

**A study of perceived classroom language proficiency
of pre-service teachers**

by

Tamrynne Jean Peyper

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Supervisor: Dr AJF Dippenaar

Co-supervisor: Prof R Evans

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I dedicate this work to the one who holds my hand, wipes away my tears and gives my life purpose and direction. You are the beacon guiding me home when all I see is darkness.

Naff, Naff

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Never again is what I swore the time before.

Depeche Mode

DECLARATION OF AUTHORSHIP AND ORIGINALITY

Full names of student: Tamrynne Jean Peyper

Student number: 21309079

Declaration

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ABSTRACT

In the South African context, it is currently assumed by most role players in education that teacher graduates are proficient in the medium of instruction they will use once they start their careers. This may be a reason why currently there is no mandatory testing of teachers' language proficiency. Due to social, economic and historical factors, English has become the medium of instruction at most educational institutions in South Africa, yet less than 10% of the population speak English as a home language. Consequently, an overwhelming number of learners are being taught in a language other than their home language and often by teachers not adequately prepared to teach through the medium of English. In the absence of mandatory testing and with the complex language situation in South African classrooms, this case study aimed to determine the perceptions held by pre-service teachers and their mentors regarding their English proficiency at entry to the teaching profession. This was done by answering the following research question:

What is the perceived Classroom English proficiency of final year pre-service teachers prior to graduating?

The conceptual framework was grounded in Uys's (2006) model of Classroom English proficiency and the methodology employed was quantitative in nature. Instruments used to collect data included an observation schedule completed by mentor teachers observing pre-service teachers presenting the fifth lesson of their first internship period, and a questionnaire completed by the pre-service teacher directly after the observed lesson. Both instruments were adapted from Elder's Classroom Language Assessment Schedule (1993, 2001), and each included 42 items related to various language proficiency variables rated on a four-point Likert scale.

Data were analysed using various statistical measures comparing groups and sub-groups within the sample. Key findings included a significant statistical difference between how English Home Language (EHL) pre-service teachers perceived their language proficiency and those who are English Additional Language (EAL) pre-service teachers. EHL pre-service teachers perceived their Classroom English proficiency better than EAL pre-service teachers. The same trend was evident among the perceptions of mentor teachers. Pedagogical language and voice skills

emerged as areas in which additional support was required by EAL pre-service teachers.

Further research avenues to explore relate to the feasibility of administering refined instruments among teachers to determine not only what the perceptions would be on a national level but also to assess their Classroom English proficiency, followed by possible interventions.

Keywords: Classroom English, English Additional Language, English Home Language, general language proficiency, internship, interpersonal language proficiency, medium of instruction, mentor teacher, pedagogical language proficiency, pre-service teacher

LIST OF ACRONYMS

ANA	Annual National Assessment
BEd	Bachelor of Education Degree
BICS	Basic Interpersonal Communication Skills
CALP	Cognitive Academic Language Proficiency
CLA	Communicative Language Ability
CLAsS	Classroom Language Assessment Schedule
DAC	Department of Arts and Culture
DoBE	Department of Basic Education
DoE ¹	Department of Education
DoHET	Department of Higher Education and Training
EAL	English Additional Language
EHL	English Home Language
ESP	English for Special Purposes
LoLT	Language of Learning and Teaching
MRTEQ	Minimum Requirements for Teacher Education Qualifications
PGCE	Post Graduate Certificate in Education
PIRLS	Progress in International Reading Literacy Study

¹ References prior to 2010

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CHAPTER 1: OVERVIEW

1.1 Introduction

According to the South African Census (2011), English as a home language is spoken by only 9.6% of the population yet it has become ‘the major language of communication for business, government and education’ (Singh, 2009:285). Although much has been published both internationally and nationally on the advantages of home language instruction (Balfour, 2007; De Wet, 2002; Heugh, 2009; Mda, 2004; Singh, 2009; Uys, 2006), 79% of South African learners are educated through the medium of English after the first four years of schooling (Department of Basic Education, 2010:16) and this number increases to 81% by Grade 12. This has resulted in English becoming the dominant language of learning and teaching (LoLT) at most educational institutions in South Africa (Uys, 2006:7; Singh, 2009:282; Desai, 2001:326; Foley, 2002:53). As a consequence, an overwhelming number of learners are being taught in a language other than their home language (Uys, 2006:32; Wildsmith-Cromarty & Gordon, 2009:361) and often by teachers not adequately prepared to teach through the medium of English (Evans & Cleghorn, 2010:147; Foley, 2002:54; Heugh, 2009:97; Sookrajh & Joshua, 2009:334; Uys, 2006:21,).

The lack of adequately proficient teachers to teach through the medium of English has been cited as one of the major barriers to effective learning (Desai, 2001:333; Evans & Cleghorn, 2010:14:x1; Plüddemann, 2002:48; Quane & Glanz, 2006:5; Sookrajh & Joshua, 2009:334; Uys, 2006:8) The link between teacher proficiency and the academic success of learners is discussed by Uys (2006:21), who comments that effective pre-service teacher preparation in the LoLT (which in most cases is English) is one of the most critical requirements for improving the level of academic literacy among South African learners. Given this situation, it is vital to ensure that teachers who wish to teach through the medium of English are equipped with the necessary proficiency to do so. Though the need for English proficiency courses for those teaching through the medium of English has been advocated, exactly what these courses should entail is open for debate (Uys, 2006:21).

1.2 Background and rationale

Being a native speaker of English, I have a very limited understanding of the real challenges faced by both teachers and learners whose mother tongue is not English. During my time teaching at schools where English was the LoLT, I was faced with learners whose mother tongue was not English and did not fully understand the content and I felt desperately unprepared to help them. I voiced this to my mentor teacher at the time. She commented that if I, as a mother tongue speaker of English, was battling, I should imagine what difficulties she was facing. This conversation has stayed with me. I have often mulled over possible solutions to the challenges faced by those who teach through the medium of English but are not mother tongue speakers of English themselves. I have seen the impact that a lack of general language proficiency has on the ability of pre-service teachers to cope in the English Home Language (EHL) classroom. This was especially evident in the school in which I was teaching at the time where the learners were largely English Home Language (EHL) speaking and of upper socio-economic standing. A pre-service teacher continuously used incorrect words and was not comfortable writing in English. An example I remember was when the pre-service teacher was required to prepare notes or transparencies, she could not construct simple sentences correctly which necessitated my providing her with language classes after school. This pre-service teacher was in her final year awaiting appointment.

In the years spanning my initial qualification up to my starting this study, I have read the arguments for and against mother tongue education and come to believe mother tongue instruction is vital to ensure effective learning. However, for various reasons which will be discussed in Chapter Two, English has become the LoLT for many learners who do not have a mastery of English as required for the classroom or for learning. Such a situation would be manageable if teachers were equipped with a mastery of the LoLT themselves but for many teachers and learners this is simply not the case.

I have also lectured on a part-time basis. I have seen how English has become a barrier to success for many students who simply lack the proficiency in English required to express themselves in a tertiary academic environment. My concern, as an individual, passionate about education and who truly believes education is what liberates people, is that these students are studying to become teachers themselves.

At some point an intervention of sorts must be found to ensure that all pre-service teachers have adequate proficiency in Classroom English (when used as the LoLT) so that they are not only competent to teach through the medium of English but are also equipped to assist learners (many of whom are not home language speakers of English) to cope within the teaching and learning environment.

It is through language that we learn, communicate and find our place in the world. Evans and Cleghorn (2010:142) highlight the importance of language within the learning environment as follows, 'Regardless of the particular context, language is the thread that ties teacher, text, activity, use of space and learner together in the overall process of meaning-making.' If language is the basis for all learning then it is vital that those charged with teaching and learning in the classroom are proficient in the LoLT and that a programme that addresses classroom proficiency should rest with initial teacher development.

Such sentiment is not uniquely mine as Johnson (1990:269) states, 'a course which focuses on the effective use of classroom specific language should be an important part of any teacher preparation course, but is most critical where teachers will be teaching through an additional language'. If we qualify teachers who are proficient in the English required for learning and teaching (Classroom English) then these teachers should in turn be better equipped to serve the proficiency needs of their learners. This statement is supported by Evans and Cleghorn (2010:147) and Plüddemann, (2002:48) who suggest the re-introduction of mandatory language endorsements for those qualifying as teachers across all phases. Without adequate proficiency in the LoLT, teachers cannot develop their learners' communicative skills or cognitive ability.

It has been my experience mentoring young teachers from various language groups that, in general, pre-service teachers perceive themselves as being proficient in Classroom English but when pressed on what makes a teacher proficient in Classroom English, the answer they provide would always be a form of, 'communicate so that the learner understands me'. I found this assertion interesting. What does this actually mean? I wanted to understand what a proficient teacher looks like and how to determine if these assertions that pre-service teachers viewed themselves as proficient were borne out in reality.

1.3 Scope of study

This study focuses on how mentor teachers and pre-service teachers perceive the Classroom English proficiency of pre-service teachers. Respondents were limited to those pre-service teachers enrolled for the Bachelor of Education degree offered at the University of Pretoria, South Africa and the mentor teachers assigned to each of these pre-service teachers during the first internship programme of their final year. This was while pre-service teachers were undertaking their internship which ran from April 2012 to June 2012. The study was focused within the classroom situation while the pre-service teacher presented a lesson. It did not include other communicative situations outside of the classroom, for example staff meetings, correspondence with parents or interaction with colleagues. It is for this reason that the questionnaire focused largely on the oral proficiency required within the classroom situation.

The University of Pretoria is a South African university which was historically white, Afrikaans speaking and as a result the university is well-resourced with highly qualified academic staff and internationally recognised programmes. The university has a very high application rate year-on-year. Due to the large number of applications and limited space, the University has admission criteria which encourage stronger academic candidates' entry to the various programmes. Internationally, the University of Pretoria is one of only six South African universities to be included in the Essential Science Indicators database (Pouris, A, 2011:29) and is ranked between 471-480 on the QS World University Ranking list (QS Quacquarelli Symonds, 2013:1). This may imply that the sample of pre-service teachers will be above the national average with better exposure to academic discourse than many other students at other universities.

All sites were within the Pretoria metropolitan area as per the requirements of the internship period covered by this study. The purpose of this study was not to make any assessment of the individual pre-service teacher's Classroom English proficiency but rather to provide a holistic view of the perceived classroom proficiency of pre-service teachers about to enter the teaching profession. After reviewing the literature, this study was located within the model for 'training English medium of instruction teachers in South Africa' (Uys, 2006). The literature review did not include discussions of models of English for Special Purposes (ESP) as South Africa does not currently require mandatory ESP courses for teachers. The data

collection instrument is based on the Language Assessment Schedule (CLAsS) developed by Elder (1993, 2001).

1.4 Aim of study and research question

The main aim of this study is to determine the perceived Classroom English proficiency of pre-service teachers completing their BEd studies at the University of Pretoria from the perspective of both mentor teachers and pre-service teachers. This was established by answering the following research question and sub questions:

What is the perceived Classroom English proficiency of final year pre-service teachers prior to graduating?

From this critical question two sub-questions were formulated to further guide the study.

- How do pre-service teachers and mentor teachers perceive the proficiency of pre-service teachers in Classroom English?
- How do pre-service teachers who are home language speakers of English and pre-service teachers who are speakers of other languages perceive their use of Classroom English?

1.5 Contextualising the study within the literature

In order to situate this study within the existing body of literature, an in-depth literature review was conducted and is presented in Chapter Two. The purpose of the literature was to describe the South African language landscape within the classroom. From this stemmed challenges surrounding English as the LoLT in the classroom within a South African context. When considering language usage within the South African classroom, it is imperative to explain the fundamental importance Classroom English plays in the teaching and learning environment. In order to do this, a definition of language proficiency must be formulated and, more specifically, what type of language proficiency is required for teachers to be proficient to teach through the LoLT (which in most cases, within the South African context, is English). Using a model to determine teachers' Classroom English proficiency which is specifically located within the South African context (Uys, 2006) and in conjunction

with the literature review, a conceptual framework was developed. This is discussed in detail, along with a schematic representation in Chapter Two.

A review of the literature identified three proficiencies that are required in order to be proficient in classroom language. These include language required for the establishment and maintenance of the social climate within the classroom (interpersonal proficiency), language used in the transmission of knowledge, attitudes and skills (pedagogical skills) and the knowledge regarding the rules of a language (general language proficiency), (Elder, 2001:152; Johnson, 1990:273; Richards & Rodgers, 2001:20; Uys, 2006: 54;).

Johnson (1990:274) divided interpersonal language proficiency into three modes, namely; control, organisation and motivation. Through these modes an educator manages the class, creates the social climate and provides for the execution of certain routines (Uys, 2006:56). Uys uses interpersonal proficiency to include exchanges beyond just the classroom environment. Though wider educational activities (such as staff meetings) are excluded from the ambit of the study, these skills will still inherently manifest themselves within the classroom environment. Uys (2006:56) identifies typical teaching activities which require interpersonal language skills such as, 'establishing and maintaining relationships, exchanging ideas and information, getting things done in the classroom and outside, exchanging messages such as letters, reports and circulars, motivating learners, participating in scheduled meetings, maintaining order and discipline'. Elder (2001:169) refers only to those proficiencies required within the classroom as 'classroom interaction'. These include elements such as forms of address, posing questions, varying the difficulty of questions, addressing both class and individuals, providing of clear instructions, appropriate level of formality, appropriate manner for dealing with the classroom situation and maintaining contact with the class while writing on the board or dealing with an individual's demands.

The major pedagogical function of classroom language is, 'the transmission of knowledge, attitudes and skills to a new generation' (Johnson et al. cited in Uys, 2006:57). This definition does not take into consideration aspects which influence the learning environment. McCroskey, Richmond and Bennett (2006:404) argue that a successful teaching environment is largely based on the communicative behaviour of

teachers as this can increase or decrease the achievement of learning goals. In their study of instructional communication, McCroskey, Valencic and Richmond (2004:198) argue that the successful learning environment assumes that teachers and students mutually exchange information in a positive relationship with each other.

Richards and Rodgers (2001:20) describe the functional view of language which is required for expressing 'functional meaning'. Johnson (1990:275-278) identifies three pedagogical modes, namely, the operative, interactive and informative modes. Each of these modes informs Uys's explanation of pedagogical language proficiency. Uys (2006:57-58) explains these modes as 'proficiency in the pedagogical language used when the educator gives instructions or sets tasks (operative mode), proficiency in the language used when the educator asks questions (interactive mode), and proficiency in the academic language used to impart new information (informative mode)'. Pedagogical language proficiency includes components of Elder's (2001:169) 'language of classroom interaction' but Elder identifies more specifically the use of 'subject-specific language'. Elder includes aspects such as the demonstration of understanding subject-specific terms, correct pronunciation of terms, using specialist terms judiciously, making clear connections between ideas, explaining concepts in a manner appropriate to the audience, and explaining models and diagrams appropriately.

'General proficiency underpins interpersonal proficiency and pedagogical proficiency as both require a knowledge regarding the rules that are entrenched in language use' (Uys, 2006:58). Elder (1993, 2001:167) assesses general proficiency in terms of intelligibility of expression, fluency and flexibility of expression, accuracy of expression and comprehension of expression (Elder, 2001:167). Uys refers to the importance of the teacher's voice under physiological aspects that affect proficiency. Elder includes this within the general proficiency requirements. Both are in agreement with Johnson (1990:273) who states that the teacher's voice is most probably the most important educational resource at the teacher's disposal. Uys (2006:59-60) speaks specifically of rate, articulation and fluency, all of which Elder addresses within the ambit of general language proficiency. For this study, I will be exploring the issue of voice both within the confines of general language proficiency

as provided by Elder (1993, 2001) as well as a separate physiological aspect as described by Uys,(2006:59).

The above discussion of my conceptual framework provided the basis for my study. It was through a communicative competence lens, and more specifically, communicative competence as it relates to classroom proficiency, with which I answered the research questions.

1.6 Clarification of terms

The following is a list of terms used in this study. The list is provided in alphabetical order.

1.6.1 Classroom English

Classroom English is defined by Willis (1985:5) as, ‘the specialised and idiomatic forms of the English used when teaching that enables teachers to use English effectively and imaginatively as a means of instruction or as a means of organising a class or even a means of communicating with their learners as individuals about their life outside the classroom.’

Classroom English refers to the specific English proficiency required by teachers who use English as the LoLT (Uys, 2006:54). Uys & Kaiser (2008: iv) use the term ‘Classroom English’ when explaining the objectives of a university course which focuses specifically on teacher language proficiency through the medium of English and define the term, ‘competence in the language/s of instruction’. Elder’s (2001:152) definition provides a more in-depth explanation of the concept, namely, that the type of English required by teachers for the purpose of teaching goes beyond the ambit of general language proficiency. Classroom English proficiency includes the English used in teaching and learning and consists of interpersonal, pedagogical and general language proficiency competencies (Uys, 2006:56).

1.6.2 English Additional Language (EAL)

The South African Department of Basic Education (DoBE) defines Additional Language proficiency as ‘language proficiency that reflects the basic intercultural and interpersonal communication skills needed in social situations and the cognitive academic skills essential for learning across the curriculum. The First Additional Language level can be used as the language of teaching and learning from the

Intermediate Phase onwards.’ In South Africa, many learners start using an additional language, which in most cases is English, as the Language of LoLT in Grade 4. As a result, this implies that learners must reach a high level of competence in English by the end of Grade 3 (DoBE, 2012a:vii).

