	-.048685	0.931867	Q12u2
Q12u3	-.083311	0.929885	-.091378	0.931949	Q12u3
Q12u4	0.299202	0.929023	0.239069	0.931312	Q12u4
Q12u5	0.268757	0.929078	0.305140	0.931184	Q12u5
Q12v1	0.393769	0.928800	0.427442	0.930946	Q12v1
Q12v2	0.195663	0.929235	0.155229	0.931474	Q12v2
Q12v3	-.389427	0.930581	-.359649	0.932462	Q12v3
Q12v4	0.435405	0.928685	0.469390	0.930865	Q12v4
Q12v5	0.409579	0.928736	0.320546	0.931154	Q12v5
Q13a1	0.331447	0.929081	0.422608	0.930956	Q13a1
Q13a2	-.327873	0.930053	-.321183	0.932389	Q13a2
Q13a3	-.068882	0.929828	-.097797	0.931962	Q13a3
Q13a4	0.638410	0.928377	0.666564	0.930479	Q13a4
Q13a5	0.249542	0.929153	0.224264	0.931341	Q13a5
Q13b1	0.220582	0.929301	0.395349	0.931009	Q13b1
Q13b2	0.209204	0.929310	0.196194	0.931395	Q13b2
Q13b3	-.189418	0.929842	-.253939	0.932261	Q13b3
Q13b4	0.678902	0.928250	0.707973	0.930398	Q13b4
Q13b5	-.057769	0.929525	-.073524	0.931915	Q13b5
Q13c1	0.239777	0.929236	0.217415	0.931354	Q13c1
Q13c2	0.247962	0.929227	0.388463	0.931022	Q13c2
Q13c3	-.353053	0.930284	-.401310	0.932542	Q13c3
Q13c4	0.641908	0.928326	0.580470	0.930648	Q13c4
Q13c5	0.382019	0.928966	0.475692	0.930852	Q13c5
Q13d1	0.220582	0.929301	0.395349	0.931009	Q13d1
Q13d2	-.165472	0.929612	-.156143	0.932074	Q13d2
Q13d3	-.109928	0.929792	-.165471	0.932091	Q13d3
Q13d4	0.694985	0.928141	0.701568	0.930411	Q13d4
Q13d5	0.110565	0.929381	0.091132	0.931598	Q13d5
Q13e1	0.411889	0.929042	0.548270	0.930711	Q13e1
Q13e2	-.116174	0.929687	-.102552	0.931971	Q13e2
Q13e3	-.208316	0.930074	-.255372	0.932263	Q13e3
Q13e4	0.736415	0.928088	0.762616	0.930291	Q13e4
Q13e5	0.293232	0.929079	0.283853	0.931225	Q13e5
Q13f1	0.411889	0.929042	0.548270	0.930711	Q13f1
Q13f2	-.182821	0.929960	-.153953	0.932069	Q13f2
Q13f3	-.143295	0.930007	-.212011	0.932180	Q13f3
Q13f4	0.581393	0.928534	0.613040	0.930584	Q13f4

Q13f5	0.288147	0.929070	0.274564	0.931243	Q13f5
Q13g1	0.411889	0.929042	0.548270	0.930711	Q13g1
Q13g2	0.031792	0.929574	0.024845	0.931726	Q13g2
Q13g3	-.210336	0.930177	-.234108	0.932223	Q13g3
Q13g4	0.509597	0.928712	0.575799	0.930657	Q13g4
Q13g5	0.411579	0.928818	0.372971	0.931052	Q13g5
Q13h1	0.351532	0.929195	0.357741	0.931082	Q13h1
Q13h2	0.232679	0.929148	0.262594	0.931266	Q13h2
Q13h3	-.384351	0.930584	-.373362	0.932489	Q13h3
Q13h4	0.407737	0.928852	0.374894	0.931048	Q13h4
Q13h5	0.474688	0.928608	0.493516	0.930817	Q13h5
Q13i1	0.372324	0.929026	0.311125	0.931172	Q13i1
Q13i2	0.104982	0.929436	0.159721	0.931466	Q13i2
Q13i3	-.326172	0.930422	-.301537	0.932352	Q13i3
Q13i4	0.485103	0.928646	0.445036	0.930912	Q13i4
Q13i5	0.516024	0.928481	0.491581	0.930821	Q13i5
Q13j1	0.207626	0.929212	0.182452	0.931422	Q13j1
Q13j2	0.124601	0.929397	0.151778	0.931481	Q13j2
Q13j3	-.354848	0.930168	-.287332	0.932324	Q13j3
Q13j4	0.392451	0.928880	0.344387	0.931108	Q13j4
Q13j5	0.505145	0.928498	0.499392	0.930806	Q13j5
Q13k1	0.257670	0.929126	0.235275	0.931319	Q13k1
Q13k2	0.150429	0.929334	0.189767	0.931408	Q13k2
Q13k3	-.322584	0.930345	-.309641	0.932367	Q13k3
Q13k4	0.492007	0.928632	0.454830	0.930893	Q13k4
Q13k5	0.576121	0.928339	0.568385	0.930671	Q13k5
Q13l1	0.039396	0.929477	0.020903	0.931733	Q13l1
Q13l2	-.058733	0.929609	0.050495	0.931676	Q13l2
Q13l3	0.042691	0.929561	0.012256	0.931750	Q13l3
Q13l4	0.509560	0.928570	0.443055	0.930916	Q13l4
Q13l5	0.211350	0.929218	0.264627	0.931263	Q13l5
Q13m1	0.182507	0.929301	0.278073	0.931236	Q13m1
Q13m2	0.171642	0.929298	0.125684	0.931531	Q13m2
Q13m3	-.128584	0.929930	-.107610	0.931980	Q13m3
Q13m4	0.585014	0.928410	0.594488	0.930620	Q13m4
Q13m5	-.054712	0.929637	-.111549	0.931988	Q13m5
Q13n1	0.351532	0.929195	0.357741	0.931082	Q13n1
Q13n2	0.090883	0.929451	0.106197	0.931569	Q13n2
Q13n3	-.253010	0.930276	-.238354	0.932231	Q13n3
Q13n4	0.459801	0.928697	0.388559	0.931022	Q13n4
Q13n5	0.377911	0.928883	0.415898	0.930969	Q13n5
Q13o1	0.220582	0.929301	0.395349	0.931009	Q13o1
Q13o2	-.011915	0.929666	-.051694	0.931873	Q13o2
Q13o3	-.079427	0.929876	-.058728	0.931887	Q13o3
Q13o4	0.642825	0.928287	0.704539	0.930405	Q13o4
Q13o5	0.073852	0.929469	0.040301	0.931696	Q13o5
Q13p1	0.247962	0.929227	0.388463	0.931022	Q13p1
Q13p2	0.049557	0.929463	0.029142	0.931718	Q13p2
Q13p3	-.118693	0.929865	-.160327	0.932082	Q13p3
Q13p4	0.678433	0.928150	0.693505	0.930426	Q13p4
Q13p5	0.056332	0.929454	0.051357	0.931675	Q13p5
Q13q1	0.394040	0.928947	0.351715	0.931094	Q13q1
Q13q2	0.051478	0.929533	0.098812	0.931583	Q13q2
Q13q3	-.175863	0.930068	-.159700	0.932080	Q13q3
Q13q4	0.549587	0.928514	0.491329	0.930822	Q13q4
Q13q5	0.374817	0.928808	0.374233	0.931050	Q13q5
Q13r1	0.394040	0.928947	0.351715	0.931094	Q13r1
Q13r2	0.052778	0.929539	0.100961	0.931579	Q13r2
Q13r3	-.182507	0.930066	-.168130	0.932096	Q13r3
Q13r4	0.573117	0.928504	0.509486	0.930786	Q13r4
Q13r5	0.364877	0.928832	0.369102	0.931060	Q13r5
Q13s1	0.247962	0.929227	0.254771	0.931282	Q13s1
Q13s2	0.133250	0.929349	0.220948	0.931347	Q13s2
Q13s3	-.141312	0.930002	-.168260	0.932097	Q13s3
Q13s4	0.365935	0.928861	0.313019	0.931169	Q13s4
Q13s5	0.416109	0.928739	0.449923	0.930902	Q13s5
Q13t1	0.178433	0.929289	0.207886	0.931372	Q13t1
Q13t2	0.287758	0.929046	0.313287	0.931168	Q13t2
Q13t3	-.212983	0.930183	-.203312	0.932164	Q13t3
Q13t4	0.434927	0.928697	0.381589	0.931035	Q13t4
Q13t5	0.331018	0.928923	0.368406	0.931061	Q13t5
Q13u1	0.280394	0.929151	0.299052	0.931196	Q13u1
Q13u2	-.009731	0.929661	0.032985	0.931710	Q13u2
Q13u3	-.061032	0.929826	-.068721	0.931906	Q13u3
Q13u4	0.459801	0.928697	0.388559	0.931022	Q13u4
Q13u5	0.399391	0.928776	0.438850	0.930924	Q13u5
Q13v1	0.324392	0.928972	0.296008	0.931202	Q13v1
Q13v2	0.199437	0.929222	0.217176	0.931354	Q13v2
Q13v3	-.392375	0.930411	-.340504	0.932426	Q13v3
Q13v4	0.392451	0.928880	0.344387	0.931108	Q13v4
Q13v5	0.589929	0.928296	0.554736	0.930698	Q13v5
Q14a1	0.220582	0.929301	0.395349	0.931009	Q14a1
Q14a3	-.262286	0.929799	-.411280	0.932561	Q14a3
Q14a4	0.705793	0.928117	0.722814	0.930369	Q14a4
Q14b1	0.220582	0.929301	0.395349	0.931009	Q14b1
Q14b3	-.262286	0.929799	-.411280	0.932561	Q14b3
Q14b4	0.678449	0.928211	0.687689	0.930438	Q14b4
Q14c1	0.220582	0.929301	0.395349	0.931009	Q14c1
Q14c3	-.231028	0.929665	-.418017	0.932574	Q14c3
Q14c4	0.628045	0.928354	0.657306	0.930497	Q14c4
Q14d1	0.186453	0.929329	0.129375	0.931524	Q14d1
Q14d2	0.220582	0.929301	0.395349	0.931009	Q14d2
Q14d3	-.349138	0.930159	-.416994	0.932572	Q14d3
Q14d4	0.660400	0.928288	0.638868	0.930533	Q14d4
Q14d5	0.249979	0.929169	0.323717	0.931148	Q14d5
Q14e1	0.220582	0.929301	0.395349	0.931009	Q14e1
Q14e2	0.123915	0.929379	0.136635	0.931510	Q14e2
Q14e3	-.262286	0.929799	-.411280	0.932561	Q14e3
Q14e4	0.625735	0.928359	0.665941	0.930480	Q14e4

Q14e5	0.123915	0.929379	0.136635	0.931510	Q14e5
Q14f1	0.263387	0.929174	0.331202	0.931133	Q14f1
Q14f2	0.090222	0.929408	0.108366	0.931565	Q14f2
Q14f3	-.326295	0.930279	-.383268	0.932507	Q14f3
Q14f4	0.680676	0.928206	0.727233	0.930360	Q14f4
Q14f5	0.145209	0.929330	0.129461	0.931524	Q14f5
Q14g1	0.220582	0.929301	0.395349	0.931009	Q14g1
Q14g3	-.231028	0.929665	-.418017	0.932574	Q14g3
Q14g4	0.640830	0.928372	0.687884	0.930437	Q14g4
Q14h1	0.212399	0.929243	0.257305	0.931277	Q14h1
Q14h2	0.224679	0.929186	0.197670	0.931392	Q14h2
Q14h3	-.298165	0.930341	-.292566	0.932334	Q14h3
Q14h4	0.601873	0.928497	0.649184	0.930513	Q14h4
Q14h5	0.282305	0.929098	0.236550	0.931317	Q14h5
Q14i1	0.220582	0.929301	0.395349	0.931009	Q14i1
Q14i2	0.100092	0.929419	0.047064	0.931683	Q14i2
Q14i3	-.267242	0.930252	-.276830	0.932304	Q14i3
Q14i4	0.601873	0.928497	0.649184	0.930513	Q14i4
Q14i5	0.211135	0.929268	0.186505	0.931414	Q14i5
Q14j1	0.182507	0.929301	0.278073	0.931236	Q14j1
Q14j2	0.178433	0.929289	0.204526	0.931379	Q14j2
Q14j3	-.265705	0.930118	-.325192	0.932397	Q14j3
Q14j4	0.506851	0.928717	0.569865	0.930668	Q14j4
Q14j5	0.029236	0.929491	-.028520	0.931829	Q14j5
Q14k1	0.279574	0.929102	0.220006	0.931349	Q14k1
Q14k2	-.040295	0.929725	0.025247	0.931725	Q14k2
Q14k3	-.203277	0.930161	-.193534	0.932145	Q14k3
Q14k4	0.553549	0.928637	0.485582	0.930833	Q14k4
Q14k5	0.439506	0.928675	0.443881	0.930914	Q14k5
Q14l1	0.511412	0.928766	0.583686	0.930641	Q14l1
Q14l2	0.095320	0.929428	0.078776	0.931622	Q14l2
Q14l3	-.445171	0.930691	-.471749	0.932676	Q14l3
Q14l4	0.711303	0.928184	0.717985	0.930378	Q14l4
Q14l5	0.498911	0.928618	0.458573	0.930886	Q14l5
Q14m1	0.220582	0.929301	0.395349	0.931009	Q14m1
Q14m2	0.354981	0.929007	0.356270	0.931085	Q14m2
Q14m3	-.330795	0.930288	-.380879	0.932503	Q14m3
Q14m4	0.669887	0.928316	0.686104	0.930441	Q14m4
Q14m5	0.162295	0.929301	0.131655	0.931520	Q14m5
Q14n1	0.186453	0.929329	0.129375	0.931524	Q14n1
Q14n2	0.175916	0.929278	0.266298	0.931259	Q14n2
Q14n3	-.272795	0.930132	-.327579	0.932401	Q14n3
Q14n4	0.430286	0.928947	0.385493	0.931028	Q14n4
Q14n5	0.482149	0.928759	0.527002	0.930752	Q14n5
Q14o1	0.411889	0.929042	0.548270	0.930711	Q14o1
Q14o2	0.246983	0.929174	0.225621	0.931338	Q14o2
Q14o3	-.402719	0.930431	-.466110	0.932665	Q14o3
Q14o4	0.580571	0.928419	0.621568	0.930567	Q14o4
Q14o5	0.406954	0.928805	0.388110	0.931023	Q14o5
Q14p1	0.019727	0.929558	0.016752	0.931741	Q14p1
Q14p2	0.054537	0.929555	0.065531	0.931647	Q14p2
Q14p3	-.229685	0.930169	-.232457	0.932220	Q14p3
Q14p4	0.410866	0.928880	0.391814	0.931016	Q14p4
Q14p5	0.480539	0.928582	0.507619	0.930790	Q14p5
Q14q1	0.086097	0.929429	0.176000	0.931434	Q14q1
Q14q2	0.211998	0.929209	0.197857	0.931392	Q14q2
Q14q3	-.248022	0.930229	-.301059	0.932351	Q14q3
Q14q4	0.506851	0.928717	0.569865	0.930668	Q14q4
Q14q5	0.479004	0.928687	0.435948	0.930930	Q14q5
Q14r1	0.364440	0.928931	0.326784	0.931142	Q14r1
Q14r2	-.002310	0.929658	0.073272	0.931632	Q14r2
Q14r3	-.309597	0.930398	-.328590	0.932403	Q14r3
Q14r4	0.512342	0.928707	0.491697	0.930821	Q14r4
Q14r5	0.539739	0.928482	0.577542	0.930653	Q14r5
Q14s1	0.346675	0.928943	0.422213	0.930956	Q14s1
Q14s2	0.072505	0.929452	0.053131	0.931671	Q14s2
Q14s3	-.284600	0.930353	-.318447	0.932384	Q14s3
Q14s4	0.695099	0.928217	0.748887	0.930318	Q14s4
Q14s5	0.372356	0.928847	0.349316	0.931098	Q14s5
Q14t1	0.198378	0.929226	0.217126	0.931355	Q14t1
Q14t2	0.019270	0.929621	0.051623	0.931674	Q14t2
Q14t3	-.263812	0.930219	-.288773	0.932327	Q14t3
Q14t4	0.396183	0.928993	0.372500	0.931053	Q14t4
Q14t5	0.487398	0.928616	0.560948	0.930686	Q14t5
Q14u1	0.222287	0.929171	0.192140	0.931403	Q14u1
Q14u2	0.190469	0.929242	0.210428	0.931368	Q14u2
Q14u3	-.438205	0.930307	-.403049	0.932545	Q14u3
Q14u4	0.268431	0.929204	0.258240	0.931275	Q14u4
Q14u5	0.473081	0.928574	0.467907	0.930867	Q14u5
Q14v1	0.403313	0.928794	0.375868	0.931047	Q14v1
Q14v2	0.144083	0.929342	0.216392	0.931356	Q14v2
Q14v3	-.452968	0.930531	-.448471	0.932631	Q14v3
Q14v4	0.268431	0.929204	0.258240	0.931275	Q14v4
Q14v5	0.495639	0.928523	0.510971	0.930783	Q14v5
Q14w1	0.363731	0.928848	0.292859	0.931208	Q14w1
Q14w2	0.036061	0.929591	0.092254	0.931596	Q14w2
Q14w3	-.438205	0.930307	-.403049	0.932545	Q14w3
Q14w4	0.268431	0.929204	0.258240	0.931275	Q14w4
Q14w5	0.473081	0.928574	0.467907	0.930867	Q14w5
Q14x1	0.434927	0.928697	0.353863	0.931089	Q14x1
Q14x2	-.008457	0.929692	0.073552	0.931632	Q14x2
Q14x3	-.504346	0.930500	-.462508	0.932658	Q14x3
Q14x4	0.268431	0.929204	0.258240	0.931275	Q14x4
Q14x5	0.548709	0.928394	0.536541	0.930734	Q14x5
Q14y1	0.039396	0.929477	0.163834	0.931458	Q14y1
Q14y2	0.376009	0.928975	0.364269	0.931069	Q14y2
Q14y3	-.317294	0.930261	-.392641	0.932525	Q14y3
Q14y4	0.680676	0.928206	0.727233	0.930360	Q14y4
Q14y5	0.224986	0.929195	0.219399	0.931350	Q14y5

ANNEXURE 7: Descriptive statistics: Frequency tables

Q1A	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Average	10	24.39	10	24.39
Quite good	19	46.34	29	70.73
Excellent	12	29.27	41	100.00

```
        Chi-Square Test
       for Equal Proportions
       ------------------
       Chi-Square    3.2683
       DF               2
       Pr > ChiSq    0.1951
        Sample Size = 41
```

Q1B	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Very weak	1	2.44	1	2.44
Weak	3	7.32	4	9.76
Average	17	41.46	21	51.22
Quite good	13	31.71	34	82.93
Excellent	6	14.63	40	97.56
N/A	1	2.44	41	100.00

```
        Chi-Square Test
       for Equal Proportions
       --------------------
       Chi-Square   32.9024
       DF               5
       Pr > ChiSq    <.0001
        Sample Size = 41
```

Q1C	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Average	15	36.59	15	36.59
Quite good	16	39.02	31	75.61
Excellent	10	24.39	41	100.00

```
        Chi-Square Test
       for Equal Proportions
       ---------------------
       Chi-Square    1.5122
       DF               2
       Pr > ChiSq    0.4695
        Sample Size = 41
```

Q2A	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	3	7.32	3	7.32
A little	6	14.63	9	21.95
Moderate	2	4.88	11	26.83
Very little	13	31.71	24	58.54
None	16	39.02	40	97.56
N/A	1	2.44	41	100.00

```
        Chi-Square Test
       for Equal Proportions
       --------------------
       Chi-Square   28.5122
       DF               5
       Pr > ChiSq    <.0001
        Sample Size = 41
```

Q2B	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	3	7.32	3	7.32
Very much	1	2.44	4	9.76
A little	9	21.95	13	31.71
Moderate	5	12.20	18	43.90
Very little	10	24.39	28	68.29
None	12	29.27	40	97.56
N/A	1	2.44	41	100.00

```
        Chi-Square Test
       for Equal Proportions
       --------------------
       Chi-Square   20.6341
       DF               6
       Pr > ChiSq    0.0021
        Sample Size = 41
```

Q2C	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	5	12.20	5	12.20
A little	4	9.76	9	21.95
Moderate	3	7.32	12	29.27
Very little	13	31.71	25	60.98
None	16	39.02	41	100.00

```
        Chi-Square Test
       for Equal Proportions
```

```
                      ----------------------
                      Chi-Square    16.9268
                      DF                   4
                      Pr > ChiSq      0.0020
                        Sample Size = 41


                                            Cumulative    Cumulative
          Q3A    Frequency    Percent     Frequency       Percent
----------------------------------------------------------------
           0           1        2.44            1           2.44
Very often             5       12.20            6          14.63
Occasionally          11       26.83           17          41.46
Some of the time       7       17.07           24          58.54
Very rarely           12       29.27           36          87.80
None                   5       12.20           41         100.00

                      Chi-Square Test
                      for Equal Proportions
                      ----------------------
                      Chi-Square    12.4146
                      DF                   5
                      Pr > ChiSq      0.0295
                        Sample Size = 41


                                            Cumulative    Cumulative
          Q3B    Frequency    Percent     Frequency       Percent
----------------------------------------------------------------
Very often            12       29.27           12          29.27
Occasionally          12       29.27           24          58.54
Some of the time       8       19.51           32          78.05
Very rarely            7       17.07           39          95.12
None                   2        4.88           41         100.00

                      Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square     8.3902
                      DF                   4
                      Pr > ChiSq      0.0783
                        Sample Size = 41


                                            Cumulative    Cumulative
          Q3C    Frequency    Percent     Frequency       Percent
----------------------------------------------------------------
Very often             5       12.20            5          12.20
Occasionally           9       21.95           14          34.15
Some of the time       7       17.07           21          51.22
Very rarely           14       34.15           35          85.37
None                   6       14.63           41         100.00

                      Chi-Square Test
                      for Equal Proportions
                      ----------------------
                      Chi-Square     6.1951
                      DF                   4
                      Pr > ChiSq      0.1850
                        Sample Size = 41


                                            Cumulative    Cumulative
          Q4A    Frequency    Percent     Frequency       Percent
----------------------------------------------------------------
           0           1        2.44            1           2.44
Occasionally           3        7.32            4           9.76
Some of the time       7       17.07           11          26.83
Very rarely           17       41.46           28          68.29
None                  13       31.71           41         100.00

                      Chi-Square Test
                      for Equal Proportions
                      ----------------------
                      Chi-Square    22.0488
                      DF                   4
                      Pr > ChiSq      0.0002
                        Sample Size = 41


                                            Cumulative    Cumulative
          Q4B    Frequency    Percent     Frequency       Percent
----------------------------------------------------------------
Very often             2        4.88            2           4.88
Occasionally           4        9.76            6          14.63
Some of the time      15       36.59           21          51.22
Very rarely           10       24.39           31          75.61
None                  10       24.39           41         100.00

                      Chi-Square Test
                      for Equal Proportions
                      ----------------------
                      Chi-Square    13.2683
                      DF                   4
                      Pr > ChiSq      0.0100
                        Sample Size = 41


                                            Cumulative    Cumulative
          Q4C    Frequency    Percent     Frequency       Percent
----------------------------------------------------------------
           0           2        4.88            2           4.88
Occasionally           3        7.32            5          12.20
Some of the time       4        9.76            9          21.95
Very rarely           20       48.78           29          70.73
```

126

```
None            12      29.27       41        100.00

                   Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    28.8780
                   DF                   4
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                     Cumulative   Cumulative
        Q5A    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
          0            1       2.44           1        2.44
None              4       9.76           5       12.20
Beginner          8      19.51          13       31.71
Intermediate     17      41.46          30       73.17
Advanced         11      26.83          41      100.00

                   Chi-Square Test
                   for Equal Proportions
                   ---------------------
                   Chi-Square    18.8780
                   DF                   4
                   Pr > ChiSq     0.0008
                    Sample Size = 41


                                     Cumulative   Cumulative
        Q5B    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
          0            1       2.44           1        2.44
None              9      21.95          10       24.39
Beginner         10      24.39          20       48.78
Intermediate     16      39.02          36       87.80
Advanced          5      12.20          41      100.00

                   Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    15.4634
                   DF                   4
                   Pr > ChiSq     0.0038
                    Sample Size = 41


                                     Cumulative   Cumulative
        Q5C    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
          0            1       2.44           1        2.44
None             14      34.15          15       36.59
Beginner          5      12.20          20       48.78
Intermediate     14      34.15          34       82.93
Advanced          7      17.07          41      100.00

                   Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    15.9512
                   DF                   4
                   Pr > ChiSq     0.0031
                    Sample Size = 41


                                   Cumulative   Cumulative
      Q6A_1    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
        Yes           9      21.95           9       21.95
        No           32      78.05          41      100.00

                   Chi-Square Test
                   for Equal Proportions
                   ---------------------
                   Chi-Square    12.9024
                   DF                   1
                   Pr > ChiSq     0.0003
                    Sample Size = 41


                                   Cumulative   Cumulative
      Q6A_2    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
        Yes          17      41.46          17       41.46
        No           24      58.54          41      100.00

                   Chi-Square Test
                   for Equal Proportions
                   ---------------------
                   Chi-Square     1.1951
                   DF                   1
                   Pr > ChiSq     0.2743
                    Sample Size = 41


                                   Cumulative   Cumulative
      Q6A_3    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
        Yes           4       9.76           4        9.76
        No           37      90.24          41      100.00

                   Chi-Square Test
                   for Equal Proportions
                   ---------------------
                   Chi-Square    26.5610
```

```
                      DF                    1
                      Pr > ChiSq    <.0001
                       Sample Size = 41


                                      Cumulative   Cumulative
Q6A_4    Frequency      Percent       Frequency     Percent
------------------------------------------------------------
 Yes          10         24.39             10         24.39
 No           31         75.61             41        100.00


                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    10.7561
                  DF                  1
                  Pr > ChiSq     0.0010
                   Sample Size = 41


                                      Cumulative   Cumulative
Q6A_5    Frequency      Percent       Frequency     Percent
------------------------------------------------------------
 Yes           7         17.07              7         17.07
 No           34         82.93             41        100.00


                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    17.7805
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                      Cumulative   Cumulative
Q6A_6    Frequency      Percent       Frequency     Percent
------------------------------------------------------------
 Yes           7         17.07              7         17.07
 No           34         82.93             41        100.00


                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    17.7805
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                      Cumulative   Cumulative
Q6B_1    Frequency      Percent       Frequency     Percent
------------------------------------------------------------
 Yes           6         14.63              6         14.63
 No           35         85.37             41        100.00


                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    20.5122
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                      Cumulative   Cumulative
Q6B_2    Frequency      Percent       Frequency     Percent
------------------------------------------------------------
 Yes          22         53.66             22         53.66
 No           19         46.34             41        100.00


                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square     0.2195
                  DF                  1
                  Pr > ChiSq     0.6394
                   Sample Size = 41


                                      Cumulative   Cumulative
Q6B_3    Frequency      Percent       Frequency     Percent
------------------------------------------------------------
 Yes           2          4.88              2          4.88
 No           39         95.12             41        100.00


                   Chi-Square Test
                  for Equal Proportions
                  ------------------
                  Chi-Square    33.3902
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                      Cumulative   Cumulative
Q6B_4    Frequency      Percent       Frequency     Percent
------------------------------------------------------------
 Yes           8         19.51              8         19.51
 No           33         80.49             41        100.00
```

```
                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square      15.2439
                      DF                    1
                      Pr > ChiSq       <.0001
                       Sample Size = 41

                                           Cumulative   Cumulative
         Q6B_5   Frequency     Percent      Frequency     Percent
         ----------------------------------------------------------
          Yes         7         17.07            7          17.07
          No         34         82.93           41         100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square      17.7805
                      DF                    1
                      Pr > ChiSq       <.0001
                       Sample Size = 41

                                           Cumulative   Cumulative
         Q6B_6   Frequency     Percent      Frequency     Percent
         ----------------------------------------------------------
          Yes         5         12.20            5          12.20
          No         36         87.80           41         100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square      23.4390
                      DF                    1
                      Pr > ChiSq       <.0001
                       Sample Size = 41

                                           Cumulative   Cumulative
         Q6C_1   Frequency     Percent      Frequency     Percent
         ----------------------------------------------------------
          Yes         5         12.20            5          12.20
          No         36         87.80           41         100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square      23.4390
                      DF                    1
                      Pr > ChiSq       <.0001
                       Sample Size = 41

                                           Cumulative   Cumulative
         Q6C_2   Frequency     Percent      Frequency     Percent
         ----------------------------------------------------------
          Yes        21         51.22           21          51.22
          No         20         48.78           41         100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square       0.0244
                      DF                    1
                      Pr > ChiSq       0.8759
                       Sample Size = 41

                                           Cumulative   Cumulative
         Q6C_3   Frequency     Percent      Frequency     Percent
         ----------------------------------------------------------
          Yes         8         19.51            8          19.51
          No         33         80.49           41         100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square      15.2439
                      DF                    1
                      Pr > ChiSq       <.0001
                       Sample Size = 41

                                           Cumulative   Cumulative
         Q6C_4   Frequency     Percent      Frequency     Percent
         ----------------------------------------------------------
          Yes        13         31.71           13          31.71
          No         28         68.29           41         100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square       5.4878
                      DF                    1
                      Pr > ChiSq       0.0191
                       Sample Size = 41

                                           Cumulative   Cumulative
         Q6C_5   Frequency     Percent      Frequency     Percent
         ----------------------------------------------------------
          No         41        100.00           41         100.00

                       Chi-Square Test
                      for Equal Proportions
```

```
                        --------------------
                        Chi-Square       0.0000
                        DF                    0
                        Pr > ChiSq            .
                          Sample Size = 41

                                        Cumulative  Cumulative
Q6C_6    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
Yes           5      12.20          5        12.20
No           36      87.80         41       100.00

                          Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square      23.4390
                        DF                    1
                        Pr > ChiSq      <.0001
                          Sample Size = 41

                                        Cumulative  Cumulative
Q7A_1    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
Yes          12      29.27         12        29.27
No           29      70.73         41       100.00

                          Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square       7.0488
                        DF                    1
                        Pr > ChiSq       0.0079
                          Sample Size = 41

                                        Cumulative  Cumulative
Q7A_2    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
Yes          18      43.90         18        43.90
No           23      56.10         41       100.00

                          Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square       0.6098
                        DF                    1
                        Pr > ChiSq       0.4349
                          Sample Size = 41

                                        Cumulative  Cumulative
Q7A_3    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
Yes           9      21.95          9        21.95
No           32      78.05         41       100.00

                          Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square      12.9024
                        DF                    1
                        Pr > ChiSq       0.0003
                          Sample Size = 41

                                        Cumulative  Cumulative
Q7B_1    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
Yes          13      31.71         13        31.71
No           28      68.29         41       100.00

                          Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square       5.4878
                        DF                    1
                        Pr > ChiSq       0.0191
                          Sample Size = 41

                                        Cumulative  Cumulative
Q7B_2    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
Yes          16      39.02         16        39.02
No           25      60.98         41       100.00

                          Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square       1.9756
                        DF                    1
                        Pr > ChiSq       0.1599
                          Sample Size = 41

                                        Cumulative  Cumulative
Q7B_3    Frequency    Percent   Frequency     Percent
-----------------------------------------------------------
Yes           9      21.95          9        21.95
No           32      78.05         41       100.00

                          Chi-Square Test
                        for Equal Proportions
```

130

```
                          --------------------
                          Chi-Square    12.9024
                          DF                  1
                          Pr > ChiSq     0.0003
                            Sample Size = 41

                                       Cumulative   Cumulative
Q7C_1    Frequency    Percent          Frequency      Percent
----------------------------------------------------------------
Yes            4        9.76                   4         9.76
No            37       90.24                  41       100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    26.5610
                   DF                  1
                   Pr > ChiSq     <.0001
                     Sample Size = 41

                                       Cumulative   Cumulative
Q7C_2    Frequency    Percent          Frequency      Percent
----------------------------------------------------------------
Yes            7       17.07                   7        17.07
No            34       82.93                  41       100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    17.7805
                   DF                  1
                   Pr > ChiSq     <.0001
                     Sample Size = 41

                                       Cumulative   Cumulative
Q7C_3    Frequency    Percent          Frequency      Percent
----------------------------------------------------------------
Yes            9       21.95                   9        21.95
No            32       78.05                  41       100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    12.9024
                   DF                  1
                   Pr > ChiSq     0.0003
                     Sample Size = 41

                                       Cumulative   Cumulative
Q7D_1    Frequency    Percent          Frequency      Percent
----------------------------------------------------------------
Yes            9       21.95                   9        21.95
No            32       78.05                  41       100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    12.9024
                   DF                  1
                   Pr > ChiSq     0.0003
                     Sample Size = 41

                                       Cumulative   Cumulative
Q7D_2    Frequency    Percent          Frequency      Percent
----------------------------------------------------------------
Yes           11       26.83                  11        26.83
No            30       73.17                  41       100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     8.8049
                   DF                  1
                   Pr > ChiSq     0.0030
                     Sample Size = 41

                                       Cumulative   Cumulative
Q7D_3    Frequency    Percent          Frequency      Percent
----------------------------------------------------------------
Yes           15       36.59                  15        36.59
No            26       63.41                  41       100.00

                     Chi-Square Test
                   for Equal Proportions
                   -------------------
                   Chi-Square     2.9512
                   DF                  1
                   Pr > ChiSq     0.0858
                     Sample Size = 41

                                       Cumulative   Cumulative
Q7E_1    Frequency    Percent          Frequency      Percent
----------------------------------------------------------------
Yes           11       26.83                  11        26.83
No            30       73.17                  41       100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
```

131

```
                              Chi-Square      8.8049
                              DF                    1
                              Pr > ChiSq      0.0030
                               Sample Size = 41


                                     Cumulative   Cumulative
       Q7E_2    Frequency    Percent   Frequency     Percent
       -----------------------------------------------------------
         Yes        13        31.71        13        31.71
         No         28        68.29        41       100.00

                         Chi-Square Test
                        for Equal Proportions
                        ---------------------
                        Chi-Square      5.4878
                        DF                    1
                        Pr > ChiSq      0.0191
                         Sample Size = 41


                                     Cumulative   Cumulative
       Q7E_3    Frequency    Percent   Frequency     Percent
       -----------------------------------------------------------
         Yes        12        29.27        12        29.27
         No         29        70.73        41       100.00

                         Chi-Square Test
                        for Equal Proportions
                        ---------------------
                        Chi-Square      7.0488
                        DF                    1
                        Pr > ChiSq      0.0079
                         Sample Size = 41


                                     Cumulative   Cumulative
       Q7F_1    Frequency    Percent   Frequency     Percent
       -----------------------------------------------------------
         Yes         6        14.63         6        14.63
         No         35        85.37        41       100.00

                         Chi-Square Test
                        for Equal Proportions
                        ---------------------
                        Chi-Square     20.5122
                        DF                    1
                        Pr > ChiSq      <.0001
                         Sample Size = 41


                                     Cumulative   Cumulative
       Q7F_2    Frequency    Percent   Frequency     Percent
       -----------------------------------------------------------
         Yes        12        29.27        12        29.27
         No         29        70.73        41       100.00

                         Chi-Square Test
                        for Equal Proportions
                        ---------------------
                        Chi-Square      7.0488
                        DF                    1
                        Pr > ChiSq      0.0079
                         Sample Size = 41


                                     Cumulative   Cumulative
       Q7F_3    Frequency    Percent   Frequency     Percent
       -----------------------------------------------------------
         Yes        14        34.15        14        34.15
         No         27        65.85        41       100.00

                         Chi-Square Test
                        for Equal Proportions
                        ---------------------
                        Chi-Square      4.1220
                        DF                    1
                        Pr > ChiSq      0.0423
                         Sample Size = 41
                                     Cumulative   Cumulative
         Q8     Frequency    Percent   Frequency     Percent
       ---------------------------------------fffffffffffff
          0          2         4.88         2         4.88
         20s         9        21.95        11        26.83
         30s        16        39.02        27        65.85
         40s        10        24.39        37        90.24
         50s         3         7.32        40        97.56
         60s         1         2.44        41       100.00

                         Chi-Square Test
                        for Equal Proportions
                        ---------------------
                        Chi-Square     25.0000
                        DF                    5
                        Pr > ChiSq      0.0001
                         Sample Size = 41


                                         Cumulative   Cumulative
                Q9     Frequency    Percent   Frequency     Percent
       --------------------------------------------------------------
                0          1         2.44         1         2.44
Std 8 / Matric            8        19.51         9        21.95
Certificate / Diploma    22        53.66        31        75.61
B Tech / Bachelors degree 8        19.51        39        95.12
```