1.6.3 English Home Language (EHL)

English as a home language requires a ‘language proficiency level that reflects the mastery of interpersonal communication skills required in social situations and the cognitive academic skills essential for learning across the curriculum. This level also provides learners with a literary, aesthetic and imaginative ability that will provide them with the ability to create, imagine, and empower their understandings of the world they live in’ (DoBE, 2012a:ix).

1.6.4 Internship

The internship requirements in the Faculty of Education at the University of Pretoria require final year pre-service teachers to undertake 12 weeks of internship. University Internship Guidelines (2012:1) define the internship as ‘the role of beginner teacher’ in the classroom. Students are afforded the opportunity to familiarise themselves with the demands of the teaching profession by fulfilling a diversity of roles and by assuming responsibility for tasks performed by teachers in the classroom, the school and the wider community, while being supported by the school and University mentors as well as fellow students.

An internship is an opportunity to integrate career-related experience into an undergraduate education by participating in planned, supervised work. Research has shown that student teaching experiences can help teachers to develop both pedagogical content knowledge needed for teaching and beliefs about teaching and learning (Rhodes, Radu & Weber, 2010:1000).

1.6.5 Language proficiency

Language proficiency is generally regarded as the ability to communicate effectively in the target language. This includes appropriate linguistic behaviour in diverse situations through the use and processing of language in all four skills (reading, writing, listening and speaking) (Dippenaar, 2004:7). As Richards (2010:103) indicates, the proficiency of native speakers of English extend beyond those of

English Second Language teachers (ESL). For the purposes of this study 'proficiency' will refer specifically to the English language proficiency required of pre-service teachers as it relates to Classroom English.

1.6.6 Language of Learning and Teaching (LoLT)

LoLT refers to the language medium in which learning and teaching, including assessment, takes place (DoBE, 2010:3). The LoLT is chosen by the school's governing body in consultation with parents (DoBE, 2012a:2). In South Africa the LoLT is largely English from Grade 3 onwards.

1.6.7 Mentor teachers

At the University of Pretoria, pre-service teachers are placed under the guidance of mentor teachers at the school where they are completing their internship. The institution's Internship Guidelines (2012:1) specify, 'The mentor teacher is an experienced teacher who is the student's main mentor and with whom the student works collaboratively'. The University of Pretoria guidelines for mentor teachers require that mentor teachers oversee planning, teaching and assessment of the pre-service teacher. The mentor teacher must set goals for pre-service teachers and assist the pre-service teacher to apply strategies to achieve them, monitor the pre-service teacher, ensure the pre-service teacher undertakes school responsibilities and remind pre-service teachers of the documents and processes required by the University of Pretoria (University of Pretoria, 2012:iv).

Atjonen (2012:40) explores the changing roles of mentorship in teaching and explains that traditionally, mentoring was a process whereby a more experienced teacher gave advice to less experienced ones. However, this role has shifted towards a more constructivist understanding of mentoring in recent years. This has resulted in the term 'mentorship' becoming a 'more collegial and dialogic relationship, where the mentors can learn from the conversations as well' (Atjonen (2012:41). Ambrosetti & Dekkers (2010:42) state that mentoring, in a pre-service teacher context, occurs during internships in which student teachers are being placed with classroom teachers to learn, develop and practise teaching knowledge and skills. Mentor teachers are therefore responsible for the further development of pre-service teachers and ought to ensure that pre-service teachers develop their classroom skills through close guidance.

1.6.8 Perception

Meyer, Moore and Viljoen (2002:34) state that perception is one of the basic elements of consciousness, describing it as sensory which arises from all cognitive contents of consciousness. Calise (2003:8) takes the step of consciousness further, stating that how we perceive any interaction is deeply entrenched in our individual collective knowledge. This results in our perceptions being personal and is dependent on our past experience and conditioning which create certain attitudes or state of mind. It is from these that we create our perspective from which we perceive the world. From these definitions it is apparent that how something is perceived includes an element of subjectivity as it speaks to how one person views or interprets a phenomenon and will vary from person to person and situation to situation. Calise (2003:10) explains this as, 'Our world and the entire universe are objective realities, but our perceptions of them are only subjective'. Perceptions have a great influence on what we think, how we make decisions and how we make meaning of the world around us; how we perceive things determines how we experience them. As this study makes use of perceptions, it is imperative to understand that perceptions are subjective in nature and therefore do not constitute an objective testing of the pre-service teacher's Classroom English.

'Perceptions' was selected as opposed to 'self-assessment' as self-assessment refers to the involvement of respondents in making judgements about their own learning, particularly about their achievements and the outcomes of their learning (Boud & Falchikov, 1989). This assertion is supported by Boud (2005:11) who states that self-assessment is typically undertaken as a form of testing by learners of themselves. This study did not require respondents to make judgements about their learning or against the outcomes envisioned for the internship but rather to reflect on their Classroom English at the specific point in time the questionnaire was completed. Well put!

1.6.9 Pre-service teachers

The University of Pretoria Internship Guidelines (2012:1) defines a pre-service teacher as, 'a final year BEd student who has been approved to fulfil internship requirements under the guidance of a full-time teacher in the same classroom, and who may not be employed in a teaching post at a school while registered at the

University'. For this study the term 'pre-service teacher' refers to all undergraduate students who were enrolled for the four year Bachelor of Education degree at the University of Pretoria and undertook their final year internship in 2012. These pre-service teachers have completed the academic, elective, fundamental and core modules required for qualifying as a teacher from the University of Pretoria.

1.7 Research design and methodology

Creswell (2009:5) refers to 'research design' as the plan or proposal to conduct research and it involves the intersection of three components:

- philosophical worldviews,
- strategies for inquiry, and
- specific methods.

My study is located within a quantitative paradigm. Creswell (2009:233) defines quantitative research as a 'means for testing objective theories by examining the relationship among variables. These variables can be measured, typically on instruments, so that numbered data can be analysed using statistical procedures'. This study determined the perceived proficiency of pre-service teachers using predetermined variables which constitute proficiency in Classroom English. These dependent variables are: 1) general language proficiency; 2) interpersonal language proficiency; 3) pedagogical language proficiency and 4) voice skills (as a physiological aspect which underpins Classroom English). In order to focus the study within a quantitative paradigm, a strategy of inquiry was selected which would render numeric data for the purposes of analysis. To this end, a survey design was employed. The reason for choosing a survey design over other designs was that this research does not use experimental conditions nor are any of the variables manipulated.

I developed an observation schedule and a questionnaire to collect data. The observation schedule and questionnaire designed for this study are based on Elder's Classroom Language Assessment Schedule (CLAsS). I contacted Prof Catherine Elder, who via email (See Appendix A) granted permission to adapt the CLAsS. Permission was further obtained from the Gauteng Department of Education, the principals of the schools as well as the mentor teachers and pre-service teachers.

The observation schedule and questionnaire consisted of a series of statements to which the respondent responded on the four-point Likert scale provided. This rendered numerical data for analysis. The observation schedule was completed by mentor teachers and consisted of 42 statements relating to the pre-service teacher's proficiency in Classroom English. This was accompanied by a four-point Likert scale the mentor teacher completed while observing the fifth lesson presented by the pre-service teachers. The questionnaire was completed by pre-service teachers immediately after they presented the lesson the mentor teacher had observed. The questionnaire consisted of the same 42 statements relating to their own personal perception of their proficiency, but in addition, pre-service teachers were required to provide biographical detail relating to their home language, their language of learning at Grade 12 level, the teaching phase they were enrolled for, electives chosen and information relating to the lesson being presented for this study. These questionnaires were completed directly after the presentation of the fifth lesson. A pairing technique was used to link the questionnaires of the pre-service teacher and observation schedules of the mentor teachers for comparison between the two groups.

The study consisted of two groups, namely, final year pre-service teachers completing their BEd degree at the University of Pretoria, a South African university, and the mentor teachers assigned to them at the schools where they completed their first internship of 2012. Each of these groups was divided into sub-groups, pre-service teachers were divided into home language speakers of English and speakers of other languages, mentor teachers were divided into those who mentored home language speakers of English and those who mentored speakers of other languages.

The packs which included the observation schedule (Appendix B) and questionnaire (Appendix C) were distributed to the entire population size (N=230). Once the instruments were finalised, data collection was undertaken.

1.8 Data collection

Packs were created and included letters of informed consent for the mentor and the pre-service teacher, the observation schedule and the questionnaire to be completed as well as an additional envelope for the returning of completed documents. These were disseminated to eligible pre-service teachers during a meeting held on 10 April

2012. A total of 230 questionnaires were disseminated and were returned during the class meeting held on 18 June. While the pre-service teachers were completing their internship, five SMSs were sent to remind respondents to participate in the study. Two of these SMSs were sent to student leaders to remind them to obtain the consent forms from the headmaster and three additional reminder SMSs were sent to all pre-service teachers.

On 18 June 2012, a total of 70 questionnaires were returned of which four were discarded for the following reasons: two the principal declined, two were incomplete, leaving a total of 66 to be analysed. The low response rate was unexpected as I had followed suggestions on ensuring a higher response rate (Creswell, 2008:402; Creswell, 2009:150; Delport, 2002:173) such as explaining to respondents the nature of the study prior to the study taking place, using follow-up procedures such as SMSs and providing detailed letters of introduction. However, due to the ethical requirement of voluntary participation, it is not possible to make the completion of the questionnaire compulsory and when consulting with pre-service teachers informally as to why they did not complete the questionnaire the general consensus was because it was not an obligation. My supervisor consulted with my co-supervisor, staff of the Faculty of Education and the senior statistician and it was agreed that the data were sufficient to continue with data analysis. However, the response rate will be considered a limitation of this study. This is discussed in more detail in Chapter Three and Chapter Five.

1.9 Data analysis

Data analysis was conducted in conjunction with the Department of Statistics at the University of Pretoria.

Data were collected from the completed questionnaires (n=66) and entered into SAS® system. The inputted data were printed and cleaned and prepared for data analysis. Data analysis was undertaken using the following statistical methods:

Frequency tables and bar-graphs were prepared from Sections A, B and C of the pre-service teachers' questionnaires. These sections provided the biographical information of the sample. Numerical measures were done to determine the overall trends and to summarise the location, variability and shape of the data distribution.

Inferential statistics which were used to render data for analysis from Section D of the pre-service teacher questionnaire and Section A of the mentor teacher observation schedule. These sections dealt with items which constituted Classroom English proficiency and as the items were the same this allowed for the pairing of items to compare scores. Due to the limited sample size various techniques were employed. These included the use of Independent T-test, Mann-Whitney U test, Paired T-tests and Fisher's exact test.

1.10 Reliability and validity

Reliability

For this study a factor analysis was not conducted due to the limited sample size. The minimum necessary sample size should be between 5 to 10 times the number of variables being analysed. This was not achieved as there was only a 29% response rate. As a result, it was determined that the Cronbach's alpha was sufficient. The use of the Cronbach's alpha ensured internal consistency reliability as all categories scored above 0.8. Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability (Santos, 1999:1). The application of the Cronbach's alpha determined the internal consistency of the following subscales within both instruments, general language proficiency, pedagogical language proficiency, interpersonal language proficiency and voice skills. The sub-scales of both instruments were highly consistent as the Cronbach's alpha was above 0.88 for all.

Validity

For the purposes of this study, face validity will be included under content validity, though these are not interchangeable terms. The instrument is based upon an existing, tested instrument designed by a leading international academic as well as through a thorough literature review. To ensure content validity and face validity the instrument was reviewed by my supervisor, co-supervisor, selected staff from the Department of Humanities and a pilot study was undertaken to determine any ambiguities and ensure these were addressed (Creswell, 2008:178).

Criterion validity was ensured through ascertaining how the instruments measured against other instruments. Currently no instrument exists within South African literature that quantifies the required Classroom English proficiencies for a pre-service teacher. It is for this reason that I am using an instrument designed outside the South African context.

Construct validity was established by determining whether the scores from the instruments are significant, meaningful, useful and have a purpose. This was achieved by employing an instrument which identifies the three competencies, namely, general language proficiency, pedagogical language proficiency and interpersonal language proficiency, required by a pre-service teacher to be considered proficient in Classroom English.

1.11 Ethical considerations

This study adhered to the requirements of international academia as well as the Ethics Committee of the University of Pretoria. Provisional clearance was obtained from the Ethics Committee prior to piloting the questionnaire. In addition, permission was obtained from the Department of Education (see Appendix D) and the Dean of the Faculty of Education of the University of Pretoria (see Appendix E) prior to the pilot study. Letters from the above were included in each letter of informed consent which was sent to the principals of schools (see Appendix F) where pre-service teachers were undertaking practical teaching, mentor teachers (see Appendix G) and pre-service teachers (see Appendix H) prior to the commencement of the study. All signed letters of informed consent were recorded and have been stored as per the requirements of the Ethics Committee. After conclusion of the study a certificate of ethical clearance was obtained and is included in this dissertation (Appendix I).

1.12 Conclusion

This study is divided into five chapters providing for the processes of research and analysis undertaken by myself. Although each chapter speaks directly to a specific aspect of the study, these chapters cannot be read in isolation as they are interconnected to form a cohesive whole. Chapter One provides an introduction to the study and includes the rationale for the study; it provides the aims, states the research questions and the scope of the study prior to a brief summary of the conceptual framework and literature review. Research design, data collection and

data analysis strategies are discussed. Issues of reliability and validity are addressed as well as ethical issues. Chapter One provides an overview of the study and this is unpacked in following chapters. Chapter Two will focus on clarifying the current language situation in South Africa and more specifically in the classroom. The literature review also includes discussion around what constitutes teacher language proficiency and how this is a specialist field.

This study uses the proposed model for training English LoLT teachers in South Africa (Uys, 2006) as its conceptual framework and Chapter Two discusses the appropriateness of using this model. The conceptual framework discusses what competencies are required in order to be considered proficient in Classroom English. Chapter Three builds on Chapter Two by exploring the research design, research methodology, and reasons for locating the study within a quantitative framework. The research population, instrument design and data collection methods are also discussed as well as ethical considerations and issues of validity and reliability. Chapter Four provides the data analysis strategies. This includes an explanation of how data were gathered through the instruments and these data were coded and analysed. Chapter Five includes the results of the study as well as the conclusions reached based on the results, followed by recommendations for practice and further research.

In the next chapter, the literature framework will be provided. This includes an overview of the South African language context, both within and outside the classroom as well as the challenges experienced in the classroom as a result of linguistic diversity. Definitions for language proficiency and classroom English are provided. The model used in this study is embedded in the South African context and the proficiencies which constitute Classroom English are defined.

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

This chapter focuses on providing the literature review which supports the conceptual framework. A comprehensive literature review is central to placing the research within the existing body of knowledge (McMillan & Schumacher, 2006:76). From the literature review a conceptual framework is formulated. The conceptual framework is the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs research and is a key part of the research design (Robson, 2002:93). As this study focuses on Classroom English within the South African classroom, the literature review focused on the South African context. As a point of departure, I examined the language make-up of the South African classroom which included the LoLT juxtaposed with home languages of learners and teachers as well as the linguistic profile of teachers and learners. This is followed by a discussion of the key areas affecting teacher classroom proficiency. These include:

- a review of policy and practice,
- the language situation in South African classrooms,
- challenges surrounding English as the LoLT,
- what language proficiency is and how it affects teacher Classroom English proficiency.

The use of English as a LoLT for a learner population who are not mother tongue speakers of English is not unique to South Africa. The political and historic imbalances which are inherent in the South African educational system further compound the complexity of the situation. For this reason, a background to the conflicts between policy and practice and how this conflict gives rise to challenges experienced in the classroom, needs to be provided. This will be supported by a discussion of what constitutes the language situation, in the South African classroom. After contextualising the South African situation an exploration of language proficiency in its broadest sense will be discussed followed by a discussion on the specific classroom language competencies a teacher should demonstrate in order to be considered proficient in Classroom English.

2.2 Language and policy: the effect on the South African education system

Inherently, past language policies have had a negative impact on the majority of learners and many of the problems experienced today are as a result of such policies (Dippenaar, 2004:28, Evans & Cleghorn, 2012:xvi). What follows is a discussion of legislation and policies which have sought to rectify past imbalances and as a result have had a major impact on the languages of teaching and learning in South Africa.

2.2.1. The Constitution of the Republic of South Africa

The Constitution of the Republic of South Africa (both the 1993 Interim Constitution and the Final Constitution 1996) provides for the unprecedented declaration of 11 official languages (Foley, 2002:5). Chapter 2, Section 29(2) states that 'everyone has the right to receive education (at a public institution) in the official language or languages of their choice'. The inclusion of all eleven languages has been a contentious issue with some academics arguing that the decision was more in the political interest than linguistic practicality (Foley, 2002:51). Others argued that such selection does make sense when viewed in terms of the whole philosophy which underlies the Constitution and the Bill of Rights (Webb, 1999:35). The Constitution has redefined the status of African languages affording previously excluded languages equality alongside English and Afrikaans as official languages and has had a direct impact on education and the Language in Education Policy and legislation (Mda, 2004:178). The Language Rights stipulated in the Constitution were to serve as the underlining principle on which all policies relating to language in education must be based. The linguistically inclusive nature of the Constitution forced policy makers to reassess what languages were used as LoLT in South African schools and though policies such as the Language in Education Policy (DoE, 1997) and the Language Policy for Higher Education (DoE, 2002), have been developed, the effectiveness of implementation of these policies has been called into question (Beukes, 2009:36).