132

```
Masters Degree                               1     2.44           40        97.56
Honneurs Degree                              1     2.44           41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            --------------------
                            Chi-Square    49.0000
                            DF                  5
                            Pr > ChiSq     <.0001
                             Sample Size = 41


                                              Cumulative    Cumulative
                  Q10     Frequency    Percent   Frequency      Percent
--------------------------------------------------------------------------
Faculty administration         17      41.46          17        41.46
Department Administration       24      58.54          41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            --------------------
                            Chi-Square     1.1951
                            DF                  1
                            Pr > ChiSq     0.2743
                             Sample Size = 41


                                         Cumulative    Cumulative
           Q11    Frequency    Percent    Frequency       Percent
---------------------------------------------------------------
Male              8      19.51           8        19.51
Female           33      80.49          41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            --------------------
                            Chi-Square    15.2439
                            DF                  1
                            Pr > ChiSq     <.0001
                             Sample Size = 41


                                          Cumulative    Cumulative
          Q12a1    Frequency    Percent    Frequency       Percent
----------------------------------------------------------------
Yes              1       2.44           1         2.44
No              40      97.56          41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            --------------------
                            Chi-Square    37.0976
                            DF                  1
                            Pr > ChiSq     <.0001
                             Sample Size = 41


                                          Cumulative    Cumulative
          Q12a2    Frequency    Percent    Frequency       Percent
----------------------------------------------------------------
Yes              4       9.76           4         9.76
No              37      90.24          41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            --------------------
                            Chi-Square    26.5610
                            DF                  1
                            Pr > ChiSq     <.0001
                             Sample Size = 41


                                          Cumulative    Cumulative
          Q12a3    Frequency    Percent    Frequency       Percent
----------------------------------------------------------------
Yes             32      78.05          32        78.05
No               9      21.95          41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            --------------------
                            Chi-Square    12.9024
                            DF                  1
                            Pr > ChiSq     0.0003
                             Sample Size = 41


                                          Cumulative    Cumulative
          Q12a4    Frequency    Percent    Frequency       Percent
----------------------------------------------------------------
Yes             13      31.71          13        31.71
No              28      68.29          41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            --------------------
                            Chi-Square     5.4878
                            DF                  1
                            Pr > ChiSq     0.0191
                             Sample Size = 41


                                          Cumulative    Cumulative
          Q12a5    Frequency    Percent    Frequency       Percent
----------------------------------------------------------------
```

```
Yes             4        9.76            4          9.76
No             37       90.24           41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     26.5610
                   DF                   1
                   Pr > ChiSq      <.0001
                    Sample Size = 41


                                      Cumulative    Cumulative
Q12b1    Frequency     Percent        Frequency      Percent
----------------------------------------------------------------
Yes             1        2.44            1          2.44
No             40       97.56           41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     37.0976
                   DF                   1
                   Pr > ChiSq      <.0001
                    Sample Size = 41


                                      Cumulative    Cumulative
Q12b2    Frequency     Percent        Frequency      Percent
----------------------------------------------------------------
Yes             6       14.63            6         14.63
No             35       85.37           41        100.00
                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     20.5122
                   DF                   1
                   Pr > ChiSq      <.0001
                    Sample Size = 41


                                      Cumulative    Cumulative
Q12b3    Frequency     Percent        Frequency      Percent
----------------------------------------------------------------
Yes            31       75.61           31         75.61
No             10       24.39           41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     10.7561
                   DF                   1
                   Pr > ChiSq      0.0010
                    Sample Size = 41


                                      Cumulative    Cumulative
Q12b4    Frequency     Percent        Frequency      Percent
----------------------------------------------------------------
Yes            11       26.83           11         26.83
No             30       73.17           41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square      8.8049
                   DF                   1
                   Pr > ChiSq      0.0030
                    Sample Size = 41


                                      Cumulative    Cumulative
Q12b5    Frequency     Percent        Frequency      Percent
----------------------------------------------------------------
Yes             2        4.88            2          4.88
No             39       95.12           41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     33.3902
                   DF                   1
                   Pr > ChiSq      <.0001
                    Sample Size = 41


                                      Cumulative    Cumulative
Q12c1    Frequency     Percent        Frequency      Percent
----------------------------------------------------------------
Yes             1        2.44            1          2.44
No             40       97.56           41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     37.0976
                   DF                   1
                   Pr > ChiSq      <.0001
                    Sample Size = 41


                                      Cumulative    Cumulative
Q12c2    Frequency     Percent        Frequency      Percent
----------------------------------------------------------------
Yes             3        7.32            3          7.32
No             38       92.68           41        100.00
```

```
                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    29.8780
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12c3   Frequency    Percent        Frequency      Percent
-------------------------------------------------------------
 Yes         36        87.80              36        87.80
 No           5        12.20              41       100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    23.4390
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12c4   Frequency    Percent        Frequency      Percent
-------------------------------------------------------------
 Yes         11        26.83              11        26.83
 No           30       73.17              41       100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square     8.8049
                  DF                  1
                  Pr > ChiSq    0.0030
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12c5   Frequency    Percent        Frequency      Percent
-------------------------------------------------------------
 Yes          1         2.44               1         2.44
 No           40       97.56              41       100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    37.0976
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12d1   Frequency    Percent        Frequency      Percent
-------------------------------------------------------------
 Yes          4         9.76               4         9.76
 No           37       90.24              41       100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    26.5610
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12d2   Frequency    Percent        Frequency      Percent
-------------------------------------------------------------
 Yes          5        12.20               5        12.20
 No           36       87.80              41       100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    23.4390
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12d3   Frequency    Percent        Frequency      Percent
-------------------------------------------------------------
 Yes         31        75.61              31        75.61
 No           10       24.39              41       100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    10.7561
                  DF                  1
                  Pr > ChiSq    0.0010
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12d4   Frequency    Percent        Frequency      Percent
-------------------------------------------------------------
 Yes          8        19.51               8        19.51
 No           33       80.49              41       100.00
```

```
                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    15.2439
                   DF                  1
                   Pr > ChiSq    <.0001
                    Sample Size = 41

                                      Cumulative   Cumulative
Q12d5   Frequency     Percent     Frequency      Percent
------------------------------------------------------------
 Yes          1         2.44             1         2.44
 No          40        97.56            41       100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    37.0976
                   DF                  1
                   Pr > ChiSq    <.0001
                    Sample Size = 41

                                      Cumulative   Cumulative
Q12e1   Frequency     Percent     Frequency      Percent
------------------------------------------------------------
 Yes          7        17.07             7        17.07
 No          34        82.93            41       100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    17.7805
                   DF                  1
                   Pr > ChiSq    <.0001
                    Sample Size = 41

                                      Cumulative   Cumulative
Q12e2   Frequency     Percent     Frequency      Percent
------------------------------------------------------------
 Yes         12        29.27            12        29.27
 No          29        70.73            41       100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     7.0488
                   DF                  1
                   Pr > ChiSq    0.0079
                    Sample Size = 41

                                      Cumulative   Cumulative
Q12e3   Frequency     Percent     Frequency      Percent
------------------------------------------------------------
 Yes         20        48.78            20        48.78
 No          21        51.22            41       100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     0.0244
                   DF                  1
                   Pr > ChiSq    0.8759
                    Sample Size = 41

                                      Cumulative   Cumulative
Q12e4   Frequency     Percent     Frequency      Percent
------------------------------------------------------------
 Yes          5        12.20             5        12.20
 No          36        87.80            41       100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    23.4390
                   DF                  1
                   Pr > ChiSq    <.0001
                    Sample Size = 41

                                      Cumulative   Cumulative
Q12e5   Frequency     Percent     Frequency      Percent
------------------------------------------------------------
 Yes          6        14.63             6        14.63
 No          35        85.37            41       100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    20.5122
                   DF                  1
                   Pr > ChiSq    <.0001
                    Sample Size = 41

                                      Cumulative   Cumulative
Q12f1   Frequency     Percent     Frequency      Percent
------------------------------------------------------------
 Yes          3         7.32             3         7.32
 No          38        92.68            41       100.00

                    Chi-Square Test
```

```
                                    for Equal Proportions
                                    ---------------------
                                    Chi-Square      29.8780
                                    DF                    1
                                    Pr > ChiSq      <.0001
                                     Sample Size = 41


                                                Cumulative    Cumulative
          Q12f2    Frequency      Percent       Frequency       Percent
          ------------------------------------------------------------
            Yes         4          9.76             4             9.76
            No         37         90.24            41           100.00

                                 Chi-Square Test
                               for Equal Proportions
                               ---------------------
                               Chi-Square      26.5610
                               DF                    1
                               Pr > ChiSq      <.0001
                                Sample Size = 41


                                                Cumulative    Cumulative
          Q12f3    Frequency      Percent       Frequency       Percent
          ------------------------------------------------------------
            Yes        31         75.61            31            75.61
            No         10         24.39            41           100.00

                                 Chi-Square Test
                               for Equal Proportions
                               ---------------------
                               Chi-Square      10.7561
                               DF                    1
                               Pr > ChiSq       0.0010
                                Sample Size = 41


                                                Cumulative    Cumulative
          Q12f4    Frequency      Percent       Frequency       Percent
          ------------------------------------------------------------
            Yes        11         26.83            11            26.83
            No         30         73.17            41           100.00

                                 Chi-Square Test
                               for Equal Proportions
                               ---------------------
                               Chi-Square       8.8049
                               DF                    1
                               Pr > ChiSq       0.0030
                                Sample Size = 41


                                                Cumulative    Cumulative
          Q12f5    Frequency      Percent       Frequency       Percent
          ------------------------------------------------------------
            Yes         4          9.76             4             9.76
            No         37         90.24            41           100.00

                                 Chi-Square Test
                               for Equal Proportions
                               ---------------------
                               Chi-Square      26.5610
                               DF                    1
                               Pr > ChiSq      <.0001
                                Sample Size = 41


                                                Cumulative    Cumulative
          Q12g1    Frequency      Percent       Frequency       Percent
          ------------------------------------------------------------
            Yes         3          7.32             3             7.32
            No         38         92.68            41           100.00

                                 Chi-Square Test
                               for Equal Proportions
                               ---------------------
                               Chi-Square      29.8780
                               DF                    1
                               Pr > ChiSq      <.0001
                                Sample Size = 41


                                                Cumulative    Cumulative
          Q12g2    Frequency      Percent       Frequency       Percent
          ------------------------------------------------------------
            Yes        10         24.39            10            24.39
            No         31         75.61            41           100.00

                                 Chi-Square Test
                               for Equal Proportions
                               ---------------------
                               Chi-Square      10.7561
                               DF                    1
                               Pr > ChiSq       0.0010
                                Sample Size = 41


                                                Cumulative    Cumulative
          Q12g3    Frequency      Percent       Frequency       Percent
          ------------------------------------------------------------
            Yes        23         56.10            23            56.10
            No         18         43.90            41           100.00

                                 Chi-Square Test
                               for Equal Proportions
```

137

```
                         ---------------------
                         Chi-Square      0.6098
                         DF                   1
                         Pr > ChiSq      0.4349
                             Sample Size = 41


                                         Cumulative   Cumulative
Q12g4    Frequency     Percent     Frequency      Percent
-------------------------------------------------------------
 Yes         10         24.39          10          24.39
 No          31         75.61          41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    10.7561
                  DF                  1
                  Pr > ChiSq     0.0010
                      Sample Size = 41


                                         Cumulative   Cumulative
Q12g5    Frequency     Percent     Frequency      Percent
-------------------------------------------------------------
 Yes          8         19.51           8          19.51
 No          33         80.49          41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    15.2439
                  DF                  1
                  Pr > ChiSq     <.0001
                      Sample Size = 41


                                         Cumulative   Cumulative
Q12h1    Frequency     Percent     Frequency      Percent
-------------------------------------------------------------
 No          41        100.00          41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square     0.0000
                  DF                  0
                  Pr > ChiSq          .
                      Sample Size = 41


                                         Cumulative   Cumulative
Q12h2    Frequency     Percent     Frequency      Percent
-------------------------------------------------------------
 Yes          6         14.63           6          14.63
 No          35         85.37          41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    20.5122
                  DF                  1
                  Pr > ChiSq     <.0001
                      Sample Size = 41


                                         Cumulative   Cumulative
Q12h3    Frequency     Percent     Frequency      Percent
-------------------------------------------------------------
 Yes         31         75.61          31          75.61
 No          10         24.39          41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    10.7561
                  DF                  1
                  Pr > ChiSq     0.0010
                      Sample Size = 41


                                         Cumulative   Cumulative
Q12h4    Frequency     Percent     Frequency      Percent
-------------------------------------------------------------
 Yes         10         24.39          10          24.39
 No          31         75.61          41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    10.7561
                  DF                  1
                  Pr > ChiSq     0.0010
                      Sample Size = 41


                                         Cumulative   Cumulative
Q12h5    Frequency     Percent     Frequency      Percent
-------------------------------------------------------------
 Yes          4          9.76           4           9.76
 No          37         90.24          41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
```

138

```
                      Chi-Square      26.5610
                      DF                     1
                      Pr > ChiSq       <.0001
                       Sample Size = 41


                                       Cumulative   Cumulative
  Q12i1   Frequency     Percent         Frequency      Percent
  ----------------------------------------------------------
  Yes             3        7.32               3         7.32
  No             38       92.68              41       100.00

                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square      29.8780
                  DF                     1
                  Pr > ChiSq       <.0001
                   Sample Size = 41


                                       Cumulative   Cumulative
  Q12i2   Frequency     Percent         Frequency      Percent
  ----------------------------------------------------------
  Yes             7       17.07               7        17.07
  No             34       82.93              41       100.00

                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square      17.7805
                  DF                     1
                  Pr > ChiSq       <.0001
                   Sample Size = 41


                                       Cumulative   Cumulative
  Q12i3   Frequency     Percent         Frequency      Percent
  ----------------------------------------------------------
  Yes            27       65.85              27        65.85
  No             14       34.15              41       100.00

                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square       4.1220
                  DF                     1
                  Pr > ChiSq       0.0423
                   Sample Size = 41


                                       Cumulative   Cumulative
  Q12i4   Frequency     Percent         Frequency      Percent
  ----------------------------------------------------------
  Yes            11       26.83              11        26.83
  No             30       73.17              41       100.00

                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square       8.8049
                  DF                     1
                  Pr > ChiSq       0.0030
                   Sample Size = 41


                                       Cumulative   Cumulative
  Q12i5   Frequency     Percent         Frequency      Percent
  ----------------------------------------------------------
  Yes             4        9.76               4         9.76
  No             37       90.24              41       100.00

                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square      26.5610
                  DF                     1
                  Pr > ChiSq       <.0001
                   Sample Size = 41


                                       Cumulative   Cumulative
  Q12j1   Frequency     Percent         Frequency      Percent
  ----------------------------------------------------------
  Yes             2        4.88               2         4.88
  No             39       95.12              41       100.00

                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square      33.3902
                  DF                     1
                  Pr > ChiSq       <.0001
                   Sample Size = 41


                                       Cumulative   Cumulative
  Q12j2   Frequency     Percent         Frequency      Percent
  ----------------------------------------------------------
  Yes             7       17.07               7        17.07
  No             34       82.93              41       100.00

                   Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square      17.7805
```

```
                                     DF                    1
                                    Pr > ChiSq      <.0001
                                     Sample Size = 41


                                             Cumulative    Cumulative
Q12j3     Frequency      Percent      Frequency       Percent
----------------------------------------------------------------
  Yes         29         70.73           29           70.73
  No          12         29.27           41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square    7.0488
                      DF                 1
                      Pr > ChiSq    0.0079
                       Sample Size = 41


                                             Cumulative    Cumulative
Q12j4     Frequency      Percent      Frequency       Percent
----------------------------------------------------------------
  Yes         11         26.83           11           26.83
  No          30         73.17           41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square    8.8049
                      DF                 1
                      Pr > ChiSq    0.0030
                       Sample Size = 41


                                             Cumulative    Cumulative
Q12j5     Frequency      Percent      Frequency       Percent
----------------------------------------------------------------
  Yes          4          9.76            4            9.76
  No          37         90.24           41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square   26.5610
                      DF                 1
                      Pr > ChiSq    <.0001
                       Sample Size = 41


                                             Cumulative    Cumulative
Q12k1     Frequency      Percent      Frequency       Percent
----------------------------------------------------------------
  Yes          2          4.88            2            4.88
  No          39         95.12           41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square   33.3902
                      DF                 1
                      Pr > ChiSq    <.0001
                       Sample Size = 41


                                             Cumulative    Cumulative
Q12k2     Frequency      Percent      Frequency       Percent
----------------------------------------------------------------
  Yes          2          4.88            2            4.88
  No          39         95.12           41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square   33.3902
                      DF                 1
                      Pr > ChiSq    <.0001
                       Sample Size = 41


                                             Cumulative    Cumulative
Q12k3     Frequency      Percent      Frequency       Percent
----------------------------------------------------------------
  Yes         36         87.80           36           87.80
  No           5         12.20           41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square   23.4390
                      DF                 1
                      Pr > ChiSq    <.0001
                       Sample Size = 41


                                             Cumulative    Cumulative
Q12k4     Frequency      Percent      Frequency       Percent
----------------------------------------------------------------
  Yes         11         26.83           11           26.83
  No          30         73.17           41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square    8.8049
                      DF                 1
```

```
                              Pr > ChiSq    0.0030
                             Sample Size = 41


                                             Cumulative   Cumulative
       Q12k5    Frequency      Percent       Frequency      Percent
       ------------------------------------------------------------
        No          41          100.00           41          100.00

                            Chi-Square Test
                           for Equal Proportions
                           ---------------------
                           Chi-Square    0.0000
                           DF                 0
                           Pr > ChiSq         .
                             Sample Size = 41


                                             Cumulative   Cumulative
       Q12l1    Frequency      Percent       Frequency      Percent
       ------------------------------------------------------------
        Yes          2            4.88            2            4.88
        No          39           95.12           41          100.00

                            Chi-Square Test
                           for Equal Proportions
                           ---------------------
                           Chi-Square   33.3902
                           DF                 1
                           Pr > ChiSq    <.0001
                             Sample Size = 41


                                             Cumulative   Cumulative
       Q12l2    Frequency      Percent       Frequency      Percent
       ------------------------------------------------------------
        Yes         12           29.27           12           29.27
        No          29           70.73           41          100.00

                            Chi-Square Test
                           for Equal Proportions
                           ---------------------
                           Chi-Square    7.0488
                           DF                 1
                           Pr > ChiSq    0.0079
                             Sample Size = 41


                                             Cumulative   Cumulative
       Q12l3    Frequency      Percent       Frequency      Percent
       ------------------------------------------------------------
        Yes         22           53.66           22           53.66
        No          19           46.34           41          100.00

                            Chi-Square Test
                           for Equal Proportions
                           ---------------------
                           Chi-Square    0.2195
                           DF                 1
                           Pr > ChiSq    0.6394
                             Sample Size = 41


                                             Cumulative   Cumulative
       Q12l4    Frequency      Percent       Frequency      Percent
       ------------------------------------------------------------
        Yes         10           24.39           10           24.39
        No          31           75.61           41          100.00

                            Chi-Square Test
                           for Equal Proportions
                           ---------------------
                           Chi-Square   10.7561
                           DF                 1
                           Pr > ChiSq    0.0010
                             Sample Size = 41


                                             Cumulative   Cumulative
       Q12l5    Frequency      Percent       Frequency      Percent
       ------------------------------------------------------------
        Yes          5           12.20            5           12.20
        No          36           87.80           41          100.00

                            Chi-Square Test
                           for Equal Proportions
                           ---------------------
                           Chi-Square   23.4390
                           DF                 1
                           Pr > ChiSq    <.0001
                             Sample Size = 41
                                             Cumulative   Cumulative
       Q12m1    Frequency      Percent       Frequency      Percent
       ------------------------------------------------------------
        Yes          2            4.88            2            4.88
        No          39           95.12           41          100.00

                            Chi-Square Test
                           for Equal Proportions
                           ---------------------
                           Chi-Square   33.3902
                           DF                 1
                           Pr > ChiSq    <.0001
                             Sample Size = 41
```

```
                                     Cumulative   Cumulative
Q12m2    Frequency     Percent       Frequency      Percent
-----------------------------------------------------------
Yes            2        4.88              2           4.88
No            39       95.12             41         100.00


                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    33.3902
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                     Cumulative   Cumulative
Q12m3    Frequency     Percent       Frequency      Percent
-----------------------------------------------------------
Yes           36       87.80             36          87.80
No             5       12.20             41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    23.4390
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                     Cumulative   Cumulative
Q12m4    Frequency     Percent       Frequency      Percent
-----------------------------------------------------------
Yes           10       24.39             10          24.39
No            31       75.61             41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    10.7561
                   DF                  1
                   Pr > ChiSq     0.0010
                    Sample Size = 41


                                     Cumulative   Cumulative
Q12m5    Frequency     Percent       Frequency      Percent
-----------------------------------------------------------
Yes            2        4.88              2           4.88
No            39       95.12             41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    33.3902
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                     Cumulative   Cumulative
Q12n1    Frequency     Percent       Frequency      Percent
-----------------------------------------------------------
Yes            1        2.44              1           2.44
No            40       97.56             41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    37.0976
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                     Cumulative   Cumulative
Q12n2    Frequency     Percent       Frequency      Percent
-----------------------------------------------------------
Yes            3        7.32              3           7.32
No            38       92.68             41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    29.8780
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                     Cumulative   Cumulative
Q12n3    Frequency     Percent       Frequency      Percent
-----------------------------------------------------------
Yes           34       82.93             34          82.93
No             7       17.07             41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    17.7805
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41
```

```
                                         Cumulative   Cumulative
Q12n4     Frequency     Percent     Frequency     Percent
-----------------------------------------------------------
 Yes          13         31.71         13         31.71
 No           28         68.29         41        100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square      5.4878
                DF                   1
                Pr > ChiSq      0.0191
                 Sample Size = 41


                                         Cumulative   Cumulative
Q12n5     Frequency     Percent     Frequency     Percent
-----------------------------------------------------------
 Yes           1          2.44          1          2.44
 No           40         97.56         41        100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     37.0976
                DF                   1
                Pr > ChiSq      <.0001
                 Sample Size = 41


                                         Cumulative   Cumulative
Q12o1     Frequency     Percent     Frequency     Percent
-----------------------------------------------------------
 Yes           2          4.88          2          4.88
 No           39         95.12         41        100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     33.3902
                DF                   1
                Pr > ChiSq      <.0001
                 Sample Size = 41


                                         Cumulative   Cumulative
Q12o2     Frequency     Percent     Frequency     Percent
-----------------------------------------------------------
 Yes           4          9.76          4          9.76
 No           37         90.24         41        100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     26.5610
                DF                   1
                Pr > ChiSq      <.0001
                 Sample Size = 41


                                         Cumulative   Cumulative
Q12o3     Frequency     Percent     Frequency     Percent
-----------------------------------------------------------
 Yes          32         78.05         32         78.05
 No            9         21.95         41        100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     12.9024
                DF                   1
                Pr > ChiSq      0.0003
                 Sample Size = 41


                                         Cumulative   Cumulative
Q12o4     Frequency     Percent     Frequency     Percent
-----------------------------------------------------------
 Yes          12         29.27         12         29.27
 No           29         70.73         41        100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square      7.0488
                DF                   1
                Pr > ChiSq      0.0079
                 Sample Size = 41


                                         Cumulative   Cumulative
Q12o5     Frequency     Percent     Frequency     Percent
-----------------------------------------------------------
 Yes           4          9.76          4          9.76
 No           37         90.24         41        100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     26.5610
                DF                   1
                Pr > ChiSq      <.0001
                 Sample Size = 41
```

```
                                            Cumulative    Cumulative
Q12p1    Frequency       Percent           Frequency       Percent
----------------------------------------------------------------
Yes            3          7.32                   3          7.32
No            38         92.68                  41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    29.8780
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                            Cumulative    Cumulative
Q12p2    Frequency       Percent           Frequency       Percent
----------------------------------------------------------------
Yes           16         39.02                  16         39.02
No            25         60.98                  41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     1.9756
                  DF                  1
                  Pr > ChiSq     0.1599
                   Sample Size = 41


                                            Cumulative    Cumulative
Q12p3    Frequency       Percent           Frequency       Percent
----------------------------------------------------------------
Yes           18         43.90                  18         43.90
No            23         56.10                  41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     0.6098
                  DF                  1
                  Pr > ChiSq     0.4349
                   Sample Size = 41
                                            Cumulative    Cumulative
Q12p4    Frequency       Percent           Frequency       Percent
----------------------------------------------------------------
Yes            6         14.63                   6         14.63
No            35         85.37                  41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    20.5122
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                            Cumulative    Cumulative
Q12p5    Frequency       Percent           Frequency       Percent
----------------------------------------------------------------
Yes            7         17.07                   7         17.07
No            34         82.93                  41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    17.7805
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                            Cumulative    Cumulative
Q12q1    Frequency       Percent           Frequency       Percent
----------------------------------------------------------------
Yes            3          7.32                   3          7.32
No            38         92.68                  41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    29.8780
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                            Cumulative    Cumulative
Q12q2    Frequency       Percent           Frequency       Percent
----------------------------------------------------------------
Yes           14         34.15                  14         34.15
No            27         65.85                  41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  ------------------
                  Chi-Square     4.1220
                  DF                  1
                  Pr > ChiSq     0.0423
                   Sample Size = 41


                                            Cumulative    Cumulative
Q12q3    Frequency       Percent           Frequency       Percent
```

```
------------------------------------------------------
Yes          21        51.22          21         51.22
No           20        48.78          41        100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     0.0244
                   DF                  1
                   Pr > ChiSq     0.8759
                    Sample Size = 41


                                  Cumulative    Cumulative
Q12q4    Frequency    Percent     Frequency      Percent
------------------------------------------------------
Yes           7        17.07           7         17.07
No           34        82.93          41        100.00


                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    17.7805
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                  Cumulative    Cumulative
Q12q5    Frequency    Percent     Frequency      Percent
------------------------------------------------------
Yes           7        17.07           7         17.07
No           34        82.93          41        100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    17.7805
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                  Cumulative    Cumulative
Q12r1    Frequency    Percent     Frequency      Percent
------------------------------------------------------
Yes           1         2.44           1          2.44
No           40        97.56          41        100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    37.0976
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                  Cumulative    Cumulative
Q12r2    Frequency    Percent     Frequency      Percent
------------------------------------------------------
Yes           3         7.32           3          7.32
No           38        92.68          41        100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    29.8780
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                  Cumulative    Cumulative
Q12r3    Frequency    Percent     Frequency      Percent
------------------------------------------------------
Yes          36        87.80          36         87.80
No            5        12.20          41        100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    23.4390
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41


                                  Cumulative    Cumulative
Q12r4    Frequency    Percent     Frequency      Percent
------------------------------------------------------
Yes          12        29.27          12         29.27
No           29        70.73          41        100.00

                     Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     7.0488
                   DF                  1
                   Pr > ChiSq     0.0079
                    Sample Size = 41


                                  Cumulative    Cumulative
Q12r5    Frequency    Percent     Frequency      Percent
```

```
-------------------------------------------------------
Yes          2       4.88           2        4.88
No          39      95.12          41      100.00

                Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square    33.3902
               DF                  1
               Pr > ChiSq    <.0001
                Sample Size = 41


                                   Cumulative   Cumulative
Q12s1    Frequency     Percent     Frequency     Percent
-------------------------------------------------------
Yes          7      17.07           7       17.07
No          34      82.93          41      100.00

                Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square    17.7805
               DF                  1
               Pr > ChiSq    <.0001
                Sample Size = 41


                                   Cumulative   Cumulative
Q12s2    Frequency     Percent     Frequency     Percent
-------------------------------------------------------
Yes         13      31.71          13       31.71
No          28      68.29          41      100.00

                Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square     5.4878
               DF                  1
               Pr > ChiSq    0.0191
                Sample Size = 41


                                   Cumulative   Cumulative
Q12s3    Frequency     Percent     Frequency     Percent
-------------------------------------------------------
Yes         17      41.46          17       41.46
No          24      58.54          41      100.00

                Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square     1.1951
               DF                  1
               Pr > ChiSq    0.2743
                Sample Size = 41


                                   Cumulative   Cumulative
Q12s4    Frequency     Percent     Frequency     Percent
-------------------------------------------------------
Yes         10      24.39          10       24.39
No          31      75.61          41      100.00

                Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square    10.7561
               DF                  1
               Pr > ChiSq    0.0010
                Sample Size = 41


                                   Cumulative   Cumulative
Q12s5    Frequency     Percent     Frequency     Percent
-------------------------------------------------------
Yes         12      29.27          12       29.27
No          29      70.73          41      100.00

                Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square     7.0488
               DF                  1
               Pr > ChiSq    0.0079
                Sample Size = 41


                                   Cumulative   Cumulative
Q12t1    Frequency     Percent     Frequency     Percent
-------------------------------------------------------
Yes          6      14.63           6       14.63
No          35      85.37          41      100.00

                Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square    20.5122
               DF                  1
               Pr > ChiSq    <.0001
                Sample Size = 41


                                   Cumulative   Cumulative
Q12t2    Frequency     Percent     Frequency     Percent
-------------------------------------------------------
```

```
Yes            14      34.15            14      34.15
No             27      65.85            41     100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    4.1220
                  DF                 1
                  Pr > ChiSq    0.0423
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12t3   Frequency     Percent        Frequency     Percent
-----------------------------------------------------------
Yes            15      36.59            15      36.59
No             26      63.41            41     100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    2.9512
                  DF                 1
                  Pr > ChiSq    0.0858
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12t4   Frequency     Percent        Frequency     Percent
-----------------------------------------------------------
Yes             9      21.95             9      21.95
No             32      78.05            41     100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   12.9024
                  DF                 1
                  Pr > ChiSq    0.0003
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12t5   Frequency     Percent        Frequency     Percent
-----------------------------------------------------------
Yes            14      34.15            14      34.15
No             27      65.85            41     100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    4.1220
                  DF                 1
                  Pr > ChiSq    0.0423
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12u1   Frequency     Percent        Frequency     Percent
-----------------------------------------------------------
Yes             4       9.76             4       9.76
No             37      90.24            41     100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   26.5610
                  DF                 1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12u2   Frequency     Percent        Frequency     Percent
-----------------------------------------------------------
Yes            15      36.59            15      36.59
No             26      63.41            41     100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    2.9512
                  DF                 1
                  Pr > ChiSq    0.0858
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12u3   Frequency     Percent        Frequency     Percent
-----------------------------------------------------------
Yes            19      46.34            19      46.34
No             22      53.66            41     100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    0.2195
                  DF                 1
                  Pr > ChiSq    0.6394
                   Sample Size = 41


                                    Cumulative   Cumulative
Q12u4   Frequency     Percent        Frequency     Percent
-----------------------------------------------------------
Yes            11      26.83            11      26.83
```

147

```
No              30       73.17            41        100.00

                    Chi-Square Test
                    for Equal Proportions
                    --------------------
                    Chi-Square    8.8049
                    DF                 1
                    Pr > ChiSq    0.0030
                     Sample Size = 41


                                 Cumulative   Cumulative
Q12u5   Frequency     Percent     Frequency      Percent
----------------------------------------------------------
Yes             11       26.83            11         26.83
No              30       73.17            41        100.00

                    Chi-Square Test
                    for Equal Proportions
                    --------------------
                    Chi-Square    8.8049
                    DF                 1
                    Pr > ChiSq    0.0030
                     Sample Size = 41


                                 Cumulative   Cumulative
Q12v1   Frequency     Percent     Frequency      Percent
----------------------------------------------------------
Yes             12       29.27            12         29.27
No              29       70.73            41        100.00

                    Chi-Square Test
                    for Equal Proportions
                    --------------------
                    Chi-Square    7.0488
                    DF                 1
                    Pr > ChiSq    0.0079
                     Sample Size = 41


                                 Cumulative   Cumulative
Q12v2   Frequency     Percent     Frequency      Percent
----------------------------------------------------------
Yes              8       19.51             8         19.51
No              33       80.49            41        100.00

                    Chi-Square Test
                    for Equal Proportions
                    --------------------
                    Chi-Square   15.2439
                    DF                 1
                    Pr > ChiSq    <.0001
                     Sample Size = 41


                                 Cumulative   Cumulative
Q12v3   Frequency     Percent     Frequency      Percent
----------------------------------------------------------
Yes             17       41.46            17         41.46
No              24       58.54            41        100.00

                    Chi-Square Test
                    for Equal Proportions
                    --------------------
                    Chi-Square    1.1951
                    DF                 1
                    Pr > ChiSq    0.2743
                     Sample Size = 41


                                 Cumulative   Cumulative
Q12v4   Frequency     Percent     Frequency      Percent
----------------------------------------------------------
Yes             15       36.59            15         36.59
No              26       63.41            41        100.00

                    Chi-Square Test
                    for Equal Proportions
                    --------------------
                    Chi-Square    2.9512
                    DF                 1
                    Pr > ChiSq    0.0858
                     Sample Size = 41


                                 Cumulative   Cumulative
Q12v5   Frequency     Percent     Frequency      Percent
----------------------------------------------------------
Yes             15       36.59            15         36.59
No              26       63.41            41        100.00

                    Chi-Square Test
                    for Equal Proportions
                    --------------------
                    Chi-Square    2.9512
                    DF                 1
                    Pr > ChiSq    0.0858
                     Sample Size = 41


                                 Cumulative   Cumulative
Q13a1   Frequency     Percent     Frequency      Percent
----------------------------------------------------------
Yes              3        7.32             3          7.32
No              38       92.68            41        100.00
```

148

```
                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    29.8780
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13a2    Frequency      Percent       Frequency      Percent
---------------------------------------------------------------
Yes            7        17.07             7           17.07
No            34        82.93            41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    17.7805
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13a3    Frequency      Percent       Frequency      Percent
---------------------------------------------------------------
Yes           23        56.10            23           56.10
No            18        43.90            41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     0.6098
                  DF                  1
                  Pr > ChiSq     0.4349
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13a4    Frequency      Percent       Frequency      Percent
---------------------------------------------------------------
Yes           10        24.39            10           24.39
No            31        75.61            41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    10.7561
                  DF                  1
                  Pr > ChiSq     0.0010
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13a5    Frequency      Percent       Frequency      Percent
---------------------------------------------------------------
Yes            7        17.07             7           17.07
No            34        82.93            41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    17.7805
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13b1    Frequency      Percent       Frequency      Percent
---------------------------------------------------------------
Yes            2         4.88             2            4.88
No            39        95.12            41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    33.3902
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13b2    Frequency      Percent       Frequency      Percent
---------------------------------------------------------------
Yes            1         2.44             1            2.44
No            40        97.56            41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    37.0976
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13b3    Frequency      Percent       Frequency      Percent
---------------------------------------------------------------
Yes           34        82.93            34           82.93
No             7        17.07            41          100.00
```

149

```
                  Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square     17.7805
                 DF                    1
                 Pr > ChiSq       <.0001
                  Sample Size = 41


                                    Cumulative   Cumulative
Q13b4    Frequency     Percent      Frequency      Percent
-----------------------------------------------------------
  Yes         11        26.83            11         26.83
  No          30        73.17            41        100.00

                  Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square      8.8049
                 DF                    1
                 Pr > ChiSq       0.0030
                  Sample Size = 41


                                    Cumulative   Cumulative
Q13b5    Frequency     Percent      Frequency      Percent
-----------------------------------------------------------
  Yes          1         2.44             1          2.44
  No          40        97.56            41        100.00

                  Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square     37.0976
                 DF                    1
                 Pr > ChiSq       <.0001
                  Sample Size = 41


                                    Cumulative   Cumulative
Q13c1    Frequency     Percent      Frequency      Percent
-----------------------------------------------------------
  Yes          3         7.32             3          7.32
  No          38        92.68            41        100.00

                  Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square     29.8780
                 DF                    1
                 Pr > ChiSq       <.0001
                  Sample Size = 41


                                    Cumulative   Cumulative
Q13c2    Frequency     Percent      Frequency      Percent
-----------------------------------------------------------
  Yes          3         7.32             3          7.32
  No          38        92.68            41        100.00

                  Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square     29.8780
                 DF                    1
                 Pr > ChiSq       <.0001
                  Sample Size = 41


                                    Cumulative   Cumulative
Q13c3    Frequency     Percent      Frequency      Percent
-----------------------------------------------------------
  Yes         29        70.73            29         70.73
  No          12        29.27            41        100.00

                  Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square      7.0488
                 DF                    1
                 Pr > ChiSq       0.0079
                  Sample Size = 41


                                    Cumulative   Cumulative
Q13c4    Frequency     Percent      Frequency      Percent
-----------------------------------------------------------
  Yes         11        26.83            11         26.83
  No          30        73.17            41        100.00

                  Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square      8.8049
                 DF                    1
                 Pr > ChiSq       0.0030
                  Sample Size = 41


                                    Cumulative   Cumulative
Q13c5    Frequency     Percent      Frequency      Percent
-----------------------------------------------------------
  Yes          5        12.20             5         12.20
  No          36        87.80            41        100.00

                  Chi-Square Test
```

```
                          for Equal Proportions
                          ---------------------
                          Chi-Square      23.4390
                          DF                    1
                          Pr > ChiSq      <.0001
                           Sample Size = 41


                                          Cumulative   Cumulative
       Q13d1   Frequency     Percent       Frequency      Percent
       -----------------------------------------------------------
        Yes         2          4.88             2           4.88
        No         39         95.12            41         100.00

                           Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square      33.3902
                          DF                    1
                          Pr > ChiSq      <.0001
                           Sample Size = 41


                                          Cumulative   Cumulative
       Q13d2   Frequency     Percent       Frequency      Percent
       -----------------------------------------------------------
        Yes         2          4.88             2           4.88
        No         39         95.12            41         100.00

                           Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square      33.3902
                          DF                    1
                          Pr > ChiSq      <.0001
                           Sample Size = 41


                                          Cumulative   Cumulative
       Q13d3   Frequency     Percent       Frequency      Percent
       -----------------------------------------------------------
        Yes        30         73.17            30          73.17
        No         11         26.83            41         100.00

                           Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square       8.8049
                          DF                    1
                          Pr > ChiSq      0.0030
                           Sample Size = 41


                                          Cumulative   Cumulative
       Q13d4   Frequency     Percent       Frequency      Percent
       -----------------------------------------------------------
        Yes        12         29.27            12          29.27
        No         29         70.73            41         100.00

                           Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square       7.0488
                          DF                    1
                          Pr > ChiSq      0.0079
                           Sample Size = 41


                                          Cumulative   Cumulative
       Q13d5   Frequency     Percent       Frequency      Percent
       -----------------------------------------------------------
        Yes         4          9.76             4           9.76
        No         37         90.24            41         100.00

                           Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square      26.5610
                          DF                    1
                          Pr > ChiSq      <.0001
                           Sample Size = 41


                                          Cumulative   Cumulative
       Q13e1   Frequency     Percent       Frequency      Percent
       -----------------------------------------------------------
        Yes         2          4.88             2           4.88
        No         39         95.12            41         100.00

                           Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square      33.3902
                          DF                    1
                          Pr > ChiSq      <.0001
                           Sample Size = 41


                                          Cumulative   Cumulative
       Q13e2   Frequency     Percent       Frequency      Percent
       -----------------------------------------------------------
        Yes         4          9.76             4           9.76
        No         37         90.24            41         100.00

                           Chi-Square Test
                          for Equal Proportions
```