2.2.2. The South African Schools Act

The South African Schools Act 84 of 1996 (SASA) is underpinned by the Constitution (1996) and replaced the separate legislative acts that had governed schooling prior to 1994 (Murray, 2002). The objective of the South African Schools Act (Act 84 of 1996) is to, 'provide a strong foundation for the protection and advancement of the country's diverse cultures and languages' (Olivier, 2009:1).

According to Section 6 of this Act, Schooling Governing Bodies (SGBs) were identified as pivotal in the implementation of the language policy in schools. The SGB was required to identify the language of learning for the school and, in addition, clearly identify how the school would promote language diversity (Mda, 2004:181). This allowed for the choice of the language to be used as the LoLT to be decided by parents and school management (Murray, 2002:437) and marked a major shift from policies of the past which saw the state dictate which languages were to be used in schools. Though schools and parents were empowered to decide upon the LoLT based upon the needs of the learners, researchers have reported that a large number of parents prefer English as the LoLT (Foley, 2002:54; Heugh, 2009:98; Hugo & Nieman, 2010:60), although there may be a new 'language wave' building as younger parents seem keen for schools to help maintain and develop the mother tongue (Evans & Cleghorn: in press 2014).

2.2.3. The Language in Education Policy Document

The Language in Education Policy Document (LiEP) was published in 1997 and was the culmination of the work of the Language in Education Policy Committee. One of the underlying principles was to maintain the home language as the LoLT while providing access to an additional language. The LiEP was developed to:

- Promote multilingualism;
- Promote access to education through redressing previously segregationist policies towards language in education;
- Facilitate communication across barriers of race, language and region;
- Promote the learning of additional languages;
- Maintain home languages while providing access to additional languages;

- Promote the right to choose the language of learning and teaching as an individual choice (Department of Education, 1997:1).

The LiEP was a marked shift away from the bilingual pre-1994 policy regarding the use of English and Afrikaans as languages of teaching and learning. It sought to provide a framework to assist schools in developing appropriate school language policies which are consistent with the intentions of the LiEP (Sookrajh & Joshua, 2009:326-327). In essence, the LoLT of the school depends largely on the choices made by learners and their parents. However, as Desai (2001:330) argues, though the LiEP advocates the development of 'additive multilingualism' in practice, with exception of Grade 12, only one language is now compulsory for promotion purposes. Though the policy advocates mother-tongue education, as stated earlier, the reality is that this is not necessarily the case within especially urban South African classrooms and as a result learners are often taught in English which for many is a second, third or even fourth language (Dixon & Peake, 2008:75).

2.2.4. Minimum requirements for teacher education qualifications

Currently the government is reconsidering the minimum requirements for teacher education. The proposed policy puts forward how the issue of LoLT will be dealt with in future programmes of teacher education. Currently there is no national requirement to ensure language proficiency within the Bachelor of Education programme. Within the policy on Minimum Requirements for Teacher Education Qualifications (MRTEQ), it is proposed that the BEd degree may only be awarded if there is an endorsement of language proficiency (DoHET, 2010:20). These will be indicated by the descriptors of 'LoLT' to indicate a language in which the teacher has attained proficiency to use as a Language of Learning and Teaching and 'communicative competence' to indicate where competence has been achieved in that language. Though the draft policy does not provide clear definitions for each of these descriptors, it requires the institutions which are qualifying teachers to ensure that teachers are proficient in the LoLT. In addition, the MRTEQ requires newly qualified teachers to demonstrate various competencies (2010:55). Only those related to language usage are listed here:

1. Newly qualified teachers must have sound subject knowledge.

2. Newly qualified teachers must know how to teach their subject(s), and how to select, sequence and pace content according to both the subject and learner needs.
3. Newly qualified teachers must know how to communicate effectively, in general and in relation to their subject(s), in order to mediate learning.
4. Newly qualified teachers must have highly developed literacy, numeracy and IT skills.
5. Newly qualified teachers must have knowledge of the school curriculum and be able to unpack its specialised contents, and be able to use available resources appropriately, so as to plan and design suitable learning programmes.
6. Newly qualified teachers must be able to manage classrooms effectively across diverse contexts in order to ensure a conducive learning environment.

The MRTEQ document does provide guidelines regarding what languages pre-service teachers are required to specialise in per phase, with the requirement that all degree courses provide endorsement of language proficiency in the LoLT as well as an endorsement of communicative competence (DoHET: 2010:24).

What is apparent when looking at the South African policy on language in education is that there is a clear drive for a multilingual education system which favours mother tongue education. However, the reality of the South African system is quite different. Even with progressive language policies, English remains the preferred LoLT in many teaching and learning situations, especially in urban schools. This places the teaching and learning situation at odds with policy ideals. This policy and practice mismatch may stem from three central dilemmas. Firstly the South African education system purports to be multilingual and yet the majority of educational institutions do not use learners' mother tongue as LoLT (Foley, 2002:54; Singh, 2009:281). Secondly, many parents expressly prefer their children to be taught through the medium of English (Foley, 2002:54; Heugh, 2009:98) and thirdly, the majority of teachers are inadequately prepared to teach in English (Foley, 2002:54; Heugh, 2009:97).

2.3 Current language situation in South African schools

Even though the majority of teachers and learners in South Africa are not mother tongue speakers of English, English is currently the LoLT in the majority of schools

with 65% of all learners in Grade 1 to Grade 12 receiving their schooling in English (DOBE, 2010:12). This is followed by Afrikaans at 12% and isiZulu at 7%. Though English, as the predominant LoLT, may be the trend across the schooling system, at Foundation Phase the picture is different. Currently 23% of learners are being taught through the medium of isiZulu followed by English at 22% and Afrikaans at 10% (DOBE, 2010:12). The major shift to English occurs at Grade 4 where 79% of learners receive their schooling through the medium of English. This drastic shift occurs when learners progress from the Foundation Phase to the Intermediate Phase. This is because the National Curriculum Statements (NCS) (Department of Education, 2002:20) and the Curriculum Assessment Policy Statements (CAPS) (Department of Basic Education, 2012a: ix) both make provision for home language as the LoLT in the Foundation Phase and the use of the first additional language (which in the majority of schools is English) as the LoLT from Grade 4 onwards. As a result, the majority of learners are taught in their home languages during the first three years of schooling and thereafter in English (which is usually considered to be the first additional language).

Numerous studies and articles have been published strongly advocating for the home language as the LoLT. These point out the advantages of such for both learners and teachers (Balfour 2007; Heugh; 2009; Mda 2004; Singh 2009). Indeed, Ngcobo (2009:211) argues that 'equitable' use of the official languages is related to the freedom to exercise language rights and choices. However, although in terms of legislation the 'choice of LoLT' exists, the choice seems to be for the use of English as the LoLT. Recently the debate surrounding mother tongue education has once again become a national debate. In 2011, the South African Language Bill (DAC, 2011) was tabled for public comment. One of the major issues was the use of mother tongue as the LoLT. During public hearings, the constitutionality of the Language Bill was questioned as organisations and academics argued that it failed to adequately promote the use of indigenous languages as the LoLT (Jacobs & Peyper, 2012:6). To compound the issue, the Sunday Times (Govender, 2012:1) reported that numerous former Model C primary schools were not offering an African language as from January 2012. This was in response to curriculum changes effective from January 2012 which required that Grade 1 to 3 learners study only one additional language as opposed to the previous requirement that the learners study two

additional languages. In response the Department of Basic Education has indicated that a policy which will compel all schools to offer an African language is currently being formulated and will be tabled for public comment at a later date (Govender, 2012:1). These debates suggest that the issue of mother tongue education will take a large amount of effort to implement fully, especially when considering the shortage of qualified teachers to teach in African languages (Govender, 2012:1). However, regardless of future changes, English is currently the dominant language used as the LoLT within the South African education system.

This current dominance of English could be attributed to a number of perceptions, such as:

- English is associated with economic growth (Foley, 2002:58; Kamwangamulu cited in Singh, 2009:288; Mda, 2004:184),
- English is a global language (DoBE, 2010:22),
- English is useful for future studies (DoBE, 2010:22),
- English is the common language of the working environment (DoBE, 2010:22),
- Parental desire for English as the LoLT (Foley, 2002:54; Heugh, 2009), and
- Lack of political will (Balfour, 2007:42; Foley, 2002:56; Heugh, 2009:101; Mda, 2004:182).

A study undertaken at the University of the Free State found that among BEd Honours students, English was viewed as the most important language with regard to politics, education, science and technology (De Wet, 2002:121). The results of this study are supported by other studies such as the one undertaken at the University of KwaZulu-Natal which found that proficiency in English was perceived as key to economic mobility (Casale & Posel, 2010:7). Statistics from this study indicated that African men with a post-secondary education are estimated to earn 97% more if they are also proficient in English (Casale & Posel, 2010:7). This drive for English results in additional burdens being placed on the education system as it demands teachers, the majority of whom are not mother tongue speakers of English, to adequately prepare learners, the majority of whom are also not mother tongue speakers of English, to successfully complete their schooling through the medium of English.

This push for English has not resulted in better equipped learners, as reported by Uys (2006:7) who indicated that in the last 14 years, functional literacy² of urban second language LoLT learners has dropped from 51% to 12%. Such statistics were recently reiterated by the National Education Evaluation and Development Unit's study on literacy levels in primary schools. The report indicated that learners were not taught basic numeracy or reading because most teachers did not know how to teach these skills (Jansen, 2013:1). Studies have shown that the proficiency of the teacher is essential for learners in order to achieve academic success (De Wet, 2002:122; Hugo & Nieman, 2010:60; Plüddemann, 2002:48; Uys, 2006:8). The link between teacher proficiency and the academic success of learners is discussed by Uys (2006:21), who states that effective teacher training in the LoLT (which in most cases is English) is one of the most important factors in ensuring improved levels of academic literacy in South African learners. Given this situation, it is vital to ensure that teachers who will most probably teach through the medium of English are provided with the necessary proficiency to do so within the scope of their university careers. Within the South African context, a Bachelor's degree in education (or equivalent) is required to enter the teaching profession. As institutions responsible for ensuring the education of pre-service teachers, universities have an obligation to develop competency in the LoLT as this is vital for effective teaching and learning. Though the need for English proficiency courses for those teaching through the medium of English has been advocated by researchers in the field (Evans & Cleghorn, 2010:147; Evans & Cleghorn, 2012:vi; Foley, 2002; Hugo & Nieman, 2010:66; Kaiser, Reynecke & Uys, 2010:64; Uys, 2006:21), exactly what these courses should entail is open for debate.

A study entitled, '*The Status of the language of learning and teaching (LoLT) in South African Public schools*' conducted by the Department of Basic Education (2010) reported that only 7.8% of Grade 12 learners are home language speakers of English (the home languages of the majority of learners are isiZulu, 25%, and IsiXhosa, 20%, respectively). When analysing home language across all grades, it was determined that English was the home language of only 7% of the school population and yet was used as the LoLT for 65% of learners (average across Grade 1 to Grade 12).

² 'functional literacy' refers to proficiency level of Grade 8 or above (Uys, 2006)

The study further reported that at Grade 3 level, only 27.7% of learners were taught through the medium of English. This jumps to 79.1% in Grade 4 and thereafter to 81.4% in Grade 12 (Afrikaans is second at 12.8%). The drastic shift from home language to English in Grade 4 is intensified by the fact that less than 5% of learners studied an additional language in the Foundation Phase (DoBE, 2010:20). This results in the majority of learners who learn via the medium of an African language during the Foundation Phase, switching to either English or, in very limited circumstances, Afrikaans from the Intermediate Phase onwards - languages to which many African language learners have had limited access at this point. For many learners who are not home language speakers of English, this is a traumatic experience as often learners do not have sufficient language skills to cope with this switch (Wildsmith-Cromarty & Gordon, 2009:361). Howie, Venter & Van Staden (2008:4) state that learners who speak African languages at home and at school and who switch to English in Grade 4 will experience success in school in proportion to their English language proficiency. The problem of transition from home language to English in Grade 4 was made evident in the Progress in International Reading Literacy Study (PIRLS) conducted in 2006 which focused on reading literacy of Grade 4 and 5 learners. This study revealed that in instances where learners had changed LoLT in Grade 4 they had a limited vocabulary of about 500 words and could only read simple 3-7 word sentences in the present tense (Fleisch, 2008:130). The limited ability of learners who learn through an additional language was once again highlighted in the Annual National Assessment (ANA) which reported that learners who were being taught English First Additional Language scored just 33.4% in Grade 4; 29.4% in Grade 5 ; 35.4% in Grade 6 and 34.5% in Grade 9 (DoBE, 2012b:52). This was contrasted by those being taught in English as a home language which were reported as 34.4% in Grade 4; 37.1% in Grade 5; 41% in Grade 6 and 48.9% in Grade 9 (DoBEb, 2012:52).

The implications of the switch to English (or in some cases Afrikaans) in Grade 4 are captured by Howie et al. (2008:7) who state that, 'children from other language groups (excluding English and Afrikaans) are not functioning at an adequate level in either their mother tongue/language nor do they have adequate English language proficiency levels to continue to read to learn from Grade 4 onwards'. Howie et al. (2008:7) continue by asserting that as a result of poor language skills inherent in

switching at Grade 4 to English these learners' progress through the schooling system is seriously impacted and that this is partly evidenced in the poor exit-examination results at Grade 12.

In 2009 a review of the implementation of the National Curriculum Statement was undertaken (Department of Basic Education, 2009). Among the results was that English, as a First Additional Language, needs greater specification in the curriculum, with special attention paid to preparation for the use of English across the curriculum. The report went further, suggesting that, 'More time needs to be made available in preparing learners for English LoLT, and the use of English across the curriculum' (Department of Basic Education, 2009:38). However, preparing learners to successfully use English as the LoLT and across the curriculum requires teachers who themselves are proficient in English (Kaiser et al., 2010:56).

When one considers a scenario where learners who are not mother tongue speakers of the LoLT are being taught by teachers who are not proficient in the LoLT, the magnitude of the situation becomes apparent.

2.4 Challenges of English as the LoLT

By analysing the challenges faced by both teachers and learners, a more holistic view of the education system will be gained and will further ground my research in a South African context. A South African study found that only 12% of learners who were taught through the medium of English and who completed Grade 12 at the end of 2004 were functionally literate³ in English (Uys, 2006:1). This situation is worse in rural areas where the percentage of those functionally literate in English was as low as 3%. Moreover, there has been a substantial drop in functional literacy (from 51% to 12 %) over the last fourteen years (Uys, 2006:1). Such statistics are not only worrying for the learners involved but for the teachers teaching them. Teachers need to be adequately prepared to handle a classroom where many learners (if not the majority) may not be academically literate in English. This may very well be compounded by the fact that teachers themselves are not fully proficient in Classroom English (Dippenaar & Peyper, 2011:35; Plüddeman, 2002:48). Evans and Cleghorn (2012:64) state that teachers themselves may not be aware of their own lack of proficiency and the impact this has on the teaching and learning situation.

³ *Ibid.*, p.3.

This hindrance forms part of what these researchers term 'instructional dissonance'. Instructional dissonance is not only applicable to teachers who themselves are learners in the LoLT but, as reported in a study conducted by Evans and Cleghorn (2012), also EHL teachers, due possibly to their limited understanding of EAL linguistic needs such as adjusting vocabulary (Evans & Cleghorn; 2012:64). When there is continual instructional dissonance there may be a risk of a self-perpetuating cycle where many learners, on completing exit-level examinations at the end of their schooling ('Matric examinations' or 'Senior certificate examinations'), are still not functionally literate in English. These learners may enter education programmes where they must, by the end of four years, be highly proficient in the LoLT and in a position to assist learners in acquiring academic proficiency in the LoLT (Evans & Cleghorn, 2012:113).

As discussed in 2.3, at the end of the Grade 3 year the current curriculum allows for a switch from home language to English as a LoLT. The difficulty experienced by these learners is compounded by the fact that currently teachers teaching in the Intermediate Phase do not require specific training in second language acquisition and language teaching strategies.

Research has shown that learners should learn to think and function in their own language on the level of CALP (Cognitive/Academic Language Proficiency Skill) before being introduced to a new language (De Wet, 2002:119). CALP refers to the learner's ability to express both written and verbal concepts and ideas required for success in school (Cummins, 2008:71). CALP cannot be achieved if a learner has not achieved BICS (Basic Interpersonal Communication Skills) in a target language. BICS refers to conversational fluency in a target language (Cummins, 2008:71). A further discussion on the theory of BICS/CALP is provided in 2.5 of this chapter.

In South Africa, many learners start their formal schooling careers without understanding a word of English (Hugo & Nieman, 2010:60) and are granted only three years to achieve BICS and CALP in English. Research has shown that if CALP is achieved in the mother tongue, achieving BICS in an additional language should take two years (Kaiser et al., 2010:57) and CALP in an additional language may take from five to ten (Kaiser et al., 2010:57). Indeed, Widdowson (1994:118) believes that even in a situation where a learner has received several years of formal English

teaching, they are often still deficient in their attainment of BICS, let alone CALP which is required for success at school. The enormity of the situation is compounded when considering many teachers in South Africa are not adequately proficient in the use of English as a LoLT (De Wet, 2002:121; Foley, 2002:55; Heugh, 2009:97). Nel and Müller (2010:647) identify the following possible reasons for many teachers' lack of proficiency in Classroom English.

There could have been a lack of:

- exposure to English outside the classroom
- exposure to sound EAL at school
- appropriate English resources
- support from colleagues and principals
- exposure to good 'role models' in English (Nel & Müller, 2010:647).

Research has shown that teachers' ability to speak, general language competence and knowledge of the LoLT impacts on the effectiveness of their teaching and the learner's understanding of the content being presented (Hugo & Nieman, 2010:60; Nel & Müller, 2010:647) (see 1.2). As a result, a learner's academic development may be permanently delayed. De Wet (2002:119) reports on a study undertaken in the Free State in 1999 which found that teachers believed that the learners' lack of proficiency in English was the most important reason for a high Grade 12 failure rate. Though many reasons for learners' lack of proficiency have been suggested, Uys (2006:1) proposes that fundamental to all these suggestions may be a lack of understanding by stakeholders in education regarding the role played by language in learning and language acquisition in general.

2.5 Defining language proficiency

On explaining the nature of language, Aguirre-Munoz and Solano-Flores (2010:506) define language as a system which recognises that different forms of language are governed by different conventions and rules and that the very nature of language is fluid and not static, therefore the question of what is proficiency must be seen in the context in which the language is used. To this end, language as a system must be contextualised socially, beyond just the individual, and any definition of proficiency must take into account that an individual may be considered proficient in one

context, for example for the purposes of social interaction with peers, but not another such as academic engagement (Aguirre-Munoz & Solano-Flores, 2010:507). This is especially important when working with people who are not first language speakers of a language (as is the case for many teachers in the South African context).

How language proficiency is defined has changed over the years. Traditionally, proficiency was described in terms of mastery of 'structures' – phonology, morphosyntax, and lexicon of the target language. Ideas found expression in methods such as the grammar-translation method and the audio-lingual method (Yule, 2007:165). This shift away from the emphasis on forms of language towards an emphasis on the functions of language is referred to as the communicative approach (Yule, 2007:166) and has largely shaped language learning since the 1960s (Finney, 2002:70). The nebulous nature of defining language proficiency has been discussed by researchers (Dippenaar, 2004:7; Grassi & Bulmahn-Barker, 2010:77, Aguirre-Munoz & Solano-Flores, 2010:506) and continues to provide various definitions with differing areas of focus (Aguirre-Munoz & Solano-Flores, 2010:506).

Dippenaar (2004:7) comments that language proficiency is a relative concept and is 'generally regarded as the ability to communicate in the target language and to display a sense of appropriate linguistic behaviour in a variety of situations by using and processing language in all four skills (reading, writing, listening and speaking).' Bachmann (1990:16) explains that language proficiency is 'knowledge, competence or ability in the use of a language, irrespective of how, where or under what conditions it has been acquired.' Bachman (1990) identifies six competencies which constitute language proficiency; these are organisational, textual, grammatical, pragmatic, functional and sociolinguistic knowledge which constitute Bachman's (1990) model of Communicative Language Ability (CLA). These competencies are similar to the theoretical work done by Canale and Swain (1980) on the theory of communicative competence. Canale and Swain (1980) proposed language proficiency as a four-part model of communicative competence. The four parts included linguistic competence, sociolinguistic competence, strategic competence and discourse competence.

Bachman's CLA and Canale and Swain's four-part model of communicative competence are not the only theories attempting to address the issue of language proficiency. Cummins' (1980) theory of BICS and CALP, which was briefly referred to earlier in this chapter, is another example. The acquisition of BICS includes the mastery of a language used in a social context and enables the user to be successful in any number of daily tasks (Cummins, 2000:58). However, the acquisition of BICS in a target language does not ensure academic success as the language used in academic contexts (CALP) is not yet developed. CALP includes content-based language which is specific to a certain subject discipline (Cummins, 2000:74) and must be explicitly taught. CALP cannot be acquired without BICS in a target language. BICS may take approximately 3-5 years to acquire and then, beyond, that CALP may take an additional 10 years to acquire (Cummins, 1999:2).

Table 1: Representation of BICS/CALP (Grassi & Bulmahn-Barker, 2010:79)

BICS	CALP
Playground vocabulary	Academic vocabulary
Language for social interaction	Language for communicating in academic subjects
Language to 'get by'	Language for writing academic papers
3-5 years to acquire	7-10 years to acquire

It is largely accepted that language is learned so that people can communicate with one another and this requires a deeper understanding of language beyond that of only structure (Yalden, 1987:15). From the above paragraphs it becomes apparent that even what may initially appear to be a simple task of providing a definition for the concept of 'language proficiency' is, in fact, fraught with complexity. Taking the above into account, language proficiency may be explained as the attainment of a target language to a level in which it may be used correctly within the intended context.

Beyond defining language proficiency, one must explore what this means for teachers. Is language proficiency as defined above sufficient for describing the language proficiency required by teachers? The following section endeavours to define teachers' language proficiency and explore how this differs from general language proficiency.

2.6 Defining teacher language proficiency

Defining the language proficiency requirements for teachers is not a straightforward task. Central to any definition is that teacher language proficiency goes beyond general language proficiency to include specialist skills (Consolo, 2000:78; Dippenaar, 2004:20; Elder, 2001:152; Uys, 2006:33) and includes an attainment of threshold proficiency in the LoLT (Dippenaar, 2004:19; Elder, 2001:152; Richards, 2010:103; Uys, 2005:33), a command of subject-specific language (Elder, 2001:169; Richards, 2010:104; Uys, 2006:57), and a command of interpersonal language which includes language used to create a social climate within the classroom and to facilitate certain tasks (Elder, 2001:169; Richards, 2010:103; Uys, 2006:33). Andrews (2007:2) comments that a teacher's knowledge and understanding of language systems are absolutely central to the language acquisition process of learners. Teachers must have 'Teacher Language Awareness' (Andrews, 2007:2) in order to facilitate the learning process, especially where the teacher or the learners (or as in many cases in South Africa, both) are not mother tongue speakers of English, and where English is the LoLT.

As subject knowledge is mediated through a teacher's use of language, an understanding of language encompasses both an understanding of the subject-specific knowledge as well as a teacher's general language ability. In a study which focused specifically on English language teachers, Richards (2010:103) argued that there are certain language-specific competencies that an English language teacher, who is not a home language speaker of English, must obtain when teaching to a classroom of non-home language speakers of English. Chesebro and McCroskey (2001:62) state that teacher clarity represents the process when a teacher is able to effectively engage with the desired course content in such a way that learners understand the content through appropriately-structured verbal and non-verbal messages. According to McCroskey, Richmond and Bennett (2006:404), 'Clarity deals with helping students understand what the teacher is trying to teach'. Teacher clarity includes 'nonverbal immediacy' which involves a positive approach to learners. 'Responsiveness' indicates the teacher's reactions to learners' needs and a willingness to listen to their students. 'Assertiveness' suggests that the teacher approaches learners as a leader and maintains discipline in the classroom. Chesebro and McCroskey (2001:62) propose that teachers whose Classroom

English is appropriate are characterised by clarity, fluency, staying on task and explaining information effectively. These behaviours have been associated with increased perception in teacher clarity, higher ratings of instruction, and higher achievement of learners. Richards (2010:103) takes the verbal aspect suggested by Chesebro and McCroskey (2001:62) and unpacks it further stating, that for a teacher to be proficient in Classroom English, the following aspects should be included:

- text comprehension
- provision of positive language models
- maintenance of the target language in the classroom
- fluency in the use of the target language
- provision of detailed explanations and instructions in the target language
- provision of examples of words and grammatical structures
- appropriate use of classroom language
- provision of target-language resources
- monitoring of own speech and writing to ensure accuracy, providing correct feedback regarding the learners use of language
- provision of input at appropriate level of difficulty
- provision of a language-enrichment experience for learners (Chesebro, 2001:62)

When the teacher is a home language speaker of English, Richards (2010:103) states that, in addition to the above competencies, the teacher should also display other discourse skills which relate to the following aspects of classroom interaction: monitoring of the teacher's own language, the avoidance of unnecessary colloquialisms and idiomatic usage, provision of a model of spoken English pitched at an appropriate level for the non-home language speakers of English and the provision of language input at an appropriate level. What is central when examining Richards's competencies is that these competencies are not only required by English language teachers exclusively but rather by any teacher teaching through the medium of English. This is evident when examining the work of Uys (2006), Kaiser et al. (2010) and Dippenaar and Peyper (2011) who all argue that it is the responsibility of all teachers across all subject areas to be fully proficiency in Classroom English so they may assist learners learning through English as the LoLT. The competencies identified by Richards (2010) have been included in models such as Uys's (2006)

which apply to all teachers and not just English language teachers. Therefore Richards' identified competencies would be applicable to all teachers teaching through the medium of English in the South African context.

Central to teaching effectively in English is an expert command of the linguistic features of the LoLT, command of subject-specific language and terminology and knowledge regarding second language acquisition (Uys, 2006:33; Hugo & Nieman, 2010:60). When a teacher has not achieved adequate Classroom English proficiency, there is an increased tendency for teachers to become over-reliant on teaching resources and less inclined to engage with the learners (Richards, 2010:103). In order to be proficient in the LoLT, teachers need a clear understanding of the constructs of language in order to be able to correct their own and learners' language, where necessary. A teacher must be proficient in subject-specific jargon, the register, syntax, semantics and pragmatics of the LoLT (Uys, 2006:56).

Pasternak and Bailey (2004:163) move beyond just describing the competencies required to be considered classroom language proficient but look at these competencies as a continuum rather than an either-or proposition. Language proficiency is not static but continues to develop throughout a person's lifetime. Proficiency also does not develop at the same rate within the four skills. Evans (2005:161) states that for many second language speakers their receptive skills (reading and listening) are more developed than their expressive skills (speaking and writing) but this is not to say that this does not change as language proficiency develops. Therefore, a continuum to explore teacher classroom proficiency would make sense as it allows for areas with differing proficiency levels to be evident. The result, as proposed by Nakata (2010:77), is that proficiency for teachers should be determined using scales which assess the language proficiency of teachers both quantitatively and qualitatively. The use of a continuum as opposed to an 'either or' approach to proficiency is central to this study as it will provide for degrees of perceived proficiency. This was built into the observation schedule and questionnaire used in my study through the use of Likert scales which provided for the continuum response as described above.

2.7 Ensuring teacher Classroom English proficiency

Looking at the above-mentioned statistics, the need to qualify teachers in South Africa who are adequately prepared to teach through the medium of English is vital (Dippenaar & Peyper, 2011:33). As stated in 2.2.4 there is no official requirement for institutions who qualify teachers to ensure teachers are proficient in English (or any other language to be used as a LoLT) prior to qualification (Dippenaar & Peyper, 2011:35). Given the complex nature of language usage in the South African classroom (see 2.4), ensuring teacher language proficiency should be top priority. Andrews (2007:ix) states that a teacher's understanding of language systems is central to the teaching and learning situation. Without this, teachers will not be able to teach effectively. Johnson (1990:269) argues that a course that focuses on effective language use in the classroom should be a vital part of educator training, especially where a second language is the LoLT. This view is reiterated by Nunan (2003:610) who concludes, 'if English is a necessity, steps should be taken to ensure that educators are adequately trained in language methodology appropriate to a range of learner ages and stages, that educators' own language skills are significantly enhanced, that classroom realities meet curricular rhetoric, and that students have sufficient exposure to English in instructional contexts.'

The need for adequately proficient teachers who are not native speakers of English is not limited to South Africa. Studies undertaken in other countries including; Vietnam, Taiwan, Malaysia, Korea, Hong Kong (Nunan, 2003), China (Liao, 1996; Nunan, 2003), Japan (Nakata, 2010; Nunan, 2003), Hungary (Dubin & Wong 1990: 282-293), Namibia (Uys 2006), and United States of America (Tellez & Waxman 2006:5) all identify a lack of adequately prepared teachers in the LoLT as a major stumbling block to learners' mastery of English as a second language. Historically a need for a teacher-focused language course is not new, as Johnson (1990:269) states, 'a course which focuses on the effective use of classroom specific language should be an important part of any teacher preparation course, but is most critical where teachers will be teaching through an additional language'. If we prepare teachers who are proficient in the English required for learning and teaching (Classroom English) then these teachers should in turn be better equipped to serve the proficiency needs of their learners (see 2.4). This statement is supported by Evans and Cleghorn (2010:147) who, in their concluding remarks, suggest

mandating the re-introduction of language endorsements for qualified teachers across all phases. This has since become a requirement requirement of the institutes which qualify teachers in terms of the MRTEQ (see 2.2.3). Without adequate proficiency in the LoLT, teachers cannot develop their learners' communicative skills or cognitive ability (Evans & Cleghorn, 2010:147).

From the above, it is clear that the issue of ensuring teacher language proficiency in Classroom English is neither new nor solely a localised issue. What has provided language researchers with a challenge is exactly how to define language proficiency and, within that, what constitutes teacher classroom proficiency. In order to address this, a clear definition of language proficiency must be provided and thereafter, a careful review of the literature must establish what constitutes teacher language proficiency in the classroom and how it can be measured.

2.8 A model for determining proficiency in Classroom English

As a starting point, a pre-service teacher needs a mastery of English at CALP level. If a pre-service teacher lacks proficiency in the use of general language, they will not be successful in teaching. Classroom English as defined in 1.6.1 is the specialist language required by teachers who use English as the LoLT. This would include using language specific to the classroom situation such as scientific terms required in the science subjects or explanations of English language structures required in the English subject classroom. Beyond just using these subject-specific terms, they have to be used appropriately. Classroom English also requires a mastery of how to use English to create a classroom situation conducive to learning. This includes language required to instil discipline and order in the classroom. In my own teaching practice, I have found that among pre-service teachers whom I have mentored, their ability to create a classroom conducive to learning is often limited. This have to do with their lack of experience or proximity in age to the learners (I taught Grades 10, 11 and 12). Often this limited ability to maintain discipline would undermine the ability to convey the key messages of the lessons successfully. In numerous instances this would cause emotional stress for the pre-service teacher. In one instance, the pre-service teacher refused to teach again.

Relating to the above, it was imperative to contextualise the study within existing literature and academic research relating to Classroom English. This included an

intensive review of the literature and the determination of the most appropriate model available to underpin the study. This study used the model for determining the proficiency in Classroom English of teachers proposed by Uys (2006) as its conceptual framework. In this model she identifies three competencies (interpersonal language proficiency, pedagogical language proficiency and general language proficiency) which are required by teachers in order to be considered proficient in English as the LoLT. Without general language proficiency in English a teacher would not have the basic language structure to develop interpersonal and pedagogical language proficiency. What is important to note is that Classroom English proficiency is not static (see 2.6). As discussed under 2.6, the four micro-skills may develop at different rates, for example in second language speakers, listening and reading skills are more developed than their speaking and writing skills (Evans, 2005:161), and proficiency in a language may improve or regress depending on the frequency of using the language. The necessary English proficiency required by teachers is not necessarily addressed in general English proficiency programmes (Dippenaar, 2004:20) which are largely aimed at developing proficiency in the four key areas of speaking, reading, writing and listening. Specialist language enrichment programmes for teachers aim not only at developing their communicative competence but also their awareness about the need for matching their communicative style with the educational aims they envision achieving (Dippenaar, 2004:20; Uys, 2006:105).

In order to be considered proficient in English for the purposes of teaching, teachers should have a command of English beyond that of grammatical mastery of the language (Elder, 2001:152). Indeed, teachers should have sufficient proficiency in general language usage as well as 'specialist skills such as expert command of the linguistic features of the [LoLT], command of subject-specific language and terminology and knowledge [of] language acquisition' (Uys, 2006:33) which are required for effective teaching of subject content. In addition, effective teaching requires a firm grasp of linguistic features such as directives, questioning techniques, and simplification strategies (Elder, 2001:152). The table below provides practical examples of such linguistic techniques:

Table 2: Example of linguistic features (Elder, 2001)

Linguistic feature	Explanation	Example
Directives	Language used to provide instruction and guidance	‘Make sure you read all the requirements at the top of the page’
Questioning techniques	Language used to elicit responses from learners	‘Shakespeare writes about love, violence and politics of his time, what is so different about poetry today?’
Simplification strategies	Language used to explain and simplify complex terms	‘if you had a very strong, big man and a small, weak man and they wrestled, who is likely to win?’ ‘The strong man. Well, this is exactly how subduction zones works.’

From the above, I formulated a schematic diagram to illustrate the conceptual framework. The diagram is followed by an explanation of each of the three competencies which constitute proficiency in Classroom English.