151

```
                         ---------------------
                         Chi-Square      26.5610
                         DF                    1
                         Pr > ChiSq      <.0001
                           Sample Size = 41

                                          Cumulative    Cumulative
Q13e3    Frequency    Percent    Frequency     Percent
--------------------------------------------------------------
 Yes         28        68.29         28          68.29
 No          13        31.71         41         100.00

                     Chi-Square Test
                    for Equal Proportions
                   ---------------------
                   Chi-Square      5.4878
                   DF                   1
                   Pr > ChiSq      0.0191
                     Sample Size = 41
                                          Cumulative    Cumulative
Q13e4    Frequency    Percent    Frequency     Percent
--------------------------------------------------------------
 Yes         11        26.83         11          26.83
 No          30        73.17         41         100.00

                     Chi-Square Test
                    for Equal Proportions
                   ---------------------
                   Chi-Square      8.8049
                   DF                   1
                   Pr > ChiSq      0.0030
                     Sample Size = 41

                                          Cumulative    Cumulative
Q13e5    Frequency    Percent    Frequency     Percent
--------------------------------------------------------------
 Yes          6        14.63          6          14.63
 No          35        85.37         41         100.00

                     Chi-Square Test
                    for Equal Proportions
                   ---------------------
                   Chi-Square     20.5122
                   DF                   1
                   Pr > ChiSq      <.0001
                     Sample Size = 41

                                          Cumulative    Cumulative
Q13f1    Frequency    Percent    Frequency     Percent
--------------------------------------------------------------
 Yes          3         7.32          3           7.32
 No          38        92.68         41         100.00

                     Chi-Square Test
                    for Equal Proportions
                   ---------------------
                   Chi-Square     29.8780
                   DF                   1
                   Pr > ChiSq      <.0001
                     Sample Size = 41

                                          Cumulative    Cumulative
Q13f2    Frequency    Percent    Frequency     Percent
--------------------------------------------------------------
 Yes          9        21.95          9          21.95
 No          32        78.05         41         100.00

                     Chi-Square Test
                    for Equal Proportions
                   ---------------------
                   Chi-Square     12.9024
                   DF                   1
                   Pr > ChiSq      0.0003
                     Sample Size = 41

                                          Cumulative    Cumulative
Q13f3    Frequency    Percent    Frequency     Percent
--------------------------------------------------------------
 Yes         22        53.66         22          53.66
 No          19        46.34         41         100.00

                     Chi-Square Test
                    for Equal Proportions
                   ---------------------
                   Chi-Square      0.2195
                   DF                   1
                   Pr > ChiSq      0.6394
                     Sample Size = 41

                                          Cumulative    Cumulative
Q13f4    Frequency    Percent    Frequency     Percent
--------------------------------------------------------------
 Yes          9        21.95          9          21.95
 No          32        78.05         41         100.00

                     Chi-Square Test
                    for Equal Proportions
                   ---------------------
```

152

```
                                    Chi-Square       12.9024
                                    DF                     1
                                    Pr > ChiSq        0.0003
                                     Sample Size = 41

                                             Cumulative   Cumulative
        Q13f5   Frequency    Percent      Frequency     Percent
        ---------------------------------------------------------
        Yes          8        19.51           8          19.51
        No          33        80.49          41         100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                             Chi-Square      15.2439
                             DF                    1
                             Pr > ChiSq       <.0001
                              Sample Size = 41

                                             Cumulative   Cumulative
        Q13g1   Frequency    Percent      Frequency     Percent
        ---------------------------------------------------------
        Yes          3         7.32           3           7.32
        No          38        92.68          41         100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                             Chi-Square      29.8780
                             DF                    1
                             Pr > ChiSq       <.0001
                              Sample Size = 41

                                             Cumulative   Cumulative
        Q13g2   Frequency    Percent      Frequency     Percent
        ---------------------------------------------------------
        Yes         13        31.71          13          31.71
        No          28        68.29          41         100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                             Chi-Square       5.4878
                             DF                    1
                             Pr > ChiSq       0.0191
                              Sample Size = 41

                                             Cumulative   Cumulative
        Q13g3   Frequency    Percent      Frequency     Percent
        ---------------------------------------------------------
        Yes         19        46.34          19          46.34
        No          22        53.66          41         100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                             Chi-Square       0.2195
                             DF                    1
                             Pr > ChiSq       0.6394
                              Sample Size = 41

                                             Cumulative   Cumulative
        Q13g4   Frequency    Percent      Frequency     Percent
        ---------------------------------------------------------
        Yes          7        17.07           7          17.07
        No          34        82.93          41         100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                             Chi-Square      17.7805
                             DF                    1
                             Pr > ChiSq       <.0001
                              Sample Size = 41

                                             Cumulative   Cumulative
        Q13g5   Frequency    Percent      Frequency     Percent
        ---------------------------------------------------------
        Yes          8        19.51           8          19.51
        No          33        80.49          41         100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                             Chi-Square      15.2439
                             DF                    1
                             Pr > ChiSq       <.0001
                              Sample Size = 41

                                             Cumulative   Cumulative
        Q13h1   Frequency    Percent      Frequency     Percent
        ---------------------------------------------------------
        Yes          3         7.32           3           7.32
        No          38        92.68          41         100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                             Chi-Square      29.8780
```

```
                       DF                       1
                       Pr > ChiSq       <.0001
                        Sample Size = 41


                                         Cumulative   Cumulative
       Q13h2   Frequency     Percent     Frequency     Percent
       ------------------------------------------------------------
         Yes       13         31.71          13          31.71
         No        28         68.29          41         100.00

                        Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square     5.4878
                        DF                  1
                        Pr > ChiSq     0.0191
                         Sample Size = 41


                                         Cumulative   Cumulative
       Q13h3   Frequency     Percent     Frequency     Percent
       ------------------------------------------------------------
         Yes       18         43.90          18          43.90
         No        23         56.10          41         100.00

                        Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square     0.6098
                        DF                  1
                        Pr > ChiSq     0.4349
                         Sample Size = 41


                                         Cumulative   Cumulative
       Q13h4   Frequency     Percent     Frequency     Percent
       ------------------------------------------------------------
         Yes        8         19.51           8          19.51
         No        33         80.49          41         100.00

                        Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square    15.2439
                        DF                  1
                        Pr > ChiSq     <.0001
                         Sample Size = 41


                                         Cumulative   Cumulative
       Q13h5   Frequency     Percent     Frequency     Percent
       ------------------------------------------------------------
         Yes       13         31.71          13          31.71
         No        28         68.29          41         100.00

                        Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square     5.4878
                        DF                  1
                        Pr > ChiSq     0.0191
                         Sample Size = 41


                                         Cumulative   Cumulative
       Q13i1   Frequency     Percent     Frequency     Percent
       ------------------------------------------------------------
         Yes        5         12.20           5          12.20
         No        36         87.80          41         100.00

                        Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square    23.4390
                        DF                  1
                        Pr > ChiSq     <.0001
                         Sample Size = 41


                                         Cumulative   Cumulative
       Q13i2   Frequency     Percent     Frequency     Percent
       ------------------------------------------------------------
         Yes       13         31.71          13          31.71
         No        28         68.29          41         100.00

                        Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square     5.4878
                        DF                  1
                        Pr > ChiSq     0.0191
                         Sample Size = 41


                                         Cumulative   Cumulative
       Q13i3   Frequency     Percent     Frequency     Percent
       ------------------------------------------------------------
         Yes       15         36.59          15          36.59
         No        26         63.41          41         100.00

                        Chi-Square Test
                        for Equal Proportions
                        --------------------
                        Chi-Square     2.9512
                        DF                  1
```

154

```
                   Pr > ChiSq     0.0858
                    Sample Size = 41

                                  Cumulative   Cumulative
Q13i4   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
Yes         11        26.83           11        26.83
No          30        73.17           41       100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     8.8049
                DF                  1
                Pr > ChiSq     0.0030
                 Sample Size = 41

                                  Cumulative   Cumulative
Q13i5   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
Yes         18        43.90           18        43.90
No          23        56.10           41       100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     0.6098
                DF                  1
                Pr > ChiSq     0.4349
                 Sample Size = 41

                                  Cumulative   Cumulative
Q13j1   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
Yes         12        29.27           12        29.27
No          29        70.73           41       100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     7.0488
                DF                  1
                Pr > ChiSq     0.0079
                 Sample Size = 41

                                  Cumulative   Cumulative
Q13j2   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
Yes         16        39.02           16        39.02
No          25        60.98           41       100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     1.9756
                DF                  1
                Pr > ChiSq     0.1599
                 Sample Size = 41

                                  Cumulative   Cumulative
Q13j3   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
Yes          6        14.63            6        14.63
No          35        85.37           41       100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square    20.5122
                DF                  1
                Pr > ChiSq     <.0001
                 Sample Size = 41

                                  Cumulative   Cumulative
Q13j4   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
Yes          7        17.07            7        17.07
No          34        82.93           41       100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square    17.7805
                DF                  1
                Pr > ChiSq     <.0001
                 Sample Size = 41

                                  Cumulative   Cumulative
Q13j5   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
Yes         21        51.22           21        51.22
No          20        48.78           41       100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     0.0244
                DF                  1
                Pr > ChiSq     0.8759
```

155

```
                                 Sample Size = 41

                                                    Cumulative   Cumulative
     Q13k1   Frequency      Percent      Frequency     Percent
     --------------------------------------------------------------
      Yes         10          24.39            10        24.39
      No          31          75.61            41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                            Chi-Square    10.7561
                            DF                  1
                            Pr > ChiSq     0.0010
                                 Sample Size = 41

                                                    Cumulative   Cumulative
     Q13k2   Frequency      Percent      Frequency     Percent
     --------------------------------------------------------------
      Yes         14          34.15            14        34.15
      No          27          65.85            41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                            Chi-Square     4.1220
                            DF                  1
                            Pr > ChiSq     0.0423
                                 Sample Size = 41

                                                    Cumulative   Cumulative
     Q13k3   Frequency      Percent      Frequency     Percent
     --------------------------------------------------------------
      Yes         10          24.39            10        24.39
      No          31          75.61            41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                            Chi-Square    10.7561
                            DF                  1
                            Pr > ChiSq     0.0010
                                 Sample Size = 41

                                                    Cumulative   Cumulative
     Q13k4   Frequency      Percent      Frequency     Percent
     --------------------------------------------------------------
      Yes         10          24.39            10        24.39
      No          31          75.61            41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                            Chi-Square    10.7561
                            DF                  1
                            Pr > ChiSq     0.0010
                                 Sample Size = 41

                                                    Cumulative   Cumulative
     Q13k5   Frequency      Percent      Frequency     Percent
     --------------------------------------------------------------
      Yes         18          43.90            18        43.90
      No          23          56.10            41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                            Chi-Square     0.6098
                            DF                  1
                            Pr > ChiSq     0.4349
                                 Sample Size = 41

                                                    Cumulative   Cumulative
     Q13l1   Frequency      Percent      Frequency     Percent
     --------------------------------------------------------------
      Yes          4           9.76             4         9.76
      No          37          90.24            41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                            Chi-Square    26.5610
                            DF                  1
                            Pr > ChiSq    <.0001
                                 Sample Size = 41

                                                    Cumulative   Cumulative
     Q13l2   Frequency      Percent      Frequency     Percent
     --------------------------------------------------------------
      Yes          5          12.20             5        12.20
      No          36          87.80            41       100.00

                              Chi-Square Test
                            for Equal Proportions
                            ---------------------
                            Chi-Square    23.4390
                            DF                  1
                            Pr > ChiSq    <.0001
```

```
                          Sample Size = 41

                                      Cumulative    Cumulative
Q13l3    Frequency    Percent    Frequency      Percent
------------------------------------------------------------
 Yes         27        65.85         27          65.85
 No          14        34.15         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    4.1220
                  DF                 1
                  Pr > ChiSq    0.0423
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13l4    Frequency    Percent    Frequency      Percent
------------------------------------------------------------
 Yes         12        29.27         12          29.27
 No          29        70.73         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    7.0488
                  DF                 1
                  Pr > ChiSq    0.0079
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13l5    Frequency    Percent    Frequency      Percent
------------------------------------------------------------
 Yes          6        14.63          6          14.63
 No          35        85.37         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   20.5122
                  DF                 1
                  Pr > ChiSq    <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13m1    Frequency    Percent    Frequency      Percent
------------------------------------------------------------
 Yes          2         4.88          2           4.88
 No          39        95.12         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   33.3902
                  DF                 1
                  Pr > ChiSq    <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13m2    Frequency    Percent    Frequency      Percent
------------------------------------------------------------
 Yes          5        12.20          5          12.20
 No          36        87.80         41         100.00
                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   23.4390
                  DF                 1
                  Pr > ChiSq    <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13m3    Frequency    Percent    Frequency      Percent
------------------------------------------------------------
 Yes         27        65.85         27          65.85
 No          14        34.15         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    4.1220
                  DF                 1
                  Pr > ChiSq    0.0423
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13m4    Frequency    Percent    Frequency      Percent
------------------------------------------------------------
 Yes         11        26.83         11          26.83
 No          30        73.17         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    8.8049
                  DF                 1
                  Pr > ChiSq    0.0030
                   Sample Size = 41
```

```
                                   Cumulative    Cumulative
Q13m5    Frequency    Percent      Frequency      Percent
-----------------------------------------------------------
Yes          5        12.20            5           12.20
No          36        87.80           41          100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     23.4390
                DF                   1
                Pr > ChiSq      <.0001
                 Sample Size = 41


                                   Cumulative    Cumulative
Q13n1    Frequency    Percent      Frequency      Percent
-----------------------------------------------------------
Yes          1         2.44            1            2.44
No          40        97.56           41          100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     37.0976
                DF                   1
                Pr > ChiSq      <.0001
                 Sample Size = 41


                                   Cumulative    Cumulative
Q13n2    Frequency    Percent      Frequency      Percent
-----------------------------------------------------------
Yes         12        29.27           12           29.27
No          29        70.73           41          100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square      7.0488
                DF                   1
                Pr > ChiSq      0.0079
                 Sample Size = 41


                                   Cumulative    Cumulative
Q13n3    Frequency    Percent      Frequency      Percent
-----------------------------------------------------------
Yes         20        48.78           20           48.78
No          21        51.22           41          100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square      0.0244
                DF                   1
                Pr > ChiSq      0.8759
                 Sample Size = 41


                                   Cumulative    Cumulative
Q13n4    Frequency    Percent      Frequency      Percent
-----------------------------------------------------------
Yes         11        26.83           11           26.83
No          30        73.17           41          100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square      8.8049
                DF                   1
                Pr > ChiSq      0.0030
                 Sample Size = 41


                                   Cumulative    Cumulative
Q13n5    Frequency    Percent      Frequency      Percent
-----------------------------------------------------------
Yes          9        21.95            9           21.95
No          32        78.05           41          100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     12.9024
                DF                   1
                Pr > ChiSq      0.0003
                 Sample Size = 41


                                   Cumulative    Cumulative
Q13o1    Frequency    Percent      Frequency      Percent
-----------------------------------------------------------
Yes          2         4.88            2            4.88
No          39        95.12           41          100.00

                 Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square     33.3902
                DF                   1
                Pr > ChiSq      <.0001
                 Sample Size = 41


                                   Cumulative    Cumulative
```

```
Q13o2      Frequency      Percent      Frequency      Percent
-----------------------------------------------------------
 Yes          12           29.27          12           29.27
 No           29           70.73          41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     7.0488
                  DF                  1
                  Pr > ChiSq     0.0079
                   Sample Size = 41


                                      Cumulative    Cumulative
Q13o3      Frequency      Percent      Frequency      Percent
-----------------------------------------------------------
 Yes          18           43.90          18           43.90
 No           23           56.10          41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     0.6098
                  DF                  1
                  Pr > ChiSq     0.4349
                   Sample Size = 41


                                      Cumulative    Cumulative
Q13o4      Frequency      Percent      Frequency      Percent
-----------------------------------------------------------
 Yes          11           26.83          11           26.83
 No           30           73.17          41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     8.8049
                  DF                  1
                  Pr > ChiSq     0.0030
                   Sample Size = 41


                                      Cumulative    Cumulative
Q13o5      Frequency      Percent      Frequency      Percent
-----------------------------------------------------------
 Yes          11           26.83          11           26.83
 No           30           73.17          41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     8.8049
                  DF                  1
                  Pr > ChiSq     0.0030
                   Sample Size = 41


                                      Cumulative    Cumulative
Q13p1      Frequency      Percent      Frequency      Percent
-----------------------------------------------------------
 Yes           2            4.88           2            4.88
 No           39           95.12          41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    33.3902
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                      Cumulative    Cumulative
Q13p2      Frequency      Percent      Frequency      Percent
-----------------------------------------------------------
 Yes           5           12.20           5           12.20
 No           36           87.80          41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    23.4390
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                      Cumulative    Cumulative
Q13p3      Frequency      Percent      Frequency      Percent
-----------------------------------------------------------
 Yes          29           70.73          29           70.73
 No           12           29.27          41          100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     7.0488
                  DF                  1
                  Pr > ChiSq     0.0079
                   Sample Size = 41


                                      Cumulative    Cumulative
Q13p4      Frequency      Percent      Frequency      Percent
```

```
------------------------------------------------------------
Yes          13        31.71          13        31.71
No           28        68.29          41       100.00

                   Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square    5.4878
                 DF                 1
                 Pr > ChiSq    0.0191
                  Sample Size = 41


                                  Cumulative   Cumulative
Q13p5   Frequency     Percent      Frequency     Percent
------------------------------------------------------------
Yes           4         9.76           4         9.76
No           37        90.24          41       100.00

                   Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square   26.5610
                 DF                 1
                 Pr > ChiSq    <.0001
                  Sample Size = 41


                                  Cumulative   Cumulative
Q13q1   Frequency     Percent      Frequency     Percent
------------------------------------------------------------
Yes           5        12.20           5        12.20
No           36        87.80          41       100.00

                   Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square   23.4390
                 DF                 1
                 Pr > ChiSq    <.0001
                  Sample Size = 41


                                  Cumulative   Cumulative
Q13q2   Frequency     Percent      Frequency     Percent
------------------------------------------------------------
Yes          11        26.83          11        26.83
No           30        73.17          41       100.00

                   Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square    8.8049
                 DF                 1
                 Pr > ChiSq    0.0030
                  Sample Size = 41


                                  Cumulative   Cumulative
Q13q3   Frequency     Percent      Frequency     Percent
------------------------------------------------------------
Yes          14        34.15          14        34.15
No           27        65.85          41       100.00

                   Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square    4.1220
                 DF                 1
                 Pr > ChiSq    0.0423
                  Sample Size = 41


                                  Cumulative   Cumulative
Q13q4   Frequency     Percent      Frequency     Percent
------------------------------------------------------------
Yes          10        24.39          10        24.39
No           31        75.61          41       100.00

                   Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square   10.7561
                 DF                 1
                 Pr > ChiSq    0.0010
                  Sample Size = 41


                                  Cumulative   Cumulative
Q13q5   Frequency     Percent      Frequency     Percent
------------------------------------------------------------
Yes          19        46.34          19        46.34
No           22        53.66          41       100.00

                   Chi-Square Test
                 for Equal Proportions
                 --------------------
                 Chi-Square    0.2195
                 DF                 1
                 Pr > ChiSq    0.6394
                  Sample Size = 41


                                  Cumulative   Cumulative
Q13r1   Frequency     Percent      Frequency     Percent
------------------------------------------------------------
```