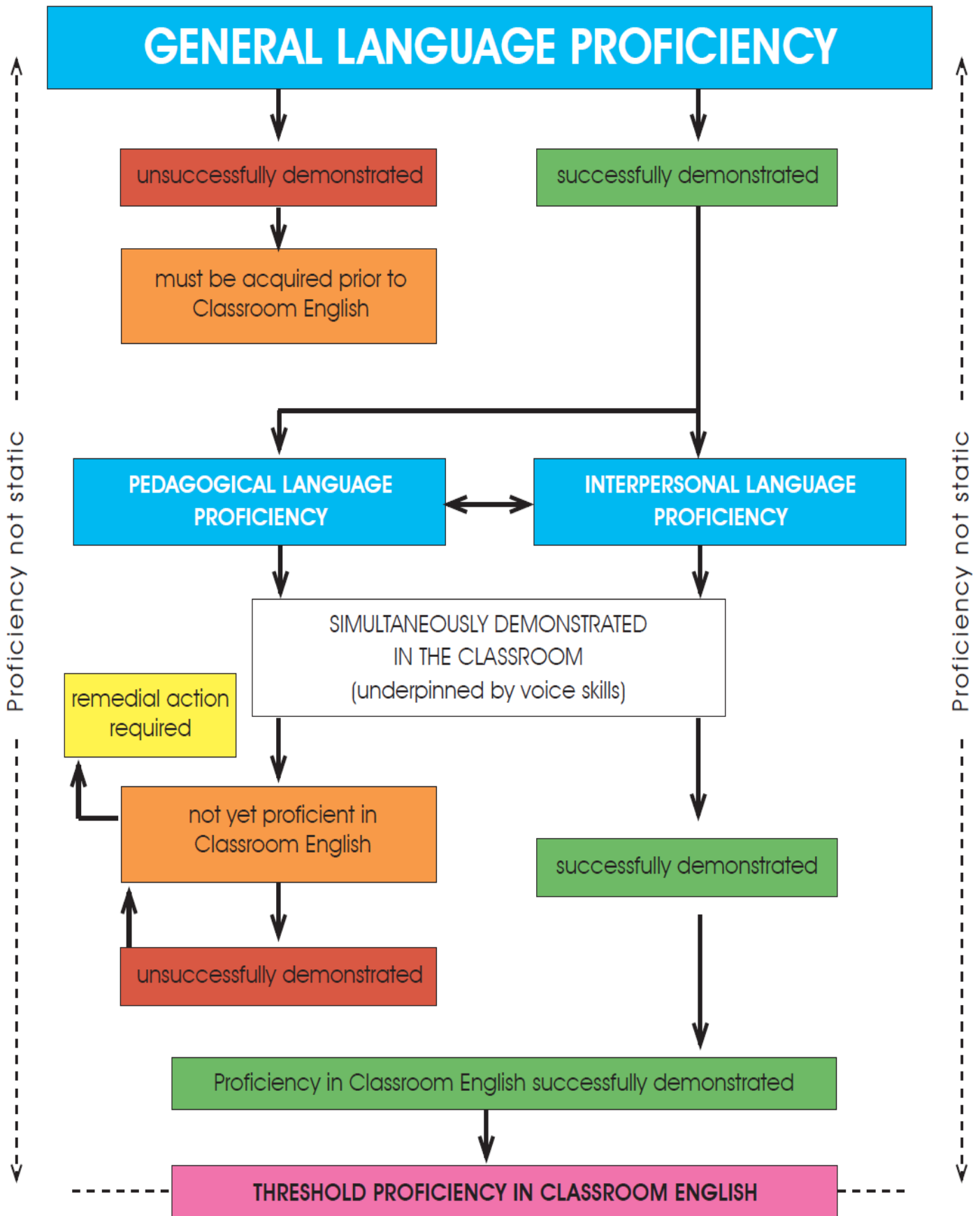


Figure 1: Schematic representation of conceptual framework

The above diagram uses general language proficiency as the point of departure for acquiring Classroom English. As will be discussed under 2.8.1, if general language proficiency is not in place, the acquiring of interpersonal language proficiency and pedagogical language proficiency will be severely hindered (Dippenaar & Peyper, 2011: 34; Uys, 2006:58). Once general language proficiency is in place, the pre-service teacher may acquire pedagogical language proficiency (see 2.8.2) and interpersonal language proficiency (see 2.8.3). These competencies may develop simultaneously or at differing rates of acquisition (Nakata, 2010:77). The three competencies are demonstrated inter-connectively in the classroom situation. As up to 85% of teaching is voice based, these skills are underpinned by the use of voice (see 2.8.4) (Morton and Watson, 2001:53). Should these three proficiencies be demonstrated to an appropriate level, the pre-service teacher would have obtained a threshold in Classroom English. This means that this teacher is proficient in Classroom English. As indicated on the y-axis of the diagram, the competencies are not static but in flux (Nakata, 2010:77). What follows is a discussion of each of the competencies within the theoretical framework.

2.8.1. General English language proficiency

Defining general language proficiency has proven to be a nebulous task, Cummins (1980:6) argues that, 'academic and cognitive variables are strongly related to at least some measures of all four general language skills (i.e. listening, speaking, reading and writing)', however, he continues by stating that defining general language proficiency is largely influenced by the context. This is especially evident when studying the number of English proficiency tests available. As illustrated in Diagram 2 and referred to in 2.6, without general English language proficiency, a teacher cannot attain interpersonal and pedagogical language proficiency in English as the LoLT as these are both underpinned by general English language proficiency (Dippenaar & Peyper, 2011: 34; Uys, 2006:58).

General English language proficiency includes elements such as the following: intelligibility of expression (which focuses mainly on the voice) and includes audibility of utterances, stress, pitch and tone, and appropriate facial expression and body movements; fluency and flexibility of expression which include enunciation, fluency, range of expression; accuracy of expression that includes aspects such as the quality of grammar usage, written questions are clearly formulated, and use of

spelling; comprehension of expression includes demonstrating an understanding of an intended sender's message as well as seeking clarity from the message when necessary (Elder, 2001:167). It includes an understanding of the rules of a language which are not only necessary for their own language proficiency but are also crucial for assisting learners in their language usage (Uys, 2006:58). Uys (2006:59) provides examples of the required general proficiency skills for prospective teachers:

- Educators' knowledge of formal grammar should be such that they can identify the role of grammar in the construction of meaning in the content classroom;
- Educators should be able to offer formal instruction when required; and
- Educators should be able to provide consistent and accurate feedback.

Central to language usage in the classroom is the use of the teacher's voice (Uys, 2006:59). This is supported by Johnson (1990:273) who states that the teacher's voice is most probably the most important educational resource at the teacher's disposal. Uys (2006:59-60) speaks specifically of rate of speech, articulation and fluency, all of which Elder addresses within the ambit of general language proficiency.

When looking at the three competencies, it becomes apparent that one cannot isolate each of the proficiencies, but that they are interlinked. However, categorising the three competencies makes determining whether a pre-service teacher is perceived proficient in Classroom English more manageable. This provides for the possibility of using an instrument to assess respondents' perception of Classroom English proficiency for the purpose of this study.

In Chapter Three, an explanation will be provided on the instrument which will be used for the purpose of rating the respondents' perception of the pre-service teacher's mastery of the competencies identified in the model and discussed below.

2.8.2. Pedagogical language proficiency

Uys & Kaiser (2008:3) state that transmission of knowledge, skills and attitudes is the major pedagogical function of classroom language. Richards and Rodgers (2001:20) describe this as the functional view of language and it is required for expressing 'functional meaning'. Johnson (1990:275-279) identifies three

pedagogical modes, namely, the operative, interactive and informative modes. Each of these modes informs Uys's explanation of pedagogical language proficiency. Uys (2006:58) explains these modes as, 'proficiency in the pedagogical language used when the educator gives instructions or sets tasks (operative mode), proficiency in the language used when the educator asks questions (interactive mode), and proficiency in the academic language used to impart new information (informative mode)'.

Pedagogical language proficiency is the ability to use language appropriately in the teaching and learning environment and includes elements required to mediate within the classroom environment (Elder, 2001:169). These elements include, more specifically, the use of 'subject-specific language'. Elder includes aspects such as the demonstration of understanding subject-specific terms, correct pronunciation of terms, using specialist terms judiciously, making clear connections between ideas, explaining concepts in a manner appropriate to the audience, explaining models and diagrams appropriately⁴.

In terms of the MRTEQ document (DoHET, 2010:10), pedagogical language proficiency is largely located within the area of disciplinary learning. 'Disciplinary learning' refers to disciplinary or subject matter learning into two areas the study of education and its foundations, and (which is relevant to this study) the study of specific specialised subject language (see 2.3.4). Disciplinary learning is one of the central areas required for competent learning (DoHET, 2010:10).

A study undertaken by Sullivan (2011:241) argued that teacher content knowledge is possibly the most central element to a better learning experience for learners. A teacher's mastery of subject-specific language speaks to the central task of teachers. Without proper pedagogical language proficiency a teacher will not be able to engage with learners on subject matter.

2.8.3. Interpersonal language proficiency

Johnson (1990:274) divided this aspect of classroom discourse into three modes, namely; control, organisation and motivation (see 1.5). Through these modes an

⁴ Examples I have encountered where pre-service teachers have not had a grasp of pedagogical language were in my English class. On one occasion, a pre-service teacher started teaching lessons about a 'proper verb'. Unsure of what the pre-service teacher was trying to teach, I intervened in the lesson and asked learners to complete the worksheet I had prepared. On approaching the pre-service teacher, she indicated that a proper-verb was a verb which started with a capital letter. On explaining that there was no such thing, we determined she was actually referring to proper nouns.

educator manages the class, creates the social climate and provides for the execution of certain routines (Uys, 2006:56). Uys uses interpersonal proficiency to include exchanges beyond just the classroom environment. Through wider educational activities (such as staff meetings) are excluded from the ambit of the study, these skills will still inherently manifest themselves within the classroom environment. Uys (2006:57) identifies typical teaching activities which require interpersonal language skills such as establishing and maintaining relationships, exchanging ideas and information, getting things done in the classroom and outside, exchanging messages such as letters, reports and circulars, motivating learners, participating in scheduled meetings and maintaining order and discipline.

Elder (2001:169) refers only to those proficiencies required within the classroom as 'classroom interaction'. These include elements such as forms of address, posing questions of varying difficulty, addressing both class and individuals, providing clear instructions, appropriate level of formality, appropriate manner for dealing with the classroom situation, and maintaining contact with the class while writing on the board or dealing with an individual's demands. These items are included in Table 3 under the section which deals with pedagogical proficiency.

Within the ambit of the MRTEQ document (DoHET, 2010:10), pedagogical learning manifests as six types of learning for teaching purposes which constitute competent learning. The MRTEQ document divides Pedagogical Learning into two areas, namely 'general pedagogical knowledge' which includes knowledge of learners, learning, curriculum and general instructional and assessment strategies, and 'specialised pedagogical content knowledge' which deals with the presentation of concepts, discipline structures to ensure a conducive learning environment and methods to evaluate progress. All of these are realised through the appropriate use of language (see 2.2).

How an educator uses interpersonal skills will greatly influence the learners' willingness to learn (Johnson, 1990:274). Dippenaar (2004:20) states that an enthusiastic, confident educator will often enhance the learning situation. The language proficiency of an educator is possibly linked to confidence experienced by that educator (Richard, 2010:104). An educator who perceives him/herself to be weak in the target language will have reduced confidence and a lesser sense of

professional legitimacy (Richards, 2010:104). Such educators are more likely to depend on educator resources and to engage less in improvisational teaching (Richards, 2010:103).

2.8.4. Physiological aspects underpinning proficiency: voice skills

As stated under 2.8.1, voice is a vital instrument in successful teaching (Morton & Watson, 2001:53; Uys, 2006:59) as learners spend between 50-80% of the school day listening to their teachers (Morton & Watson; 2001:53). Volume, pace and pitch are fundamental qualities of voice (Barker, 2013:160). The use of vocal variance in pitch, volume and rate of speech create an interesting, more stimulating communication, resulting in more meaningful student and teacher interaction and a higher likelihood of retention of knowledge by the learners (Barker, 2013:9; Hunt & Touzel, 2009:85). Uys asserts that interpersonal, pedagogical and general language proficiency cannot be separated from the way voice skills are used in the classroom. In fact, the voice is central to underpinning most skills developed and maintained throughout the teacher's career and, for this reason; teachers are referred to as 'professional voice users' (Morton & Watson, 2001:53).

Uys (2007:59) identifies seven paralinguistic aspects, namely, loudness, pitch, rate, variation, articulation, fluency and tone which are specifically important to pre-service teachers who are not home language speakers of English namely; the timing of the delivery speech and silences (rate); articulation; and fluency. Rate of speech is a determining factor in the clarity of a speaker (Williams, 1997:19). Uys (2005:59) reports that a common complaint regarding new teachers is that they speak too quickly; this could be a result of excitement and nervousness. For the purposes of teaching, 100 words per minute are considered effective (Evans, 2005). Ensuring that the message is clear is critical in the classroom. The more complex and formal the information, the slower and more deliberate the teacher needs to be (Uys, 2006:52). This is especially important where the classroom consists of learners who are not home language speakers of English since a speech rate which a home language speaker of English may consider appropriate, may be too fast for a non-native speakers of English (Barone, Mallette & Xu, 2005:56). Uys (2007:60) comments that within the South African context pre-service teachers need to be trained to articulate clearly. Uys continues by stating that such training, 'presupposes

knowledge of assimilation, spelling, slurring, silent letters, pronouncing, stressed rhythm and reduction.’

There is no universal definition for fluency, however, Rasinski (2006:5) suggests that fluency goes beyond reading speed or oral expression and instead focuses on the ability to decode and comprehend text at the same time. Uys (2006:60) proposes that a fluent delivery is defined as one where nothing distracts the listener’s attention from the message. The most important risks to fluency are hesitations, pauses, false starts and verbal mannerisms which are all exaggerated by a lack of general language proficiency.

2.9 Conclusion

From the above discussion it becomes apparent that language in the South African classroom is a complex issue, especially with regard to the issue of English as the LoLT (see 2.2). There is no quick fix to the challenges of language in education – especially when policy and practice are pulling in different directions (see 2.2). However, a sound point of departure would be to ensure that qualifying teachers are equipped with the necessary classroom language proficiency (in this case Classroom English) to assist their learners in achieving BICS/CALP in English (see 2.4). This becomes critical when preparing teachers to teach through the medium of English as in many cases both teachers and learners in the classroom are not first language speakers of English (see 2.4). In order to achieve a threshold level of Classroom English, pre-service teachers need to be educated, as part of their formal programme, regarding what Classroom English is and how it is attained, maintained and built upon (see 1.2 and 2.7). What the literature has provided is an overview of language in South Africa and, more specifically, a framework for what Classroom English entails. What skills and competencies should be demonstrated by pre-service teachers (and in-service teachers) to be considered proficient in English, are also discussed. These are general language proficiency, pedagogical language proficiency and interpersonal language proficiency.

The location of the study within the existing body of knowledge is central to answering the research questions. Having located the study within the existing literature, it is now possible to describe the research process. This is done within Chapter Three and includes the philosophical worldview, methodology, sampling and

instrument design which were used to answer the research questions as described in 1.4.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The research design and methodology of a study provides a clear indication of how the researcher plans to undertake such a study and includes the procedures used in the collection, analysis and reporting of research (Creswell, 2008:646). This chapter serves to provide an explanation of the research design and methodology which underpin this study. It describes the use of a quantitative research methodology and provides the reasoning for selecting a survey design approach. Site selection, sampling, as well as the instruments used for data collection and a detailed process of how data collection took place are also described. Finally, issues such as validity and reliability and ethical considerations are also explained within this chapter.

As was stated in 1.3, the purpose of the study was to gauge the perceived Classroom English proficiency of University of Pretoria's 4th year Bachelor of Education students at the time they undertook their internship. In order to answer the research questions, an existing questionnaire was adapted into two separate instruments. The one was an observation schedule to be administered once-off by mentor teachers and the other was a questionnaire to be filled-in once-off by pre-service teachers. The analysis of data is discussed in detail in Chapter Four. The following section locates the study within a research paradigm, explaining why such a paradigm was selected and how this will guide the research process.

3.2 Philosophical worldview

Worldviews are a person's general understanding of the world. In the research context, this includes the view a researcher has of the research (Creswell, 2009:6). Worldviews are informed by various factors such as the discipline of the researcher, beliefs of advisors and past research experiences. These factors influence the choice of either a qualitative, quantitative or mixed method approach to research (Creswell, 2009:6). My study is located within a postpositivist worldview.

This implies that I have adopted the 'traditional' form of research (Creswell, 2009:6), otherwise referred to as the scientific method. Accepting this method implies that I reject the notion of absolute truth. Knowledge is not based upon rock-solid

foundations, rather knowledge is conjectural in nature (Phillips & Burbules, 2000:25). I accept that all knowledge exists with a context therefore all knowledge cannot be considered absolute. This gives postpositivist its name as we cannot be 'positive' about our claims of knowledge when studying the behaviour and actions of humans (Creswell, 2009:7).

Data, evidence and rational assumptions shape knowledge. This study began with a model which I wanted to use to test how mentor teachers and pre-service teachers view the proficiency of pre-service teachers. Testing of a model (or a theory) is how most quantitative research begins (Phillips & Burbules, 2000:3).

The quantitative approach places emphasis on the collection and analysis of numerical information and this was done by using a survey approach which included a closed-ended observation schedule and questionnaire which rendered numerical data (Creswell, 2009:7) for analysis.

In order to better defend the quantitative research approach I have chosen, it would be appropriate to discuss the underpinnings of quantitative research and how this philosophical worldview underpins my study. The reason for choosing this approach over the others directly emanated from the research question. I wanted to identify the general trends of perceived Classroom English proficiency of pre-service teachers completing their BEd at the University of Pretoria. I employed an existing model which provided the competencies one requires to have successfully demonstrated in order to be considered proficient in Classroom English (see 2.8). To satisfy this aim, I determined that using a closed-ended, quantitative questionnaire would provide the most appropriate source of data to answer the research questions. My own approach to research has always been vested more in a scientific method than in the exploratory methods which largely underpin qualitative research. To this end, I hold a postpositivist worldview as evidenced in this study.

Another key aspect which underpins a postpositivist view is the issue of objectivity; the researcher must ensure a level of objectivity and must examine methods and conclusions for bias (Creswell, 2009:7). To this end, respondents should remain anonymous and unknown to the researcher. Further, the data are analysed to seek general trends and not individual responses. In this study responses were analysed as a whole sample and not individually.

Figure 1 provides a schematic representation of how worldviews, strategies for inquiry and research methods all relate to each other to inform the research design. Research needs to be informed by the philosophical worldview assumptions that they bring to the study, the strategies of inquiry linked to this worldview and specific methods or procedures of research which translate the approach into practice (Creswell, 2009:6).

My philosophical worldview I brought to this study was postpositivist, my selected strategy was surveys and my research methods used predetermined closed-ended instruments which made use of statistical analysis and statistical interpretation. These three areas informed my research design which is quantitative in nature.

3.3 Research questions and null hypothesis

As discussed in 3.2, this study is located within a quantitative research design. In quantitative research, researchers use research questions which render numerical data and hypotheses to shape and specifically focus the purpose of the study. To test the research question, a null hypothesis versus an alternative hypothesis were formulated. The research question was formulated around determining the perceived Classroom English proficiency of pre-service teachers. To answer this question, sub-questions were formulated which identified how the research question was going to be answered. The first sub-question sought to answer how pre-service teachers and mentor teachers perceived the pre-service teachers' proficiency in Classroom English. The second sub-question focused on whether there was any difference between the perceptions of EAL and EHL pre-service teachers. The research question and sub-questions are formulated as follows:

What is the perceived Classroom English proficiency of final year pre-service teachers prior to graduating?

- How do pre-service teachers and mentor teachers perceive the proficiency of pre-service teachers in Classroom English?
- How do pre-service teachers who are home language speakers of English and pre-service teachers who are speakers of other languages perceive their proficiency in Classroom English?

To focus the research question, a null hypothesis was formulated against an

alternative hypothesis. T-tests and the Mann-Whitney U tests were used to test the following hypotheses:

- $H_0: \mu_1 = \mu_2$

$$H_a: \mu_1 \neq \mu_2$$

with μ_1 = home language speakers of English and μ_2 = home language speakers of other languages

- $H_0: \mu_1 = \mu_2$

$$H_a: \mu_1 \neq \mu_2$$

with μ_1 = perceptions of mentor teachers and μ_2 = perceptions of pre-service teachers

The following section provides a detailed explanation of how research was undertaken and what processes were employed. This includes the research design, strategies for inquiry, and methodology employed to answer the research questions.

3.4 Research design, strategies of inquiry and research methodology

Strategies for inquiry provide specific direction for procedures in research design (Creswell, 2009:11) as they describe how the researcher intends conducting research (see 1.7). The goal of a research design is to provide a framework for which the results may be judged as being credible (McMillan & Schumacher, 2007:117). Credibility speaks to the degree that the results are accurate, trustworthy and reasonable (McMillan & Schumacher, 2007:117). As this study did not make use of any intervention and was focused on identifying trends among respondents, I determined that a 'survey design' was the most appropriate design for this study (see 1.7). Surveys are popular for a number of reasons such as versatility, credibility of information, rapid turn-around and they are cost effective (McMillan & Schumacher, 2006:233). Creswell (2009:146) explains, 'the purpose of a survey is to generalise from a sample so that inferences can be made about some characteristic, attitude or behaviour of this population'. For the purpose of this study a cross-sectional survey design was used. This meant that data were collected once-off as opposed to a longitudinal design where data are collected over an extended period (Creswell, 2009:146).

In survey design, a sample of respondents is selected and an instrument is used to collect information on variables of interest. Fink (2002:44) identifies four forms of data collection: self-administered questionnaires, interviews, structured record reviews and structured observation. In this study, the design included an observation schedule that was completed by the mentor teacher, and the questionnaire was completed by the pre-service teacher directly after the mentor teacher had observed the fifth lesson presented by the pre-service teacher.

Research methods involve forms of data collection, analysis and interpretation that researchers use for their studies (Creswell, 2009:15). This section will follow the chronology in which they occurred during the study. Firstly, issues of sampling and site selection are explained; thereafter, the process of instrumentation identification and refinement explained. After the explanation of the research instrument, an overview of the results and suggestions from the pilot study will be provided with a description of how these were incorporated into the final instrument. This will lead into the data collection process which will include the rationale as well as a detailed explanation of the process.

3.4.1 Site Selection and Sampling

As discussed in 1.7, this study consisted of two groups, namely, 230 pre-service teachers completing their BEd degree at the University of Pretoria in 2012 and the mentor teachers assigned to them at the schools where they were undertaking their internship. Sites were those identified by the Teaching Practice Office for the purpose of hosting pre-service teachers for their internship. As a result, I had no influence on the selection of research sites. All schools to be used were in Tshwane metropolitan and immediate surrounding areas in the Gauteng province. Schools included primary and high schools, from Grade R to Grade 12. The principals of each of these schools were approached, via a letter (see Appendix D), requesting them to allow their teachers to participate in the study. Only those sites where permission was obtained were used for data collection.

The sample (pre-service teachers) was selected based on the following criteria (see 1.7):

- The group of pre-service teachers should provide the closest measure of Classroom English proficiency at entry to the teaching profession. All pre-service

teachers identified for this study were final year, full-time students completing their BEd at the University of Pretoria. This meant that the pre-service teachers were easily accessible for the purposes of this study. Where a group of respondents is selected based upon them being accessible, this is referred to as convenience sampling (McMillan and Schumacher, 2006:125).

- Only pre-service teachers who were teaching through the medium of English were eligible for inclusion in the study (this included both first language English and additional language English subjects). Gender, ethnic groups, age or any other social grouping did not affect the criteria used.
- Due to the proximity of teachers during their internship, the sample was easily accessible for the purposes of follow-up reminders.

All pre-service teachers were required to attend two meetings – one before the internship period commenced and one after the end of the internship period. The first was on 10 April 2012 where questionnaires were disseminated and the second on 18 June 2012 where questionnaires were returned. This meant that both dissemination and collection of questionnaires could be managed effectively (see 1.8).

The sampling of the pre-service teachers determined which mentor teachers would be used as schools accommodating the pre-service teachers for their internship decide which pre-service teachers are placed with which mentor teacher. As no random sampling was undertaken, nonprobability sampling was used (McMillan & Schumacher, 2006:152).

In order to identify the population, and thus the sample, the Teaching Practice Office provided a list of all possible respondents (those pre-service teachers undertaking their internship through the medium of English) which constituted the population (N=230). Questionnaires were distributed to the entire available population.

3.4.2 Description of research instruments

This study made use of one observation schedule used by mentor teachers (see Appendix B) and one closed-ended paper-based questionnaire completed by pre-service teachers (see Appendix C) (see 1.7). After an extensive literature review, it was determined that the development of a completely new set of instruments which could reliably determine the perceptions of both pre-service teachers and mentor

teachers was a task beyond the scope of this study and therefore it was preferable that an existing instrument was sourced, and if necessary, modified.

The main criterion for sourcing an instrument was that it provided measurable markers for assessing the perceived ability of those skills required to be considered proficient in Classroom English as put forward in Uys's model (2006). It was determined that the Classroom Language Assessment Schedule (CLAsS) (Elder, 1993; 2001) developed by Prof Catherine Elder, was appropriate for this purpose as it is an established, in-use instrument underpinned by published research which led to the development of CLAsS (Elder, 1993) (see 1.7). The developer of CLAsS is an internationally recognised figure in teacher-language proficiency testing, and, to my knowledge, no such test currently exists within the South African context. CLAsS is an observation schedule used to observe the classroom proficiency of non-native speakers of English while they are teaching through the medium of English. It was initially developed in response to the growing number of non-native English speakers who were training to teach mathematics in Australian secondary schools (Elder 1993:16). Further, CLAsS provided items within the observation schedule which directly addresses the competencies required for demonstration in order to be considered proficient in Classroom English. CLAsS was chosen for several reasons. It has been used widely and adapted since its development in 1992. The research that resulted in the development in the CLAsS instrument reflected intensive consultation (Elder, 2001). Though the schedule was developed for non-native speakers of English, the competencies are generic enough to apply to both home language speakers of English and non-native speakers. This schedule was chosen because it provides practical and measurable examples of each of the three competencies (general language proficiency, interpersonal language proficiency and pedagogical language proficiency) that pre-service teachers are required to demonstrate in order to be proficient in Classroom English. Once it was determined that CLAsS was appropriate for this study, I contacted Prof Elder who granted me permission to modify CLAsS and use this as the instrument for data collection (see Appendix A).

The mentor teacher observation schedule (see Appendix B) consists of 42 statements relating to the pre-service teacher's proficiency in Classroom English which the mentor teacher completed on a four-point Likert scale while observing the

pre-service teacher presenting a lesson (see 1.7). The ranges within the four-point Likert scale are as follows: 1 – Unsatisfactory; 2 – Needs attention; 3 – Acceptable; 4 – Highly satisfactory. The 42 statements are grouped according to general language proficiency; pedagogical language proficiency and interpersonal language proficiency as they constitute proficiency in Classroom English (see 2.8).

Underpinning the three proficiencies, is voice skills as there is no separate section for voice skills (see 2.8.4). However, those statements which speak to voice skills were grouped together during data analysis as discussed in Chapter Four (see 2.8.4 for rationale). The statements are written so as to indicate observable behaviours which can be used to assess three competencies required by teachers in order to be considered proficient in Classroom English.

The pre-service teacher questionnaire (see Appendix C) consists of the same 42 statements as described in the mentor teacher observation schedule. In addition to these, there is an additional section at the beginning of the questionnaire which relates to the pre-service teacher's biographical information, programme of study and lesson being presented (see 1.7). The data rendered from the first section provided a more detailed profile of the population and allowed for analysis within the pre-service teacher data set. This addresses the questions such as whether there are any substantive differences between home language speakers of English and speakers of other languages or whether there is any correlation between those who studied English at university as opposed to those who did not study English at university. These are discussed in further detail in Chapter Four. What is central to understand is that language usage is not easily compartmentalised. There are skills which reside in more than one competency. For example, being able to use questioning effectively may form part of all three competencies. To accommodate this data analysis of one competency may include items from another competency. Table 3 refers to the additional biographical information required from pre-service teachers as well as how the competencies described in 2.8 are represented in the questionnaire. The blanked-out section of the table (mentor teacher) under 'biographical' is because there were no biographical questions asked of the mentor teachers. This was because the target of the study was pre-service teachers.

The underpinning physiological aspect of voice (see 2.8.4) is included within the three competencies as voice skills cannot be separated from these competencies

(Uys, 2006:59) and therefore vocal aspects are found within all three competencies. In Chapter Four, those items which relate to voice skills will be analysed both within the competencies and will also be analysed as part of voice skills.

Table 3: Behavioural items included in instruments

Section	Pre-service teacher	Mentor Teacher
Biographical ⁵	<ul style="list-style-type: none"> • Home language • Language of instruction • Language studied at school • Area of specialisation • English as an elective during their studies • Grade being taught • Subject to be taught for this lesson 	
Statements which constitute each proficiency		
General language proficiency ⁶	<ul style="list-style-type: none"> • Voice projection • Voice pitch • Enunciation of words • Sentence structure • Ability to distinguish between questions, statements and instructions • Ability to stress important words • Ability to mark transitions from one idea to another • The use of facial expressions • Use of gestures • Speed of speech • Fluency of speech • Ability to express ideas in a variety of ways • Use of synonyms • Accuracy of verbal grammar • Accuracy of written grammar • Ability to ask clearly formulated questions • Spelling 	

⁵ See 1.7

⁶ See 2.8.1

	<ul style="list-style-type: none"> • Punctuation • Ability to interpret what learners are saying • Ability to seek clarification from learners
Pedagogical Proficiency ⁷	<ul style="list-style-type: none"> • Subject-specific terms used correctly • Pronunciation of subject-specific terms • Appropriate use of subject-specific terms • Use of language to explain subject-specific terms • Explanations of diagrams/models • Use of subject-specific terms in writing • Ability to summarise information for learners • Ability to mark transition between ideas • Ability to ask clearly formulated questions • Determining pre-knowledge • Posing questions to individuals and class • Responses to learners' questions • Varying techniques to elicit responses • Provision of instruction to learners
Interpersonal Proficiency ⁸	<ul style="list-style-type: none"> • Use of forms of address • Use of questioning to determine pre-knowledge • Level of questioning • Posing questions to individuals and class • Responses to learners' questions • Varying techniques to elicit responses • Level of formality • Level of firmness • Provision of instruction • Ability to maintain contact with class when engaging with individual learners • Use of teaching aids

3.4.3 Adaptation of CLAsS

Based upon CLAsS, an observation schedule and a questionnaire were developed. The observation schedule included items which a teacher would complete while

⁷ See 2.8.2

⁸ See 2.8.3

observing the pre-service teacher, while the questionnaire was to be completed by the pre-service teacher directly after the lesson observed by the teacher.

Adaptations have been made to the observation schedule to suit the purposes of this study. These include:

- CLAsS has been reworked to become an observation schedule and a questionnaire to be answered by both mentor teachers and pre-service teachers. This has been done to document perceptions from both mentor teachers and pre-service teachers.
- CLAsS observation schedule makes use of overall rating scales for each of the following aspects: intelligibility, fluency and flexibility, accuracy, comprehension, subject-specific language, classroom interaction and overall effectiveness. Each category comprises several behaviours which must be demonstrated in order for a teacher to be considered proficient in Classroom English. The layout of each adapted instrument is different to the original instrument inasmuch as each of the 42 statements has a Likert scale instead of assigned ratings only for the overall groupings. This is to provide detailed feedback on each statement and not just an overall impression of classroom proficiency of the pre-service teacher.
- Within the original instrument, some of the statements included more than one behaviour which had to be demonstrated, for example 1.11 of the original instrument read 'grammar of spoken and written English is generally accurate' (Elder, 2001). This has now been separated into a statement on written and a statement on spoken grammar. The reason for this is to facilitate data analysis by having only one variable per statement.

3.5 Data collection

The initial observation schedule and questionnaire were piloted in early 2012 in the Tshwane metropolitan area. As advised by the Department of Statistics of the University of Pretoria, 20 respondents (ten in-service teachers and lecturers within the Faculty of Education and ten 2011 Post Graduate Certificate in Education (PGCE) students) were used in the pilot study. The in-service teachers were known to the researcher and were identified as they taught across different grades and

subjects in the schooling system. The university staff identified were those whose focus was the area of classroom language proficiency, as well as having experience in the completion of observation schedules while observing pre-service teachers. The ten PGCE students were students who had completed their studies in 2011. In 2011 the students were identified and contact details taken so as to approach them when the pilot was ready for administration. These students were chosen as they were known to the supervisor, had taught through the medium of English and had completed the internship period required for the PGCE. It was decided that this particular group would be able to provide valuable feedback on the questionnaire as they had just completed their teaching qualifications.

The pilot study was administered in February 2012 (after permission from the Ethics Committee had been obtained). Respondents were approached by the researcher and feedback requested on issues of readability, length, time, content, and if questions were understandable. The comments were collated and discussed with my supervisor for advice and recommendations.

The central issues raised by respondents were the length of the questionnaire, concerns regarding time for completion, and repetition of statements. From the comments of the respondents in the pilot study, the observation schedule and the questionnaire were modified based on the feedback (Creswell, 2008:402). This included using headings to break up the questionnaire and thus assist with the perceived length of the questionnaire. Apart from this, the pilot study revealed no substantive changes to either instrument.

After incorporating the recommended changes, the instruments were reviewed and approved by the Department of Statistics of the University of Pretoria for statistical analysis. Further, I circulated the instrument to identified staff within the Department of Humanities, Faculty of Education, University of Pretoria for review. The review considered issues such as the modification of Elder's schedule, the correctness of language and the ease of use. Recommendations from these individuals were used to further refine the instrument. Based on the results, final versions of the observation schedule and questionnaire were drafted.

Packs, in the form of envelopes addressed to the mentor teachers were compiled for ease of distribution (see 1.8). Each pack consisted of the following documents:

- Letter of informed consent: mentor teacher (see Appendix G)
- Letter of informed consent: pre-service teacher (see Appendix H)
- Observation schedule: mentor teacher (see Appendix B)
- Questionnaire: pre-service teacher (see Appendix C)
- Marked envelope to be used for return of questionnaires and completed consent forms

A pairing technique was used to link pre-service teachers' and mentor teachers' questionnaires for comparison between the two groups. This was done by allocating numbers to each set of questionnaires, for example 001MT (mentor teacher) was linked to 001PT (pre-service teacher).