160

```
           Yes          6       14.63            6         14.63
           No          35       85.37           41        100.00

                           Chi-Square Test
                         for Equal Proportions
                         ---------------------
                         Chi-Square     20.5122
                         DF                   1
                         Pr > ChiSq      <.0001
                          Sample Size = 41


                                       Cumulative   Cumulative
           Q13r2   Frequency   Percent   Frequency     Percent
           ----------------------------------------------------------
           Yes         12       29.27           12        29.27
           No          29       70.73           41        100.00

                           Chi-Square Test
                         for Equal Proportions
                         ---------------------
                         Chi-Square      7.0488
                         DF                   1
                         Pr > ChiSq      0.0079
                          Sample Size = 41


                                       Cumulative   Cumulative
           Q13r3   Frequency   Percent   Frequency     Percent
           ----------------------------------------------------------
           Yes         12       29.27           12        29.27
           No          29       70.73           41        100.00

                           Chi-Square Test
                         for Equal Proportions
                         ---------------------
                         Chi-Square      7.0488
                         DF                   1
                         Pr > ChiSq      0.0079
                          Sample Size = 41


                                       Cumulative   Cumulative
           Q13r4   Frequency   Percent   Frequency     Percent
           ----------------------------------------------------------
           Yes          9       21.95            9        21.95
           No          32       78.05           41        100.00

                           Chi-Square Test
                         for Equal Proportions
                         ---------------------
                         Chi-Square     12.9024
                         DF                   1
                         Pr > ChiSq      0.0003
                          Sample Size = 41
                                       Cumulative   Cumulative
           Q13r5   Frequency   Percent   Frequency     Percent
           ----------------------------------------------------------
           Yes         19       46.34           19        46.34
           No          22       53.66           41        100.00

                           Chi-Square Test
                         for Equal Proportions
                         ---------------------
                         Chi-Square      0.2195
                         DF                   1
                         Pr > ChiSq      0.6394
                          Sample Size = 41


                                       Cumulative   Cumulative
           Q13s1   Frequency   Percent   Frequency     Percent
           ----------------------------------------------------------
           Yes          3        7.32            3         7.32
           No          38       92.68           41        100.00

                           Chi-Square Test
                         for Equal Proportions
                         ---------------------
                         Chi-Square     29.8780
                         DF                   1
                         Pr > ChiSq      <.0001
                          Sample Size = 41


                                       Cumulative   Cumulative
           Q13s2   Frequency   Percent   Frequency     Percent
           ----------------------------------------------------------
           Yes          6       14.63            6         14.63
           No          35       85.37           41        100.00

                           Chi-Square Test
                         for Equal Proportions
                         ---------------------
                         Chi-Square     20.5122
                         DF                   1
                         Pr > ChiSq      <.0001
                          Sample Size = 41


                                       Cumulative   Cumulative
           Q13s3   Frequency   Percent   Frequency     Percent
           ----------------------------------------------------------
           Yes         22       53.66           22        53.66
           No          19       46.34           41        100.00
```

161

```
                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      0.2195
                      DF                   1
                      Pr > ChiSq      0.6394
                       Sample Size = 41


                                       Cumulative   Cumulative
Q13s4    Frequency      Percent        Frequency      Percent
----------------------------------------------------------
 Yes         13          31.71            13           31.71
 No          28          68.29            41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      5.4878
                      DF                   1
                      Pr > ChiSq      0.0191
                       Sample Size = 41


                                       Cumulative   Cumulative
Q13s5    Frequency      Percent        Frequency      Percent
----------------------------------------------------------
 Yes         12          29.27            12           29.27
 No          29          70.73            41          100.00


                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      7.0488
                      DF                   1
                      Pr > ChiSq      0.0079
                       Sample Size = 41


                                       Cumulative   Cumulative
Q13t1    Frequency      Percent        Frequency      Percent
----------------------------------------------------------
 Yes          4           9.76             4            9.76
 No          37          90.24            41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square     26.5610
                      DF                   1
                      Pr > ChiSq      <.0001
                       Sample Size = 41


                                       Cumulative   Cumulative
Q13t2    Frequency      Percent        Frequency      Percent
----------------------------------------------------------
 Yes         11          26.83            11           26.83
 No          30          73.17            41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      8.8049
                      DF                   1
                      Pr > ChiSq      0.0030
                       Sample Size = 41


                                       Cumulative   Cumulative
Q13t3    Frequency      Percent        Frequency      Percent
----------------------------------------------------------
 Yes         16          39.02            16           39.02
 No          25          60.98            41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      1.9756
                      DF                   1
                      Pr > ChiSq      0.1599
                       Sample Size = 41


                                       Cumulative   Cumulative
Q13t4    Frequency      Percent        Frequency      Percent
----------------------------------------------------------
 Yes         14          34.15            14           34.15
 No          27          65.85            41          100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      4.1220
                      DF                   1
                      Pr > ChiSq      0.0423
                       Sample Size = 41


                                       Cumulative   Cumulative
Q13t5    Frequency      Percent        Frequency      Percent
----------------------------------------------------------
 Yes         14          34.15            14           34.15
 No          27          65.85            41          100.00
```

162

```
                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      4.1220
                      DF                   1
                      Pr > ChiSq      0.0423
                       Sample Size = 41
                                          Cumulative   Cumulative
 Q13u1   Frequency    Percent     Frequency     Percent
 ------------------------------------------------------------
  Yes         3         7.32            3          7.32
  No         38        92.68           41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square     29.8780
                      DF                   1
                      Pr > ChiSq      <.0001
                       Sample Size = 41

                                          Cumulative   Cumulative
 Q13u2   Frequency    Percent     Frequency     Percent
 ------------------------------------------------------------
  Yes        12        29.27           12         29.27
  No         29        70.73           41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      7.0488
                      DF                   1
                      Pr > ChiSq      0.0079
                       Sample Size = 41

                                          Cumulative   Cumulative
 Q13u3   Frequency    Percent     Frequency     Percent
 ------------------------------------------------------------
  Yes        16        39.02           16         39.02
  No         25        60.98           41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      1.9756
                      DF                   1
                      Pr > ChiSq      0.1599
                       Sample Size = 41

                                          Cumulative   Cumulative
 Q13u4   Frequency    Percent     Frequency     Percent
 ------------------------------------------------------------
  Yes        11        26.83           11         26.83
  No         30        73.17           41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      8.8049
                      DF                   1
                      Pr > ChiSq      0.0030
                       Sample Size = 41

                                          Cumulative   Cumulative
 Q13u5   Frequency    Percent     Frequency     Percent
 ------------------------------------------------------------
  Yes        13        31.71           13         31.71
  No         28        68.29           41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      5.4878
                      DF                   1
                      Pr > ChiSq      0.0191
                       Sample Size = 41

                                          Cumulative   Cumulative
 Q13v1   Frequency    Percent     Frequency     Percent
 ------------------------------------------------------------
  Yes        13        31.71           13         31.71
  No         28        68.29           41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square      5.4878
                      DF                   1
                      Pr > ChiSq      0.0191
                       Sample Size = 41

                                          Cumulative   Cumulative
 Q13v2   Frequency    Percent     Frequency     Percent
 ------------------------------------------------------------
  Yes        12        29.27           12         29.27
  No         29        70.73           41        100.00
```

```
                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     7.0488
                  DF                  1
                  Pr > ChiSq     0.0079
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13v3   Frequency     Percent         Frequency       Percent
-----------------------------------------------------------
 Yes          8       19.51                  8         19.51
 No          33       80.49                 41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    15.2439
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13v4   Frequency     Percent         Frequency       Percent
-----------------------------------------------------------
 Yes          8       19.51                  8         19.51
 No          33       80.49                 41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    15.2439
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q13v5   Frequency     Percent         Frequency       Percent
-----------------------------------------------------------
 Yes         21       51.22                 21         51.22
 No          20       48.78                 41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     0.0244
                  DF                  1
                  Pr > ChiSq     0.8759
                   Sample Size = 41

                                      Cumulative    Cumulative
Q14a1   Frequency     Percent         Frequency       Percent
-----------------------------------------------------------
 Yes          1        2.44                  1          2.44
 No          40       97.56                 41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    37.0976
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41
                                      Cumulative    Cumulative
Q14a2   Frequency     Percent         Frequency       Percent
-----------------------------------------------------------
 Yes          1        2.44                  1          2.44
 No          40       97.56                 41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    37.0976
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q14a3   Frequency     Percent         Frequency       Percent
-----------------------------------------------------------
 Yes         37       90.24                 37         90.24
 No           4        9.76                 41        100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    26.5610
                  DF                  1
                  Pr > ChiSq    <.0001
                   Sample Size = 41

                                      Cumulative    Cumulative
Q14a4   Frequency     Percent         Frequency       Percent
-----------------------------------------------------------
 Yes         13       31.71                 13         31.71
 No          28       68.29                 41        100.00

                    Chi-Square Test
                  for Equal Proportions
```

```
                              ---------------------
                              Chi-Square     5.4878
                              DF                  1
                              Pr > ChiSq     0.0191
                               Sample Size = 41


                                             Cumulative  Cumulative
Q14a5   Frequency     Percent     Frequency     Percent
--------------------------------------------------------
  No          41      100.00            41      100.00

                      Chi-Square Test
                     for Equal Proportions
                     ---------------------
                     Chi-Square     0.0000
                     DF                  0
                     Pr > ChiSq          .
                      Sample Size = 41


                                             Cumulative  Cumulative
Q14b1   Frequency     Percent     Frequency     Percent
--------------------------------------------------------
  Yes          2        4.88             2        4.88
  No          39       95.12            41      100.00

                      Chi-Square Test
                     for Equal Proportions
                     ---------------------
                     Chi-Square    33.3902
                     DF                  1
                     Pr > ChiSq     <.0001
                      Sample Size = 41


                                             Cumulative  Cumulative
Q14b2   Frequency     Percent     Frequency     Percent
--------------------------------------------------------
  No          41      100.00            41      100.00




                      Chi-Square Test
                     for Equal Proportions
                     ---------------------
                     Chi-Square     0.0000
                     DF                  0
                     Pr > ChiSq          .
                      Sample Size = 41


                                             Cumulative  Cumulative
Q14b3   Frequency     Percent     Frequency     Percent
--------------------------------------------------------
  Yes         37       90.24            37       90.24
  No           4        9.76            41      100.00

                      Chi-Square Test
                     for Equal Proportions
                     ---------------------
                     Chi-Square    26.5610
                     DF                  1
                     Pr > ChiSq     <.0001
                      Sample Size = 41


                                             Cumulative  Cumulative
Q14b4   Frequency     Percent     Frequency     Percent
--------------------------------------------------------
  Yes         12       29.27            12       29.27
  No          29       70.73            41      100.00

                      Chi-Square Test
                     for Equal Proportions
                     ---------------------
                     Chi-Square     7.0488
                     DF                  1
                     Pr > ChiSq     0.0079
                      Sample Size = 41


                                             Cumulative  Cumulative
Q14b5   Frequency     Percent     Frequency     Percent
--------------------------------------------------------
  No          41      100.00            41      100.00

                      Chi-Square Test
                     for Equal Proportions
                     ---------------------
                     Chi-Square     0.0000
                     DF                  0
                     Pr > ChiSq          .
                      Sample Size = 41


                                             Cumulative  Cumulative
Q14c1   Frequency     Percent     Frequency     Percent
--------------------------------------------------------
  Yes          1        2.44             1        2.44
  No          40       97.56            41      100.00

                      Chi-Square Test
                     for Equal Proportions
                     ---------------------
```

165

```
                              Chi-Square     37.0976
                              DF                    1
                              Pr > ChiSq       <.0001
                               Sample Size = 41

                                            Cumulative   Cumulative
      Q14c2   Frequency     Percent       Frequency     Percent
      ----------------------------------------------------------
      No          41        100.00            41        100.00

                          Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square      0.0000
                          DF                   0
                          Pr > ChiSq            .
                           Sample Size = 41


                                            Cumulative   Cumulative
      Q14c3   Frequency     Percent       Frequency     Percent
      ----------------------------------------------------------
      Yes         39         95.12            39         95.12
      No           2          4.88            41        100.00

                          Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square     33.3902
                          DF                   1
                          Pr > ChiSq       <.0001
                           Sample Size = 41


                                            Cumulative   Cumulative
      Q14c4   Frequency     Percent       Frequency     Percent
      ----------------------------------------------------------
      Yes         11         26.83            11         26.83
      No           30        73.17            41        100.00

                          Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square      8.8049
                          DF                   1
                          Pr > ChiSq       0.0030
                           Sample Size = 41


                                            Cumulative   Cumulative
      Q14c5   Frequency     Percent       Frequency     Percent
      ----------------------------------------------------------
      No          41        100.00            41        100.00

                          Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square      0.0000
                          DF                   0
                          Pr > ChiSq            .
                           Sample Size = 41


                                            Cumulative   Cumulative
      Q14d1   Frequency     Percent       Frequency     Percent
      ----------------------------------------------------------
      Yes          1          2.44             1          2.44
      No           40        97.56            41        100.00

                          Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square     37.0976
                          DF                   1
                          Pr > ChiSq       <.0001
                           Sample Size = 41


                                            Cumulative   Cumulative
      Q14d2   Frequency     Percent       Frequency     Percent
      ----------------------------------------------------------
      Yes          2          4.88             2          4.88
      No           39        95.12            41        100.00

                          Chi-Square Test
                          for Equal Proportions
                          ---------------------
                          Chi-Square     33.3902
                          DF                   1
                          Pr > ChiSq       <.0001
                           Sample Size = 41


                                            Cumulative   Cumulative
      Q14d3   Frequency     Percent       Frequency     Percent
      ----------------------------------------------------------
      Yes         33         80.49            33         80.49
      No           8         19.51            41        100.00



                          Chi-Square Test
                          for Equal Proportions
                          ---------------------
```

166

```
                        Chi-Square    15.2439
                        DF                   1
                        Pr > ChiSq     <.0001
                         Sample Size = 41


                                  Cumulative    Cumulative
Q14d4    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
 Yes         11        26.83         11          26.83
 No          30        73.17         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    8.8049
                  DF                 1
                  Pr > ChiSq    0.0030
                   Sample Size = 41


                                  Cumulative    Cumulative
Q14d5    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
 Yes          6        14.63          6          14.63
 No          35        85.37         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   20.5122
                  DF                 1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                  Cumulative    Cumulative
Q14e1    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
 Yes          1         2.44          1           2.44
 No          40        97.56         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   37.0976
                  DF                 1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                  Cumulative    Cumulative
Q14e2    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
 Yes          2         4.88          2           4.88
 No          39        95.12         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   33.3902
                  DF                 1
                  Pr > ChiSq    <.0001
                   Sample Size = 41


                                  Cumulative    Cumulative
Q14e3    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
 Yes         37        90.24         37          90.24
 No           4         9.76         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   26.5610
                  DF                 1
                  Pr > ChiSq    <.0001
                   Sample Size = 41
                                  Cumulative    Cumulative
Q14e4    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
 Yes         10        24.39         10          24.39
 No          31        75.61         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   10.7561
                  DF                 1
                  Pr > ChiSq    0.0010
                   Sample Size = 41


                                  Cumulative    Cumulative
Q14e5    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
 Yes          2         4.88          2           4.88
 No          39        95.12         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square   33.3902
                  DF                 1
```

167

```
                            Pr > ChiSq      <.0001
                           Sample Size = 41

                                         Cumulative    Cumulative
Q14f1   Frequency   Percent   Frequency       Percent
------------------------------------------------------------
  Yes         4        9.76          4          9.76
  No         37       90.24         41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square    26.5610
                      DF                  1
                      Pr > ChiSq     <.0001
                       Sample Size = 41

                                         Cumulative    Cumulative
Q14f2   Frequency   Percent   Frequency       Percent
------------------------------------------------------------
  Yes         4        9.76          4          9.76
  No         37       90.24         41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square    26.5610
                      DF                  1
                      Pr > ChiSq     <.0001
                       Sample Size = 41

                                         Cumulative    Cumulative
Q14f3   Frequency   Percent   Frequency       Percent
------------------------------------------------------------
  Yes        28       68.29         28         68.29
  No         13       31.71         41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square     5.4878
                      DF                  1
                      Pr > ChiSq     0.0191
                       Sample Size = 41

                                         Cumulative    Cumulative
Q14f4   Frequency   Percent   Frequency       Percent
------------------------------------------------------------
  Yes        13       31.71         13         31.71
  No         28       68.29         41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square     5.4878
                      DF                  1
                      Pr > ChiSq     0.0191
                       Sample Size = 41

                                         Cumulative    Cumulative
Q14f5   Frequency   Percent   Frequency       Percent
------------------------------------------------------------
  Yes         5       12.20          5         12.20
  No         36       87.80         41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square    23.4390
                      DF                  1
                      Pr > ChiSq     <.0001
                       Sample Size = 41

                                         Cumulative    Cumulative
Q14g1   Frequency   Percent   Frequency       Percent
------------------------------------------------------------
  Yes         1        2.44          1          2.44
  No         40       97.56         41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square    37.0976
                      DF                  1
                      Pr > ChiSq     <.0001
                       Sample Size = 41

                                         Cumulative    Cumulative
Q14g2   Frequency   Percent   Frequency       Percent
------------------------------------------------------------
  No         41      100.00         41        100.00

                       Chi-Square Test
                      for Equal Proportions
                      ---------------------
                      Chi-Square     0.0000
                      DF                  0
                      Pr > ChiSq          .
```

```
                          Sample Size = 41

                                       Cumulative   Cumulative
Q14g3    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
Yes         39        95.12         39          95.12
No           2         4.88         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    33.3902
                  DF                  1
                  Pr > ChiSq     <.0001
                     Sample Size = 41

                                       Cumulative   Cumulative
Q14g4    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
Yes         10        24.39         10          24.39
No          31        75.61         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    10.7561
                  DF                  1
                  Pr > ChiSq     0.0010
                     Sample Size = 41

                                       Cumulative   Cumulative
Q14g5    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
No          41       100.00         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     0.0000
                  DF                  0
                  Pr > ChiSq          .
                     Sample Size = 41

                                       Cumulative   Cumulative
Q14h1    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
Yes          5        12.20          5          12.20
No          36        87.80         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    23.4390
                  DF                  1
                  Pr > ChiSq     <.0001
                     Sample Size = 41

                                       Cumulative   Cumulative
Q14h2    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
Yes          6        14.63          6          14.63
No          35        85.37         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    20.5122
                  DF                  1
                  Pr > ChiSq     <.0001
                     Sample Size = 41

                                       Cumulative   Cumulative
Q14h3    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
Yes         25        60.98         25          60.98
No          16        39.02         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     1.9756
                  DF                  1
                  Pr > ChiSq     0.1599
                     Sample Size = 41

                                       Cumulative   Cumulative
Q14h4    Frequency    Percent    Frequency      Percent
-----------------------------------------------------------
Yes         10        24.39         10          24.39
No          31        75.61         41         100.00

                   Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    10.7561
                  DF                  1
                  Pr > ChiSq     0.0010
                     Sample Size = 41
```