The purpose of addressing the envelope to the mentor teacher and not the pre-service teacher was to ensure the pre-service teacher was not privy to the date of the observation nor the observation schedule or questionnaire. The envelope was sealed with a sticker on the pack to ensure the envelope was not opened by the pre-service teacher. In addition, on the front of the envelope, a label was placed 'to be opened by mentor teacher ONLY'. These measures were also to assist in preventing a situation where a pre-service teacher prepares for the lesson as if a critical lesson, which is formally assessed, is being observed. If this was the case, the data may be skewed as to reflect the additional preparation by the pre-service teacher. Pre-service teachers were, however, provided with a detailed oral presentation on what the study would entail so as to ensure informed consent (see 1.8). In addition, the mentor teacher was advised to give the pre-service teacher the letter of informed consent prior to the lesson being observed so that the pre-service teacher could decide whether to participate or not. The packs were each numbered to ensure accurate totalling at both dissemination and return stages. The same numbering system was used when numbering the questionnaires and consent forms. The decision to number both questionnaires and informed letters was to ensure that only questionnaires with completed informed consent letters were used in this study. The packs were distributed on 10 April 2012 during the pre-internship meeting (see 1.8). During this meeting, students undertaking their teaching experience at Afrikaans schools were excused except in situations where pre-service teachers were teaching the subject English. I explained the nature of the study as well as the methodology to be used in the study. To assist with the response rate of completed questionnaires,

five reminder SMSs were sent to pre-service teachers at predetermined intervals. The use of reminders is recommended by Creswell (2008:403) as a 'good follow-up procedure' to assist with ensuring a good response rate'.

Letters of introduction and informed consent were sent separately to principals (see Appendix F) via the students' leaders. A student leader was assigned by the Teaching Practice Office to each school and act as a liaison between pre-service teachers at the school and the university. The letters for the principals were collected by student leaders on 10 April 2012 from the Teaching Practice Office and returned via the marked envelope included in the pack. The reason for using only student leaders for this was because the principals only needed to provide one form of general consent for the entire school. Sending letters through all the pre-service teachers would have resulted in some principals having to complete up to eight letters individually.

Completion of the observation schedule was done by the mentor teacher during the fifth lesson presented by the pre-service teacher. The pre-service teacher completed the questionnaire directly after the fifth lesson. The reason for using specifically the fifth lesson was two-fold, firstly, the fifth lesson provided time for pre-service teachers to familiarise themselves with the classroom environment as it provided them with four prior opportunities to teach. Secondly, in order to account for the time-lapse variable (the possibility that the longer the time the pre-service teacher is in the classroom the better their use of Classroom English) it was decided that all pre-service teachers would be observed during the same lesson. It was agreed that should pre-service teachers be observed at different points during the internship, there would be no way to accurately account for the time-lapse variable during the data analysis phase. On 18th June, 70 questionnaires were returned. A total of 4 were rejected leaving 66 for data analysis – a 29% response rate.

Response rate refers to the total number of respondents divided by the total number of eligible respondents (Babbie, 2012:272). Though accepted techniques were used to improve the response rate, such as personally addressing respondents and multiple follow-ups (Creswell, 2008:403; De Vaus, 2002:137), the response rate was low (29%). It is accepted that telephonic, personal and internet surveys render higher responses than mailed questionnaires (Shih & Fan, 2007:59; Wimmer &

Dominick, 2006:213). Though these instruments were not mailed they were disseminated *en masse* to be delivered to the mentor teacher by way of a pre-service teacher.

Researchers (De Vaus, 2002; Hamilton, 2009; Marsden & Wright, 2010) have reported a decline in response rates to surveys over the last 20 years. Authors opinions vary on the issue of an acceptable response rate for distributed surveys such as those employed in my study. Wimmer & Dominick report that a response rate between 1 and 5 % may be expected, De Vaus (2002:127) indicated that an average of 61% is acceptable and Hamilton (2009:3) and De Rada (2005:3) report an average response rate of 25%. The wide variance in response rate is explored by Marsden and Wright (2010:512) who, after conducting a review of studies using mailed surveys, found that the response rate varied from 2.5% to 97.7%. The low response rate in my study could be attributed to several factors. Firstly, due to ethical constraints, participation was voluntary and respondents could not be compelled to participate in the survey. To support this assertion, I informally approached eight pre-service teachers on 18 June to enquire as to why they did not participate and they all indicated that they did not see the necessity for participating in the study because it was not compulsory. As incentives is one of the identified ways to ensure a better response rate (Creswell, 2009:403), I asked what possibly would have encouraged them to answer and they indicated that if the participation in the study was for marks or if the completion of the questionnaire had been made compulsory. I was in no position to offer a mark-based incentive or to make the completion compulsory. On reflection, perhaps some other way of motivating may have rendered a better response rate. Another factor which may have resulted in the low response rate was that I was unknown to pre-service teachers, and may have lacked credibility in their eyes. Having not lectured or interacted with them prior to the date of the distribution of the packs they may have attached little or no significance to what I was asking them. Though researcher credibility is generally dealt with in qualitative research (Polit & Beck, 2009:505), I believe that my lack of credibility may have influenced the response rate. However, I did consider this before the distribution of the packs, and during my presentation I explained that this research was approved by the Dean of the Faculty of Education, Ethics Committee of the Faculty of Education and the Department of Education, with the assumption that this would promote the credibility

of my study. Prior to commencing with data collection, the issue of the low response rate was discussed with the supervisor who took the matter to the co-supervisor, various senior academics in the Faculty of Education and the senior statistician from the Department of Statistics who was assigned to this study. It was agreed that the study should continue. The low response rate is discussed within the limitations of the study in Chapter Five.

3.6 Ethical considerations

This study adhered to the requirements of the Ethics Committee of the Faculty of Education at the University of Pretoria. Provisional clearance was obtained from the Ethics Committee prior to piloting the questionnaire (see 1.11). Clearance was obtained from the Gauteng Department of Education (GDE) and communicated to the relevant district officials through faxes and emails and followed up with telephone calls to the relevant co-ordinators. In order to use University of Pretoria students, written permission was obtained from the Dean of the Faculty of Education prior to applying to the Ethics Committee. As the study related to pre-service teachers during their internship, permission was received from the Head of Department, Humanities Education and the Teaching Practice Office.

To ensure informed consent, pre-service teachers were addressed in person in the presence of my co-supervisor and a detailed letter informing them of the study was provided. Letters detailing the study were sent to both the mentor teachers and the principals where pre-service teachers were undertaking their internship. The letter of introduction included the Ethical Committee provisional clearance letter, permission from the GDE and the permission letter from the Dean of Faculty of Education (see 1.11). Anonymity was ensured through the separation of the instruments and the informed consent forms. Though I was able to correlate between the informed consent form and instruments, I did not declare respondents to anyone else and the correlation was done to ensure no instruments were used where informed consent was not obtained.

I made no use of incentives as I did not want to coerce potential participants into participating in the study. As the study made use of closed-ended questionnaires and no deeply personal information was requested, the possibility to cause harm was very limited. However, in the informed consent letter, I provided the details of

my supervisor should respondents have felt that they had suffered any harm by partaking in the process.

3.7 Reliability and validity

3.7.1 Reliability

A goal of research is to have measures or observations that are reliable (Creswell, 2008:169). Reliability concerns itself with the accuracy or precision of an instrument. Scores from an instrument are reliable and accurate if an individual's scores are internally consistent (Creswell, 2008:171). For this study, the use of the Cronbach's alpha ensured internal consistency as the original questionnaire designed by Elder (1993, 2001) is a tried and tested instrument, therefore a factor analysis was not done to validate the questionnaire. Cronbach's alpha is most commonly used for multiple Likert questions in a questionnaire that form a scale and one wishes to determine if the scale is reliable. Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability (Santos, 1999:1).

Cronbach's alpha was done on each subscale to test for reliability of the subscales. The high Cronbach's alpha values show high reliabilities. The Cronbach's alpha for each subscale for the mentor teacher and pre-service teacher can be found in the following tables:

Table 4: Cronbach's alpha scores for mentor teacher's observation schedule

Subscales	Mentor Teacher Observation schedule Cronbach's alpha (raw)
V3 – 22 (General language proficiency)	0.9385
V23 – V29 (Pedagogical language proficiency subject-specific speak)	0.8765
V9,18,23-29,30,31,33-37,40 (Pedagogical language proficiency)	0.9397
V30 – V42 (Interpersonal language proficiency)	0.9236
V3, 4, 5 ,7-14,16,21,22 (Voice skills)	0.9087

Table 5: Cronbach's alpha scores for pre-service teacher's questionnaire

Subscales	Pre-service Teacher Questionnaire Cronbach's alpha (raw)
V11 – 30 (General language proficiency)	0.9057
V31 – V37 (Pedagogical language proficiency subject-specific speak)	0.8495
V17,26,31-39,41-45,48 (Pedagogical language proficiency)	0.9072
V38 – V50 (Interpersonal language proficiency)	0.8821
V11,12,13,15-22,24,29,30 (Voice skills)	0.9087

3.7.2 Validity

A valid instrument is one where the researcher can draw meaningful and useful inferences from the scores of that instrument (Creswell, 2009:235). It includes two parts: does the instrument actually measure what it is intended to measure and is the concept measured accurately (Delpont, 2004:167)? Validity is commonly categorised in terms of content, criterion and construct validity (Delpont, 2004:166; Creswell, 2008:172-173).

Creswell (2008:172) defines content validity as ‘the extent to which questions on the instrument and scores of these questions are representative of all possible questions that a researcher could ask about the content or skills.’ For the purposes of this study, face validity will be included under content validity, though these are not interchangeable terms. The instrument is based upon an existing, tested instrument designed by a leading international academic as well as through a thorough literature review. To ensure content validity and face validity, the instrument was reviewed by my supervisor, co-supervisor and selected staff from the Department of Humanities (Creswell, 2008:173).

Criterion validity is how well an instrument compares to another instrument believed to measure the concept, trait or behaviour being studied (Delpont, 2004:167). A literature review found that CLAsS was the closest matched instrument to the competencies required by pre-service teacher trainees as described in Uys’s model.

Creswell (2008:173) states that construct validity is established by determining whether the scores from an instrument are significant, meaningful, useful and have a purpose. By employing an instrument which assesses the three competencies theoretically identified, I have attempted to address the issue of construct validity.

3.8 Conclusion

This chapter provided both the theoretical and practical foundations for this study. I located my study within a postpositivist theoretical worldview which strongly underpinned the rationale for locating my study within a quantitative paradigm. The use of a survey research design was underpinned by a non-experimental approach to the study. Beyond the theory, the practical implications of quantitative research were discussed and this influenced instrument design and data collection. Site and sampling techniques were explained, focusing specifically on how the population was identified as well as sites to be used for this study. The rationale for adapting an existing instrument and creating two new individual instruments was provided which lent itself to a discussion on the data collection techniques used. This included how data collection took place within schools; it included dissemination as well as collection of the completed instruments. The issues of validity and reliability were interrogated and the chapter closed with a detailed explanation of how ethical considerations were maintained throughout the data collection phase. In Chapter

Four, the data analysis phase is described. This builds on the foundation laid in Chapter Three and will use statistics to analyse both pre-service teachers' and mentor teachers' perceptions of pre-service teachers' proficiency in Classroom English.

CHAPTER 4: DATA ANALYSIS AND DISCUSSION

4.1 Introduction

Upon entry to the teaching profession, it is assumed that a qualified teacher is proficient in the LoLT (which for the purposes of this study is English) in order for teaching and learning to take place effectively (Uys, 2006:21); this level of proficiency is referred to as Classroom English (see 1.6.1). There currently exists no formal national mechanism for assessing the classroom language proficiency of teachers prior to qualifying. In the absence of a formal localised instrument, this study sought to determine Classroom English proficiency of pre-service teachers who are completing their final year of study at the University of Pretoria, as perceived by both pre-service teachers and their mentor teachers. To this end, two instruments were adapted: a pre-service teacher questionnaire and a mentor teacher observation schedule (see 3.4.2). These would provide data on the skills which needed to be demonstrated in the three areas which constitute Classroom English: namely general language proficiency, pedagogical language proficiency and interpersonal language proficiency (see 2.8.1 - 2.8.4). The development of the instruments is explained in detail in 3.4.2.

This chapter will focus on the methods employed to obtain data in order to answer the research questions (see 1.4). The questionnaire was designed to provide insight into how pre-service teachers completing their BEd studies at the University of Pretoria perceived their ability in Classroom English. In order to provide a more-rounded picture, mentor teachers were also asked to complete an observation schedule providing their perception of how the pre-service teachers used Classroom English. Since these responses are perception based, it would be incorrect to read any of these results as definite markers of Classroom English proficiency but rather to see the results as *perceived* indicators of Classroom English proficiency which may be followed up in future studies.

4.2 Preparing for data analysis

As discussed in Chapter Three, this study was quantitative in nature and made use of two closed-ended instruments to obtain numerical data which were analysed in conjunction with the Department of Statistics at the University of Pretoria.

Once the completed observation schedules and questionnaires had been collected (see 3.5 for data collection procedures), the responses were scored manually and the data inputted into the SAS® programme for analysis. Once the data were inserted into the SAS programme, a print-out of the captured responses was made and these were checked against the actual instruments to ensure the captured data were correct. This was done for both the pre-service teacher and the mentor teacher responses. This process is referred to as 'data checking'. After data checking, a PROC frequency (PROC FREQ) was done on both sets of data (pre-service teacher and mentor teacher data sets). A PROC FREQ is a procedure used preliminary for counting, displaying and analysing categorical data (Guido, 2007:1).

On interpreting the PROC FREQ for both data sets (pre-service teachers and mentor teachers) it was determined that the size of the data sample sets was limited (see 3.5). Due to the limited sample size, the items of Sections A, B and C of the pre-service teacher questionnaire had to be regrouped as the data were not expansive enough to employ the original categories. In conjunction with the Department of Statistics it was determined that in order to make the data sufficiently expansive for data analysis, it was decided that the original V subsets were regrouped into VV subsets to facilitate analysis. The regrouping of data was to be done according to the data categories identified in the pre-service teachers' questionnaire. This is because no biographical questions were asked of the mentor teachers. There was no regrouping of 'Proficiency' groups in either instrument as all respondents were required to respond to all statements within these groups (Section A in the mentor teacher observation schedule and Section D in the pre-service teacher questionnaire). The following categories in the pre-service teachers' questionnaire were regrouped: Section A, Question 1 (home language), Question 2 (LoLT in Grade 12 year), Question 3 (home language paper in Grade 12). All of these responses were regrouped into either 'English' or 'Other'. Question 3 was a multiple response question. A similar process was followed with Section B Question 4 which grouped responses into the schooling phases in which the pre-service teachers would teach:

namely, Foundation phase, Intermediate/Senior phase and FET phase. Question 5, which covered whether the pre-service teacher took English as a major at university, was regrouped to be either a yes or no response. Question 6 was regrouped in primary school and high school. The reason for this is that the senior phase (Grades 7-9) spans both primary and secondary schooling. Question 7 was grouped into four subject areas, namely Mathematics & Science, Business Studies, English, and Humanities subjects. Upon completion of this process the data were ready to be analysed.

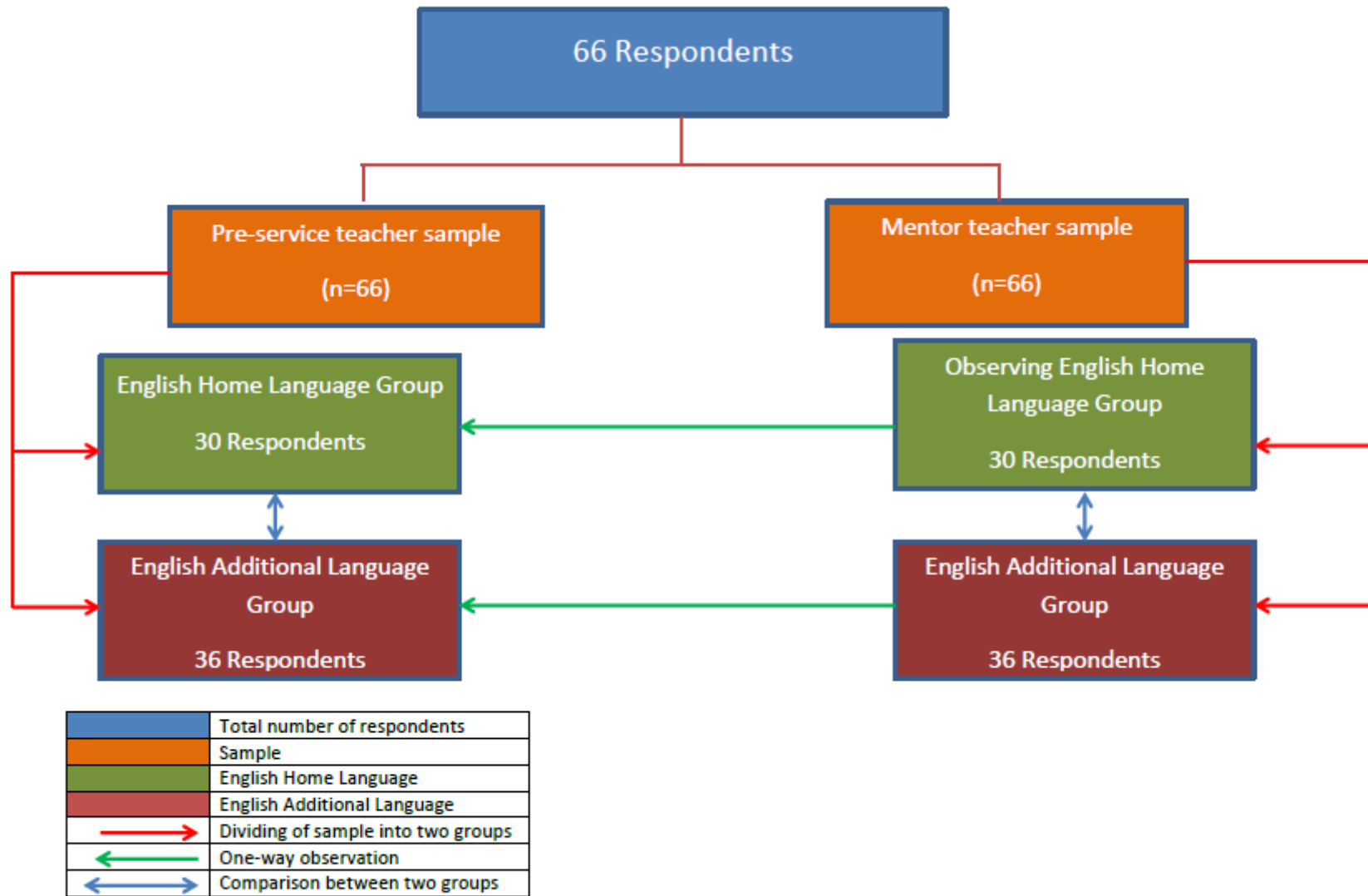


Figure 2: Process of data analysis

Figure 2 illustrates how sampling and data analysis took place. Firstly, the 66 respondents included both pre-service teachers and mentor teachers. These were then divided into a sample of pre-service teachers and a sample of mentor teachers. From these, two groups were created from each sample. Within the sample of pre-service teachers, the groups were English Home Language (EHL) pre-service teachers and English Additional Language (EAL) pre-service teachers. The mentor teacher sample was divided into those who had observed pre-service teachers who were EHL speakers and those pre-service teachers who were EAL speakers. Within the sample of pre-service teachers, statistical analysis was undertaken to determine the samples' perceptions of themselves. Thereafter, comparative data analysis was undertaken between the samples of pre-service teachers and mentor teachers to test if there was any difference between how each sample perceived the Classroom English proficiency of the pre-service teacher sample. Further, comparative data analysis was undertaken to determine if there was any difference between how EHL pre-service teachers and EAL pre-service teachers perceived their own Classroom English proficiency.