169

```
                                          Cumulative   Cumulative
Q14h5   Frequency    Percent    Frequency     Percent
------------------------------------------------------------
Yes          6        14.63           6       14.63
No          35        85.37          41      100.00


                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    20.5122
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                          Cumulative   Cumulative
Q14i1   Frequency    Percent    Frequency     Percent
------------------------------------------------------------
Yes          3         7.32           3        7.32
No          38        92.68          41      100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    29.8780
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                          Cumulative   Cumulative
Q14i2   Frequency    Percent    Frequency     Percent
------------------------------------------------------------
Yes          8        19.51           8       19.51
No          33        80.49          41      100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    15.2439
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                          Cumulative   Cumulative
Q14i3   Frequency    Percent    Frequency     Percent
------------------------------------------------------------
Yes         25        60.98          25       60.98
No          16        39.02          41      100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square     1.9756
                  DF                  1
                  Pr > ChiSq     0.1599
                   Sample Size = 41


                                          Cumulative   Cumulative
Q14i4   Frequency    Percent    Frequency     Percent
------------------------------------------------------------
Yes          9        21.95           9       21.95
No          32        78.05          41      100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    12.9024
                  DF                  1
                  Pr > ChiSq     0.0003
                   Sample Size = 41


                                          Cumulative   Cumulative
Q14i5   Frequency    Percent    Frequency     Percent
------------------------------------------------------------
Yes          3         7.32           3        7.32
No          38        92.68          41      100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    29.8780
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                          Cumulative   Cumulative
Q14j1   Frequency    Percent    Frequency     Percent
------------------------------------------------------------
Yes          3         7.32           3        7.32
No          38        92.68          41      100.00

                    Chi-Square Test
                  for Equal Proportions
                  ---------------------
                  Chi-Square    29.8780
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41
```

170

```
                                     Cumulative  Cumulative
Q14j2   Frequency   Percent   Frequency    Percent
-------------------------------------------------------
Yes         4        9.76          4        9.76
No         37       90.24         41      100.00

                  Chi-Square Test
                for Equal Proportions
                -------------------
                Chi-Square   26.5610
                DF                 1
                Pr > ChiSq    <.0001
                  Sample Size = 41


                                     Cumulative  Cumulative
Q14j3   Frequency   Percent   Frequency    Percent
-------------------------------------------------------
Yes        30       73.17         30       73.17
No         11       26.83         41      100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square    8.8049
                DF                 1
                Pr > ChiSq    0.0030
                  Sample Size = 41


                                     Cumulative  Cumulative
Q14j4   Frequency   Percent   Frequency    Percent
-------------------------------------------------------
Yes         8       19.51          8       19.51
No         33       80.49         41      100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square   15.2439
                DF                 1
                Pr > ChiSq    <.0001
                  Sample Size = 41


                                     Cumulative  Cumulative
Q14j5   Frequency   Percent   Frequency    Percent
-------------------------------------------------------
Yes         5       12.20          5       12.20
No         36       87.80         41      100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square   23.4390
                DF                 1
                Pr > ChiSq    <.0001
                  Sample Size = 41


                                     Cumulative  Cumulative
Q14k1   Frequency   Percent   Frequency    Percent
-------------------------------------------------------
Yes         5       12.20          5       12.20
No         36       87.80         41      100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square   23.4390
                DF                 1
                Pr > ChiSq    <.0001
                  Sample Size = 41


                                     Cumulative  Cumulative
Q14k2   Frequency   Percent   Frequency    Percent
-------------------------------------------------------
Yes        12       29.27         12       29.27
No         29       70.73         41      100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square    7.0488
                DF                 1
                Pr > ChiSq    0.0079
                  Sample Size = 41


                                     Cumulative  Cumulative
Q14k3   Frequency   Percent   Frequency    Percent
-------------------------------------------------------
Yes        17       41.46         17       41.46
No         24       58.54         41      100.00

                  Chi-Square Test
                for Equal Proportions
                ---------------------
                Chi-Square    1.1951
                DF                 1
                Pr > ChiSq    0.2743
                  Sample Size = 41
```

171

```
                                           Cumulative  Cumulative
Q14k4    Frequency      Percent    Frequency     Percent
------------------------------------------------------------
Yes           9        21.95            9        21.95
No           32        78.05           41       100.00

                 Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square    12.9024
               DF                  1
               Pr > ChiSq     0.0003
                Sample Size = 41


                                           Cumulative  Cumulative
Q14k5    Frequency      Percent    Frequency     Percent
------------------------------------------------------------
Yes          14        34.15           14        34.15
No           27        65.85           41       100.00

                 Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square     4.1220
               DF                  1
               Pr > ChiSq     0.0423
                Sample Size = 41


                                           Cumulative  Cumulative
Q14l1    Frequency      Percent    Frequency     Percent
------------------------------------------------------------
Yes           4         9.76            4         9.76
No           37        90.24           41       100.00

                 Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square    26.5610
               DF                  1
               Pr > ChiSq    <.0001
                Sample Size = 41
                                           Cumulative  Cumulative
Q14l2    Frequency      Percent    Frequency     Percent
------------------------------------------------------------
Yes           9        21.95            9        21.95
No           32        78.05           41       100.00

                 Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square    12.9024
               DF                  1
               Pr > ChiSq     0.0003
                Sample Size = 41


                                           Cumulative  Cumulative
Q14l3    Frequency      Percent    Frequency     Percent
------------------------------------------------------------
Yes          24        58.54           24        58.54
No           17        41.46           41       100.00

                 Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square     1.1951
               DF                  1
               Pr > ChiSq     0.2743
                Sample Size = 41


                                           Cumulative  Cumulative
Q14l4    Frequency      Percent    Frequency     Percent
------------------------------------------------------------
Yes          11        26.83           11        26.83
No           30        73.17           41       100.00

                 Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square     8.8049
               DF                  1
               Pr > ChiSq     0.0030
                Sample Size = 41


                                           Cumulative  Cumulative
Q14l5    Frequency      Percent    Frequency     Percent
------------------------------------------------------------
Yes           9        21.95            9        21.95
No           32        78.05           41       100.00

                 Chi-Square Test
               for Equal Proportions
               --------------------
               Chi-Square    12.9024
               DF                  1
               Pr > ChiSq     0.0003
                Sample Size = 41


                                           Cumulative  Cumulative
Q14m1    Frequency      Percent    Frequency     Percent
```

172

```
--------------------------------------------------------
Yes          2       4.88          2        4.88
No          39      95.12         41      100.00

             Chi-Square Test
            for Equal Proportions
            --------------------
            Chi-Square   33.3902
            DF                 1
            Pr > ChiSq    <.0001
              Sample Size = 41


                            Cumulative   Cumulative
Q14m2    Frequency   Percent   Frequency     Percent
--------------------------------------------------------
Yes          5      12.20          5       12.20
No          36      87.80         41      100.00


             Chi-Square Test
            for Equal Proportions
            --------------------
            Chi-Square   23.4390
            DF                 1
            Pr > ChiSq    <.0001
              Sample Size = 41


                            Cumulative   Cumulative
Q14m3    Frequency   Percent   Frequency     Percent
--------------------------------------------------------
Yes         29      70.73         29       70.73
No          12      29.27         41      100.00


             Chi-Square Test
            for Equal Proportions
            --------------------
            Chi-Square    7.0488
            DF                 1
            Pr > ChiSq    0.0079
              Sample Size = 41


                            Cumulative   Cumulative
Q14m4    Frequency   Percent   Frequency     Percent
--------------------------------------------------------
Yes         10      24.39         10       24.39
No          31      75.61         41      100.00


             Chi-Square Test
            for Equal Proportions
            --------------------
            Chi-Square   10.7561
            DF                 1
            Pr > ChiSq    0.0010
              Sample Size = 41


                            Cumulative   Cumulative
Q14m5    Frequency   Percent   Frequency     Percent
--------------------------------------------------------
Yes          6      14.63          6       14.63
No          35      85.37         41      100.00


             Chi-Square Test
            for Equal Proportions
            --------------------
            Chi-Square   20.5122
            DF                 1
            Pr > ChiSq    <.0001
              Sample Size = 41


                            Cumulative   Cumulative
Q14n1    Frequency   Percent   Frequency     Percent
--------------------------------------------------------
Yes          4       9.76          4        9.76
No          37      90.24         41      100.00


             Chi-Square Test
            for Equal Proportions
            --------------------
            Chi-Square   26.5610
            DF                 1
            Pr > ChiSq    <.0001
              Sample Size = 41


                            Cumulative   Cumulative
Q14n2    Frequency   Percent   Frequency     Percent
--------------------------------------------------------
Yes          5      12.20          5       12.20
No          36      87.80         41      100.00


             Chi-Square Test
            for Equal Proportions
            --------------------
            Chi-Square   23.4390
            DF                 1
            Pr > ChiSq    <.0001
              Sample Size = 41
                            Cumulative   Cumulative
Q14n3    Frequency   Percent   Frequency     Percent
--------------------------------------------------------
```

```
Yes        29        70.73        29        70.73
No         12        29.27        41       100.00

              Chi-Square Test
             for Equal Proportions
             --------------------
             Chi-Square    7.0488
             DF                 1
             Pr > ChiSq    0.0079
              Sample Size = 41


                             Cumulative   Cumulative
Q14n4   Frequency    Percent   Frequency     Percent
-----------------------------------------------------
 Yes         6        14.63         6        14.63
 No         35        85.37        41       100.00

              Chi-Square Test
             for Equal Proportions
             --------------------
             Chi-Square   20.5122
             DF                 1
             Pr > ChiSq    <.0001
              Sample Size = 41


                             Cumulative   Cumulative
Q14n5   Frequency    Percent   Frequency     Percent
-----------------------------------------------------
 Yes         7        17.07         7        17.07
 No         34        82.93        41       100.00

              Chi-Square Test
             for Equal Proportions
             --------------------
             Chi-Square   17.7805
             DF                 1
             Pr > ChiSq    <.0001
              Sample Size = 41


                             Cumulative   Cumulative
Q14o1   Frequency    Percent   Frequency     Percent
-----------------------------------------------------
 Yes         2         4.88         2         4.88
 No         39        95.12        41       100.00

              Chi-Square Test
             for Equal Proportions
             --------------------
             Chi-Square   33.3902
             DF                 1
             Pr > ChiSq    <.0001
              Sample Size = 41


                             Cumulative   Cumulative
Q14o2   Frequency    Percent   Frequency     Percent
-----------------------------------------------------
 Yes         4         9.76         4         9.76
 No         37        90.24        41       100.00

              Chi-Square Test
             for Equal Proportions
             --------------------
             Chi-Square   26.5610
             DF                 1
             Pr > ChiSq    <.0001
              Sample Size = 41


                             Cumulative   Cumulative
Q14o3   Frequency    Percent   Frequency     Percent
-----------------------------------------------------
 Yes        31        75.61        31        75.61
 No         10        24.39        41       100.00

              Chi-Square Test
             for Equal Proportions
             --------------------
             Chi-Square   10.7561
             DF                 1
             Pr > ChiSq    0.0010
              Sample Size = 41


                             Cumulative   Cumulative
Q14o4   Frequency    Percent   Frequency     Percent
-----------------------------------------------------
 Yes        12        29.27        12        29.27
 No         29        70.73        41       100.00

              Chi-Square Test
             for Equal Proportions
             --------------------
             Chi-Square    7.0488
             DF                 1
             Pr > ChiSq    0.0079
              Sample Size = 41


                             Cumulative   Cumulative
Q14o5   Frequency    Percent   Frequency     Percent
-----------------------------------------------------
```

```
    Yes            10      24.39             10      24.39
    No             31      75.61             41     100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square    10.7561
                      DF                  1
                      Pr > ChiSq     0.0010
                       Sample Size = 41


                                    Cumulative   Cumulative
    Q14p1   Frequency   Percent    Frequency      Percent
    ------------------------------------------------------------
    Yes             8      19.51              8      19.51
    No             33      80.49             41     100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square    15.2439
                      DF                  1
                      Pr > ChiSq     <.0001
                       Sample Size = 41


                                    Cumulative   Cumulative
    Q14p2   Frequency   Percent    Frequency      Percent
    ------------------------------------------------------------
    Yes            15      36.59             15      36.59
    No             26      63.41             41     100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square     2.9512
                      DF                  1
                      Pr > ChiSq     0.0858
                       Sample Size = 41


                                    Cumulative   Cumulative
    Q14p3   Frequency   Percent    Frequency      Percent
    ------------------------------------------------------------
    Yes            12      29.27             12      29.27
    No             29      70.73             41     100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square     7.0488
                      DF                  1
                      Pr > ChiSq     0.0079
                       Sample Size = 41


                                    Cumulative   Cumulative
    Q14p4   Frequency   Percent    Frequency      Percent
    ------------------------------------------------------------
    Yes             7      17.07              7      17.07
    No             34      82.93             41     100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square    17.7805
                      DF                  1
                      Pr > ChiSq     <.0001
                       Sample Size = 41


                                    Cumulative   Cumulative
    Q14p5   Frequency   Percent    Frequency      Percent
    ------------------------------------------------------------
    Yes            14      34.15             14      34.15
    No             27      65.85             41     100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square     4.1220
                      DF                  1
                      Pr > ChiSq     0.0423
                       Sample Size = 41


                                    Cumulative   Cumulative
    Q14q1   Frequency   Percent    Frequency      Percent
    ------------------------------------------------------------
    Yes             7      17.07              7      17.07
    No             34      82.93             41     100.00

                       Chi-Square Test
                      for Equal Proportions
                      --------------------
                      Chi-Square    17.7805
                      DF                  1
                      Pr > ChiSq     <.0001
                       Sample Size = 41


                                    Cumulative   Cumulative
    Q14q2   Frequency   Percent    Frequency      Percent
    ------------------------------------------------------------
    Yes             7      17.07              7      17.07
```

175

```
No            34        82.93            41        100.00

                       Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square   17.7805
                    DF                 1
                    Pr > ChiSq    <.0001
                     Sample Size = 41


                                   Cumulative  Cumulative
Q14q3   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
 Yes           24        58.54            24        58.54
 No            17        41.46            41        100.00

                       Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square    1.1951
                    DF                 1
                    Pr > ChiSq    0.2743
                     Sample Size = 41


                                   Cumulative  Cumulative
Q14q4   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
 Yes            7        17.07             7        17.07
 No            34        82.93            41        100.00

                       Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square   17.7805
                    DF                 1
                    Pr > ChiSq    <.0001
                     Sample Size = 41


                                   Cumulative  Cumulative
Q14q5   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
 Yes            9        21.95             9        21.95
 No            32        78.05            41        100.00

                       Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square   12.9024
                    DF                 1
                    Pr > ChiSq    0.0003
                     Sample Size = 41


                                   Cumulative  Cumulative
Q14r1   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
 Yes            9        21.95             9        21.95
 No            32        78.05            41        100.00

                       Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square   12.9024
                    DF                 1
                    Pr > ChiSq    0.0003
                     Sample Size = 41


                                   Cumulative  Cumulative
Q14r2   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
 Yes           11        26.83            11        26.83
 No            30        73.17            41        100.00

                       Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square    8.8049
                    DF                 1
                    Pr > ChiSq    0.0030
                     Sample Size = 41


                                   Cumulative  Cumulative
Q14r3   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
 Yes           15        36.59            15        36.59
 No            26        63.41            41        100.00

                       Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square    2.9512
                    DF                 1
                    Pr > ChiSq    0.0858
                     Sample Size = 41


                                   Cumulative  Cumulative
Q14r4   Frequency    Percent      Frequency     Percent
-----------------------------------------------------------
 Yes            6        14.63             6        14.63
 No            35        85.37            41        100.00
```

176

```
                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    20.5122
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                      Cumulative    Cumulative
Q14r5    Frequency     Percent        Frequency       Percent
-----------------------------------------------------------
Yes          13         31.71              13          31.71
No           28         68.29              41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     5.4878
                  DF                  1
                  Pr > ChiSq     0.0191
                   Sample Size = 41


                                      Cumulative    Cumulative
Q14s1    Frequency     Percent        Frequency       Percent
-----------------------------------------------------------
Yes          11         26.83              11          26.83
No           30         73.17              41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     8.8049
                  DF                  1
                  Pr > ChiSq     0.0030
                   Sample Size = 41


                                      Cumulative    Cumulative
Q14s2    Frequency     Percent        Frequency       Percent
-----------------------------------------------------------
Yes           5         12.20               5          12.20
No           36         87.80              41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square    23.4390
                  DF                  1
                  Pr > ChiSq     <.0001
                   Sample Size = 41


                                      Cumulative    Cumulative
Q14s3    Frequency     Percent        Frequency       Percent
-----------------------------------------------------------
Yes          18         43.90              18          43.90
No           23         56.10              41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     0.6098
                  DF                  1
                  Pr > ChiSq     0.4349
                   Sample Size = 41


                                      Cumulative    Cumulative
Q14s4    Frequency     Percent        Frequency       Percent
-----------------------------------------------------------
Yes          11         26.83              11          26.83
No           30         73.17              41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     8.8049
                  DF                  1
                  Pr > ChiSq     0.0030
                   Sample Size = 41


                                      Cumulative    Cumulative
Q14s5    Frequency     Percent        Frequency       Percent
-----------------------------------------------------------
Yes          15         36.59              15          36.59
No           26         63.41              41         100.00

                    Chi-Square Test
                  for Equal Proportions
                  --------------------
                  Chi-Square     2.9512
                  DF                  1
                  Pr > ChiSq     0.0858
                   Sample Size = 41


                                      Cumulative    Cumulative
Q14t1    Frequency     Percent        Frequency       Percent
-----------------------------------------------------------
Yes          13         31.71              13          31.71
No           28         68.29              41         100.00
```

177

```
                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     5.4878
                   DF                  1
                   Pr > ChiSq     0.0191
                    Sample Size = 41

                                        Cumulative    Cumulative
Q14t2    Frequency     Percent     Frequency      Percent
-----------------------------------------------------------
 Yes         11          26.83          11          26.83
 No          30          73.17          41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     8.8049
                   DF                  1
                   Pr > ChiSq     0.0030
                    Sample Size = 41

                                        Cumulative    Cumulative
Q14t3    Frequency     Percent     Frequency      Percent
-----------------------------------------------------------
 Yes         11          26.83          11          26.83
 No          30          73.17          41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     8.8049
                   DF                  1
                   Pr > ChiSq     0.0030
                    Sample Size = 41

                                        Cumulative    Cumulative
Q14t4    Frequency     Percent     Frequency      Percent
-----------------------------------------------------------
 Yes          5          12.20           5          12.20
 No          36          87.80          41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square    23.4390
                   DF                  1
                   Pr > ChiSq     <.0001
                    Sample Size = 41

                                        Cumulative    Cumulative
Q14t5    Frequency     Percent     Frequency      Percent
-----------------------------------------------------------
 Yes         13          31.71          13          31.71
 No          28          68.29          41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     5.4878
                   DF                  1
                   Pr > ChiSq     0.0191
                    Sample Size = 41

                                        Cumulative    Cumulative
Q14u1    Frequency     Percent     Frequency      Percent
-----------------------------------------------------------
 Yes         14          34.15          14          34.15
 No          27          65.85          41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     4.1220
                   DF                  1
                   Pr > ChiSq     0.0423
                    Sample Size = 41

                                        Cumulative    Cumulative
Q14u2    Frequency     Percent     Frequency      Percent
-----------------------------------------------------------
 Yes         14          34.15          14          34.15
 No          27          65.85          41         100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square     4.1220
                   DF                  1
                   Pr > ChiSq     0.0423
                    Sample Size = 41

                                        Cumulative    Cumulative
Q14u3    Frequency     Percent     Frequency      Percent
-----------------------------------------------------------
 Yes          6          14.63           6          14.63
 No          35          85.37          41         100.00

                    Chi-Square Test
```

```
                                  for Equal Proportions
                                  --------------------
                                  Chi-Square      20.5122
                                  DF                    1
                                  Pr > ChiSq      <.0001
                                   Sample Size = 41


                                                    Cumulative    Cumulative
           Q14u4   Frequency      Percent       Frequency        Percent
           ------------------------------------------------------------
            Yes          4          9.76               4           9.76
            No          37         90.24              41         100.00

                                  Chi-Square Test
                                  for Equal Proportions
                                  --------------------
                                  Chi-Square      26.5610
                                  DF                    1
                                  Pr > ChiSq      <.0001
                                   Sample Size = 41


                                                    Cumulative    Cumulative
           Q14u5   Frequency      Percent       Frequency        Percent
           ------------------------------------------------------------
            Yes         20         48.78              20          48.78
            No          21         51.22              41         100.00

                                  Chi-Square Test
                                  for Equal Proportions
                                  --------------------
                                  Chi-Square       0.0244
                                  DF                    1
                                  Pr > ChiSq       0.8759
                                   Sample Size = 41


                                                    Cumulative    Cumulative
           Q14v1   Frequency      Percent       Frequency        Percent
           ------------------------------------------------------------
            Yes         12         29.27              12          29.27
            No          29         70.73              41         100.00

                                  Chi-Square Test
                                  for Equal Proportions
                                  --------------------
                                  Chi-Square       7.0488
                                  DF                    1
                                  Pr > ChiSq       0.0079
                                   Sample Size = 41


                                                    Cumulative    Cumulative
           Q14v2   Frequency      Percent       Frequency        Percent
           ------------------------------------------------------------
            Yes         11         26.83              11          26.83
            No          30         73.17              41         100.00

                                  Chi-Square Test
                                  for Equal Proportions
                                  --------------------
                                  Chi-Square       8.8049
                                  DF                    1
                                  Pr > ChiSq       0.0030
                                   Sample Size = 41


                                                    Cumulative    Cumulative
           Q14v3   Frequency      Percent       Frequency        Percent
           ------------------------------------------------------------
            Yes          9         21.95               9          21.95
            No          32         78.05              41         100.00

                                  Chi-Square Test
                                  for Equal Proportions
                                  --------------------
                                  Chi-Square      12.9024
                                  DF                    1
                                  Pr > ChiSq       0.0003
                                   Sample Size = 41


                                                    Cumulative    Cumulative
           Q14v4   Frequency      Percent       Frequency        Percent
           ------------------------------------------------------------
            Yes          3          7.32               3           7.32
            No          38         92.68              41         100.00

                                  Chi-Square Test
                                  for Equal Proportions
                                  --------------------
                                  Chi-Square      29.8780
                                  DF                    1
                                  Pr > ChiSq      <.0001
                                   Sample Size = 41


                                                    Cumulative    Cumulative
           Q14v5   Frequency      Percent       Frequency        Percent
           ------------------------------------------------------------
            Yes         19         46.34              19          46.34
            No          22         53.66              41         100.00

                                  Chi-Square Test
                                  for Equal Proportions
```

179

```
                         --------------------
                         Chi-Square       0.2195
                         DF                    1
                         Pr > ChiSq       0.6394
                           Sample Size = 41


                                          Cumulative    Cumulative
Q14w1   Frequency    Percent     Frequency       Percent
-----------------------------------------------------------
 Yes          15       36.59            15         36.59
 No           26       63.41            41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square       2.9512
                   DF                    1
                   Pr > ChiSq       0.0858
                     Sample Size = 41
                     Sample Size = 41


                                          Cumulative    Cumulative
Q14w2   Frequency    Percent     Frequency       Percent
-----------------------------------------------------------
 Yes          13       31.71            13         31.71
 No           28       68.29            41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square       5.4878
                   DF                    1
                   Pr > ChiSq       0.0191
                     Sample Size = 41


                                          Cumulative    Cumulative
Q14w3   Frequency    Percent     Frequency       Percent
-----------------------------------------------------------
 Yes           6       14.63             6         14.63
 No           35       85.37            41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square      20.5122
                   DF                    1
                   Pr > ChiSq       <.0001
                     Sample Size = 41


                                          Cumulative    Cumulative
Q14w4   Frequency    Percent     Frequency       Percent
-----------------------------------------------------------
 Yes           3        7.32             3          7.32
 No           38       92.68            41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square      29.8780
                   DF                    1
                   Pr > ChiSq       <.0001
                     Sample Size = 41


                                          Cumulative    Cumulative
Q14w5   Frequency    Percent     Frequency       Percent
-----------------------------------------------------------
 Yes          21       51.22            21         51.22
 No           20       48.78            41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square       0.0244
                   DF                    1
                   Pr > ChiSq       0.8759
                     Sample Size = 41


                                          Cumulative    Cumulative
Q14x1   Frequency    Percent     Frequency       Percent
-----------------------------------------------------------
 Yes          14       34.15            14         34.15
 No           27       65.85            41        100.00

                    Chi-Square Test
                   for Equal Proportions
                   --------------------
                   Chi-Square       4.1220
                   DF                    1
                   Pr > ChiSq       0.0423
                     Sample Size = 41


                                          Cumulative    Cumulative
Q14x2   Frequency    Percent     Frequency       Percent
-----------------------------------------------------------
 Yes          13       31.71            13         31.71
 No           28       68.29            41        100.00
                    Chi-Square Test
                   for Equal Proportions
                   --------------------
```

180

```
                              Chi-Square        5.4878
                              DF                     1
                              Pr > ChiSq        0.0191
                               Sample Size = 41


                                            Cumulative   Cumulative
Q14x3   Frequency      Percent    Frequency      Percent
------------------------------------------------------------
 Yes           8        19.51            8        19.51
 No           33        80.49           41       100.00

                     Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square       15.2439
                    DF                     1
                    Pr > ChiSq        <.0001
                     Sample Size = 41


                                            Cumulative   Cumulative
Q14x4   Frequency      Percent    Frequency      Percent
------------------------------------------------------------
 Yes           3         7.32            3         7.32
 No           38        92.68           41       100.00

                     Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square       29.8780
                    DF                     1
                    Pr > ChiSq        <.0001
                     Sample Size = 41


                                            Cumulative   Cumulative
Q14x5   Frequency      Percent    Frequency      Percent
------------------------------------------------------------
 Yes          20        48.78           20        48.78
 No           21        51.22           41       100.00

                     Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square        0.0244
                    DF                     1
                    Pr > ChiSq        0.8759
                     Sample Size = 41


                                            Cumulative   Cumulative
Q14y1   Frequency      Percent    Frequency      Percent
------------------------------------------------------------
 Yes           4         9.76            4         9.76
 No           37        90.24           41       100.00

                     Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square       26.5610
                    DF                     1
                    Pr > ChiSq        <.0001
                     Sample Size = 41


                                            Cumulative   Cumulative
Q14y2   Frequency      Percent    Frequency      Percent
------------------------------------------------------------
 Yes           5        12.20            5        12.20
 No           36        87.80           41       100.00

                     Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square       23.4390
                    DF                     1
                    Pr > ChiSq        <.0001
                     Sample Size = 41


                                            Cumulative   Cumulative
Q14y3   Frequency      Percent    Frequency      Percent
------------------------------------------------------------
 Yes          29        70.73           29        70.73
 No           12        29.27           41       100.00

                     Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square        7.0488
                    DF                     1
                    Pr > ChiSq        0.0079
                     Sample Size = 41


                                            Cumulative   Cumulative
Q14y4   Frequency      Percent    Frequency      Percent
------------------------------------------------------------
 Yes          13        31.71           13        31.71
 No           28        68.29           41       100.00

                     Chi-Square Test
                    for Equal Proportions
                    ---------------------
                    Chi-Square        5.4878
```

181

```
                                  DF                       1
                                  Pr > ChiSq     0.0191
                                   Sample Size = 41

                                                   Cumulative   Cumulative
              Q14y5    Frequency      Percent      Frequency      Percent
              --------------------------------------------------------------
               Yes          6         14.63            6          14.63
               No          35         85.37           41         100.00

                                   Chi-Square Test
                                 for Equal Proportions
                                 ---------------------
                                 Chi-Square   20.5122
                                 DF                 1
                                 Pr > ChiSq     <.0001
                                  Sample Size = 41
```

ANNEXURE 8: Comparisons using Pearson chi-square

```
                        Table of Q1A by Q5A

Frequency        ,
Percent          ,
Row Pct          ,
Col Pct          ,None   ,Beginner,Intermed,Advanced,  Total
                 ,       ,        ,iate    ,        ,
-----------------------------------------------------------
Very weak-Averag ,     1 ,     6 ,     3 ,     0 ,     10
e                ,  2.50 , 15.00 ,  7.50 ,  0.00 ,  25.00
                 , 10.00 , 60.00 , 30.00 ,  0.00 ,
                 , 25.00 , 75.00 , 17.65 ,  0.00 ,
-----------------------------------------------------------
Quite good-Excel ,     3 ,     2 ,    14 ,    11 ,     30
lent             ,  7.50 ,  5.00 , 35.00 , 27.50 ,  75.00
                 , 10.00 ,  6.67 , 46.67 , 36.67 ,
                 , 75.00 , 25.00 , 82.35 ,100.00 ,
-----------------------------------------------------------
Total                  4      8      17      11        40
                   10.00  20.00  42.50  27.50    100.00


            Statistics for Table of Q1A by Q5A
     Statistic                    DF      Value      Prob
     ----------------------------------------------------
     Chi-Square                    3    14.8235    0.0020
     Likelihood Ratio Chi-Square   3    15.6468    0.0013
     Mantel-Haenszel Chi-Square    1     6.8924    0.0087
     Phi Coefficient                     0.6088
     Contingency Coefficient             0.5200
     Cramer's V                          0.6088
     WARNING: 63% of the cells have expected counts less than 5.
             (Asymptotic) Chi-Square may not be a valid test.


                   Pearson Chi-Square Test
              ----------------------------------
              Chi-Square                14.8235
              DF                              3
              Asymptotic Pr >  ChiSq     0.0020
              Exact      Pr >= ChiSq     0.0018
                  Effective Sample Size = 40
                  Frequency Missing = 1



                        Table of Q1B by Q5B
Frequency        ,
Percent          ,
Row Pct          ,
Col Pct          ,None   ,Beginner,Intermed,Advanced,  Total
                 ,       ,        ,iate    ,        ,
-----------------------------------------------------------
Very weak-Averag ,     5 ,     8 ,     7 ,     0 ,     20
e                , 12.82 , 20.51 , 17.95 ,  0.00 ,  51.28
                 , 25.00 , 40.00 , 35.00 ,  0.00 ,
                 , 62.50 , 80.00 , 43.75 ,  0.00 ,
-----------------------------------------------------------
Quite good-Excel ,     3 ,     2 ,     9 ,     5 ,     19
lent             ,  7.69 ,  5.13 , 23.08 , 12.82 ,  48.72
                 , 15.79 , 10.53 , 47.37 , 26.32 ,
                 , 37.50 , 20.00 , 56.25 ,100.00 ,
-----------------------------------------------------------
Total                  8     10      16       5        39
                   20.51  25.64  41.03  12.82    100.00


            Statistics for Table of Q1B by Q5B
     Statistic                    DF      Value      Prob
     ----------------------------------------------------
     Chi-Square                    3     9.3305    0.0252
     Likelihood Ratio Chi-Square   3    11.5167    0.0092
     Mantel-Haenszel Chi-Square    1     5.7129    0.0168
     Phi Coefficient                     0.4891
     Contingency Coefficient             0.4394
     Cramer's V                          0.4891
     WARNING: 63% of the cells have expected counts less than 5.
             (Asymptotic) Chi-Square may not be a valid test.


                   Pearson Chi-Square Test
              ----------------------------------
              Chi-Square                 9.3305
              DF                              3
              Asymptotic Pr >  ChiSq     0.0252
              Exact      Pr >= ChiSq     0.0249
                  Effective Sample Size = 39
                  Frequency Missing = 2



                        Table of Q1C by Q5C
Frequency        ,
Percent          ,
Row Pct          ,
Col Pct          ,None   ,Beginner,Intermed,Advanced,  Total
                 ,       ,        ,iate    ,        ,
-----------------------------------------------------------
Very weak-Averag ,     7 ,     4 ,     4 ,     0 ,     15
e                , 17.50 , 10.00 , 10.00 ,  0.00 ,  37.50
```

```
                    ,  46.67 ,  26.67 ,  26.67 ,   0.00 ,
                    ,  50.00 ,  80.00 ,  28.57 ,   0.00 ,
          --------------------------------------------------
          Quite good-Excel ,     7 ,     1 ,    10 ,     7 ,    25
          lent         ,  17.50 ,   2.50 ,  25.00 ,  17.50 ,  62.50
                       ,  28.00 ,   4.00 ,  40.00 ,  28.00 ,
                       ,  50.00 ,  20.00 ,  71.43 , 100.00 ,
          --------------------------------------------------
          Total              14       5      14       7      40
                          35.00   12.50   35.00   17.50  100.00
```

Statistics for Table of Q1C by Q5C

Statistic	DF	Value	Prob
Chi-Square	3	9.4629	0.0237
Likelihood Ratio Chi-Square	3	11.7614	0.0082
Mantel-Haenszel Chi-Square	1	5.5409	0.0186
Phi Coefficient		0.4864	
Contingency Coefficient		0.4374	
Cramer's V		0.4864	

WARNING: 50% of the cells have expected counts less than 5.
        (Asymptotic) Chi-Square may not be a valid test.

Pearson Chi-Square Test

```
          --------------------------------
          Chi-Square                 9.4629
          DF                              3
          Asymptotic Pr >  ChiSq     0.0237
          Exact     Pr >= ChiSq      0.0203
               Effective Sample Size = 40
                  Frequency Missing = 1
```

Table of Q1A by Q2A

```
          Frequency       ,
          Percent         ,
          Row Pct         ,
          Col Pct         ,A little,Very lit,None     ,  Total
                          ,-Very mu,tle-Mode,         ,
                          ,ch      ,rate    ,         ,
          --------------------------------------------------
          Very weak-Averag ,     3 ,     6 ,     0 ,     9
          e            ,   8.11 ,  16.22 ,   0.00 ,  24.32
                       ,  33.33 ,  66.67 ,   0.00 ,
                       ,  50.00 ,  40.00 ,   0.00 ,
          --------------------------------------------------
          Quite good-Excel ,     3 ,     9 ,    16 ,    28
          lent         ,   8.11 ,  24.32 ,  43.24 ,  75.68
                       ,  10.71 ,  32.14 ,  57.14 ,
                       ,  50.00 ,  60.00 , 100.00 ,
          --------------------------------------------------
          Total               6      15      16      37
                          16.22   40.54   43.24  100.00
```

Statistics for Table of Q1A by Q2A

Statistic	DF	Value	Prob
Chi-Square	2	9.2940	0.0096
Likelihood Ratio Chi-Square	2	12.5463	0.0019
Mantel-Haenszel Chi-Square	1	8.8838	0.0029
Phi Coefficient		0.5012	
Contingency Coefficient		0.4481	
Cramer's V		0.5012	

WARNING: 67% of the cells have expected counts less than 5.
        (Asymptotic) Chi-Square may not be a valid test.

Pearson Chi-Square Test

```
          --------------------------------
          Chi-Square                 9.2940
          DF                              2
          Asymptotic Pr >  ChiSq     0.0096
          Exact     Pr >= ChiSq      0.0075
               Effective Sample Size = 37
                  Frequency Missing = 4
```

Table of Q1B by Q2B

```
          Frequency       ,
          Percent         ,
          Row Pct         ,
          Col Pct         ,A little,Very lit,None     ,  Total
                          ,-Very mu,tle-Mode,         ,
                          ,ch      ,rate    ,         ,
          --------------------------------------------------
          Very weak-Averag ,     7 ,     8 ,     3 ,    18
          e            ,  19.44 ,  22.22 ,   8.33 ,  50.00
                       ,  38.89 ,  44.44 ,  16.67 ,
                       ,  77.78 ,  53.33 ,  25.00 ,
          --------------------------------------------------
          Quite good-Excel ,     2 ,     7 ,     9 ,    18
          lent         ,   5.56 ,  19.44 ,  25.00 ,  50.00
                       ,  11.11 ,  38.89 ,  50.00 ,
                       ,  22.22 ,  46.67 ,  75.00 ,
          --------------------------------------------------
          Total               9      15      12      36
                          25.00   41.67   33.33  100.00
```

Statistics for Table of Q1B by Q2B

Statistic	DF	Value	Prob

```
--------------------------------------------------------
Chi-Square                      2      5.8444    0.0538
Likelihood Ratio Chi-Square     2      6.1481    0.0462
Mantel-Haenszel Chi-Square      1      5.6693    0.0173
Phi Coefficient                        0.4029
Contingency Coefficient                0.3737
Cramer's V                             0.4029
WARNING: 33% of the cells have expected counts less than 5.
         (Asymptotic) Chi-Square may not be a valid test.


                  Pearson Chi-Square Test
          ----------------------------------
          Chi-Square                    5.8444
          DF                                 2
          Asymptotic Pr >  ChiSq        0.0538
          Exact      Pr >= ChiSq        0.0603
               Effective Sample Size = 36
                 Frequency Missing = 5
          WARNING: 12% of the data are missing.



                   Table of Q1C by Q2C
          Frequency      ,
          Percent        ,
          Row Pct        ,
          Col Pct        ,A little,Very lit,None    ,  Total
                         ,-Very mu,tle-Mode,         ,
                         ,ch      ,rate    ,         ,
          --------------------------------------------------
          Very weak-Averag ,     3 ,     9 ,     0 ,     12
          e                ,  8.33 , 25.00 ,  0.00 ,  33.33
                           , 25.00 , 75.00 ,  0.00 ,
                           , 75.00 , 56.25 ,  0.00 ,
          --------------------------------------------------
          Quite good-Excel ,     1 ,     7 ,    16 ,     24
          lent             ,  2.78 , 19.44 , 44.44 ,  66.67
                           ,  4.17 , 29.17 , 66.67 ,
                           , 25.00 , 43.75 ,100.00 ,
          --------------------------------------------------
          Total                  4      16      16       36
                             11.11   44.44   44.44   100.00

           Statistics for Table of Q1C by Q2C
          Statistic              DF     Value     Prob
          ------------------------------------------------------
          Chi-Square              2    14.9063    0.0006
          Likelihood Ratio Chi-Square  2  19.4003  <.0001
          Mantel-Haenszel Chi-Square   1  14.3975  0.0001
          Phi Coefficient                0.6435
          Contingency Coefficient        0.5411
          Cramer's V                     0.6435
          WARNING: 33% of the cells have expected counts less than 5.
                   (Asymptotic) Chi-Square may not be a valid test.

                  Pearson Chi-Square Test
          ----------------------------------
          Chi-Square                   14.9063
          DF                                 2
          Asymptotic Pr >  ChiSq        0.0006
          Exact      Pr >= ChiSq     2.362E-04
               Effective Sample Size = 36
                 Frequency Missing = 5
          WARNING: 12% of the data are missing.
```

185