4.3 Data analysis

Following on from data collection, and the sorting of the data, data analysis was undertaken. Data analysis involves the systematic application of statistical tools in order to make sense of data (Lewis-Beck, 1995: vii). This explanation is further elaborated on by Hair, Anderson, Tatham and Black (1998:6) who state that data analysis includes the separating, identification and measurement of variation in a set of variables. This study made use of a variety of data analysis techniques which are discussed in the following sections. As this study is quantitative in nature the data rendered was numerical and is statistically represented (Creswell, 2008:645). Statistics are those methods used to organise and analyse quantitative data (McMillan & Schumacher, 2006:150). Two broad categories of statistics techniques are provided by McMillan and Schumacher, (2006:150) namely, descriptive statistics and inferential statistics. Both of these were employed in this study.

The following research question and sub-questions are provided under 1.4 and are provided here for ease of reference:

What is the perceived Classroom English proficiency of final year pre-service teachers prior to graduating?

- How do pre-service teachers and mentor teachers perceive the proficiency of pre-service teachers in Classroom English?
- How do pre-service teachers who are home language speakers of English and pre-service teachers who are speakers of other languages perceive their use of Classroom English?

To answer these questions, the following two types of statistics were employed:

Descriptive statistics were used to determine:

- the biographical profile of the sample; and
- the perceptions of the pre-service teachers' use of Classroom English

Inferential statistics were used to compare the perceptions:

- of two groups (pre-service and mentor teacher); and
- within the pre-service teacher group between home language speakers of English and home language speakers of other languages.

4.3.1 Descriptive statistics

Creswell (2008:638) provides the following definition of descriptive statistics: 'descriptive statistics present information that helps a researcher describe responses to each question in a database as well as determine overall trends and distribution of data.' Descriptive statistics are used to summarise, organise and reduce large numbers of observations by use of mathematical formulae. Within descriptive statistics, one variable is studied at a time as opposed to inferential analysis where multiple variables are analysed at the same time (Creswell, 2008:190). This study made use of descriptive statistics to analyse the biographical data.

In order to make sense of the data provided by the completed instruments, frequency distribution tables were formulated. A frequency distribution is a table of classes of values and accompanying frequencies. The simplest organisation of scores is to list them from highest to lowest and create a rank-order distribution (McMillan & Schumacher, (2006:153). This rank order is then transformed to a

frequency distribution table (McMillan & Schumacher, 2006:153) by indicating the number of times a score occurs.

Within this study, descriptive statistics were used to answer the biographical questions posed in the pre-service teacher questionnaire. Descriptive statistics were also used to determine how pre-service teacher proficiency was perceived within each data set (namely, pre-service teacher and mentor teacher). This was done by ranking the responses on each item in Section A (mentor teacher see Appendix B) and Section D (pre-service teacher– see Appendix C) using a four-point Likert scale provided. This provided a description of how each item related to the three proficiencies general language proficiency, pedagogical language proficiency and interpersonal language proficiency (see 2.8.1-2.8.4). These descriptive statistics provided a clear illustration of the sample through the biographical data and further, provided the answer as to how both mentor teachers and pre-service teachers perceived Classroom English of pre-service teachers.

4.3.2 Inferential statistics

Inferential statistics provide the researcher with the opportunity to draw conclusions, inferences or generalisations from a sample to a population of participants (Creswell, 2008:640). The purpose of inferential statistics is to determine, in a precise manner, the probability of an occurrence (McMillan & Schumacher, 2006:288). Probability is a scientific manner of stating the degrees of confidence we have in predicting something (McMillan & Schumacher, 2006:288). Within inferential statistics, procedures that use sample statistics to estimate characteristics of the population are referred to as parametric procedures (McMillan & Schumacher, 2006:308). Parametric statistics are used when it can be assumed that the population is normally distributed, has homogeneity of variance within different groups, and has data that are interval or ratio in scale (McMillan & Schumacher, 2006:308). Within parametric statistics, should a statistical hypothesis be tested, this is done by stating the hypothesis in terms of either a null or alternative hypothesis.

In this study, inferential statistics were used to determine if there was any difference between EHL and EAL pre-service teacher's perception of Classroom English proficiency. Inferential statistics were also used to compare the mentor teacher group with the pre-service teacher group. This included a comparison of perceptions

of those mentor teachers who observed pre-service teachers who were home language speakers of other languages against the perceptions of those mentor teachers who observed pre-service teachers who were home language speakers of English.

This study made use of the null hypothesis which makes predications that there will be no statistically significant difference between the two populations. In this instance, t-tests were used to test the following hypotheses:

To focus the research question a null hypothesis was formulated against an alternative hypothesis. t-tests and the Mann-Whitney U test were used to test the following hypotheses:

- $H_0 : \mu_1 = \mu_2$

$$H_a : \mu_1 \neq \mu_2$$

with μ_1 = home language speakers of English and μ_2 = language speakers of other home languages

- $H_0 : \mu_1 = \mu_2$

$$H_a : \mu_1 \neq \mu_2$$

with μ_1 = perceptions of mentor teachers and μ_2 = perceptions of pre-service teachers

The null hypothesis would be rejected should the perceptions of mentor teachers not be the same as that of EAL pre-service teachers.

4.4 Description of results

Using a frequency distribution table, a demographic profile of pre-service teachers was generated from Sections A, B and C of the pre-service teacher questionnaire. The profile consisted of the following variables: home language, LoLT in Grade 12 year, home language paper in Grade 12, English was taken at university level, phase of specialisation at university, grade taught for the lesson observed, and subject taught for the lesson observed (see Table 6).

For Section D of the pre-service teachers' questionnaires and Section A of the mentor teachers' questionnaires, a frequency analysis was also done for the five

variables of general language proficiency (see 2.8.1 and 3.5), pedagogical language proficiency, subject-specific language proficiency (see 2.8.2 and 3.5), interpersonal language proficiency (2.8.3 and 3.5) and voice skills (2.8.4 and 3.5) for each of the two instruments as well as various inferential statistical applications which are dealt with in the next section. As discussed under 4.2, the sample was divided into home language speakers of English and speakers of other home languages. The formulae as expressed in 4.3.2 were applied. The application of these formulae served to interpret the following:

- The perception of pre-service teachers' Classroom English proficiency by both the pre-service teachers and the mentor teachers.
- The relationship between home language and perceived language proficiency from both the perspective of the mentor and the pre-service teachers.

4.4.1 Demographic profile of pre-service teachers

A total of 66 pre-service teachers responded. As explained under 4.2, due to the limited sample I decided to divide the sample into two major linguistic groups; those who are English Home Language (EHL) (referred to as 'English') and those who are EAL (referred to as 'Other'). The total of 66 respondents was almost equally divided between home language speakers of English and speakers of other languages. These other languages were not limited to the official languages of South Africa but any other language spoken as a home language.

Table 6: Biographical information of pre-service teachers 2012

Language profile	English		Other	
Home Language	30 (45%)		36 (55%)	
LoLT Grade 12	56 (85%)		10 (15%)	
Those who wrote English Home Language in Grade 12⁹	40 (62.5%)		24 (37.5%)	
English at University level	Yes 26 (39%)		No 40 (61%)	
Phase of specialisation	Foundation Phase		Intermediate/Senior phase	Further Education and Training phase
	21 (32%)		10 (15%)	35 (53%)
Grade taught for lesson	Primary school 29 (44%)		High school 37 (56%)	
Subject taught¹⁰	Maths/Science	Business	Languages	Humanities
	25 (39%)	3 (5%)	22 (34%)	15 (23%)

The majority of respondents (85%) indicated that English was the LoLT in their Grade 12 year and this is in line with the results of the Department of Education (2012:12) that indicated that in Grade 4, 71% of schooling happens through the medium of English and this increases exponentially each year. Almost two-thirds of the respondents indicated that they wrote English as a home language paper in Grade 12 versus a third who did not. This is significant as it supports national trends reported by the Department of Basic Education (DoBE) in 2012. This implies that the sample is representative of the reality of the schooling system. Only 39% indicated that they had taken English at university level to either first, second or third year as opposed to 61% who responded that they had not. The majority of pre-service respondents were specialising in the Further Education and Training phase (53%) followed by Foundation phase (32%) and then a combined Intermediate and Senior phase group that comprised 10 respondents (15%). Within the internship environment, 12% more respondents reported that they were undertaking their

⁹ Frequency Missing= 2

¹⁰ Frequency Missing= 1

internship at high schools rather than primary schools (including pre-grade R). The subjects taught specifically for the lesson under review were as follows: 38% of respondents taught Mathematics/Science, followed by those teaching English (33%). This included English as a Home Language and English Additional Language. Humanity subjects and Business Studies subjects were in the minority (See Table 6). Recently, the issue of the subject-specific language usage of mathematics and science teachers has been widely debated with a national study indicating that the limited proficiency of these teachers was a major stumbling block in ensuring that learners coped in these subjects (Jansen, 2013:1). As the majority of respondents were teaching these subjects, it is possible to determine if this study is in alignment with the findings of the above study. Though the sample of respondents is limited, it may provide an indication if this is an area which requires additional support within the BEd programme at the University of Pretoria.

The bar graph (see Figure 3) below represents the three important variables: home language, LoLT in the Grade 12 year and Home Language paper in Grade 12. It illustrates that the split between those who speak English as a home language is 10% lower than those speak another language as a home language. The vast majority of pre-service teachers were taught through the medium of English in their Grade 12 year (85%) while only 62% wrote English as a home language in their Grade 12 year. This is again in alignment with results of the Department of Education (2012:12).

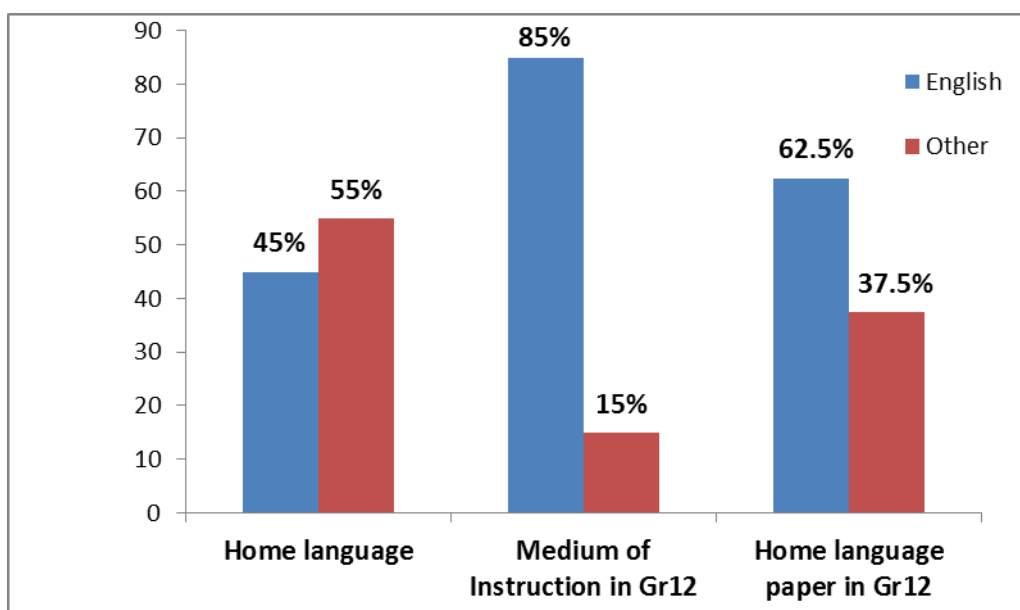


Figure 3: Side-by-side bar graph of English Home Language and Other

4.4.2 The perception of pre-service teacher Classroom English proficiency

This section will explore the perceptions of both the pre-service teacher and the mentor teacher samples under general language proficiency, pedagogical language proficiency and interpersonal language proficiency. Within the sample of pre-service teachers, comparisons are made between home language speakers of English and speakers of other home languages.

The following statistical methods were used to analyse the data:

- Independent T-tests
- Mann-Whitney U test
- Paired T-tests
- Fisher's exact test

The **independent t -test** compares two means. Those means should come from different groups of entities –EHL (English) pre-service teachers and EAL (Other) pre-service teachers.

To use the **independent t -test**, the following assumptions should be met, i.e.

- The sampling distribution is normally distributed
- Data are measured at least on an interval scale (a four-point Likert scale was used, but the independent t -test was done on summated scores)
- Variances in these populations are roughly equal (*homogeneity of variance*) (See Appendix AA)
- Scores are independent

The tests that were used for the independent t -test with $n_1 + n_2 - 1$ degrees of freedom is as follows:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_p^2}{n_1} + \frac{s_p^2}{n_2}}} \text{ where } s_p^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{(n_1 + n_2 - 1)} \text{ (the pooled variance estimate)}$$

The **Mann-Whitney U test** is a non-parametric test that can be used in replacement of an independent t -test, if the sample sizes are less than 30 (Item 6 Overall

language proficiency of English (VV8)) and 8 (Overall average score of English (VV4)) in the table below. It is used to test the null hypothesis that two samples come from the same population (i.e. have the same median).

The **Mann-Whitney U-test** assumptions are as follows:

- Independent random samples are obtained from each populations
- The two populations are continuous and have the same shape

Paired t-tests were done to determine if there is any statistical difference between how mentor teachers and pre-service teachers perceive the proficiency of the pre-service teachers. ($H_0 : d = 0$)

The test that was used for the paired t -test with $n - 1$ degrees of freedom is as follows:

$$t = \frac{\bar{d} - d}{\frac{s_d}{\sqrt{n}}} \text{ where } s_d = \sqrt{\frac{\sum d^2 - (\sum d)^2 / n}{n - 1}} \text{ and}$$

n = number of mentor versus pre - service teacher pairs

\bar{d} = difference between average score of mentor and pre - service teacher

Fisher's exact test is used as a replacement for the **chi square** test to test whether an association exists between two variables. The sampling distribution of the chi square test statistic has an approximate chi square distribution for large samples. There is an approximation problem with the chi square test if more than 20% of the cells in the contingency table have an expected value of less than five.

The hypotheses being tested are as follows:

H_0 : There is no association between the two variables

H_a : There is an association between the two variables

The following table is a two-way table and provides for comparison of:

- how EHL pre-service perceptions of Classroom English proficiency compare to pre-service teachers who are EAL,
- mentor teachers' perceptions who mentored EHL pre-service teachers and the perceptions of those who mentored EAL pre-service teachers.

The independent t- test was used for items 1-5 & 7 and the Mann-Whitney U test for items 6 and 8 as these items did not yield the minimum data required to utilise the independent t- test as described above

Table 7: Difference between self-ratings of Classroom English by EAL and EHL pre-service teachers

Area ¹¹	Mentor teacher			Pre-service teachers		
	EHL observers Mean (SD)	EAL observers Mean (SD)	p-value	EHL speakers Mean (SD)	EAL speakers Mean (SD)	p-values
1. Overall language proficiency of English (VV3) and other group	3.6633 (0.3515)	3.3417 (0.4049)	$p = 0.0011^{**}$	3.5950 (0.2944)	3.3534 (0.3489)	$p = 0.0038^{**}$
2. General language proficiency of English (VV3) and other group	3.6817 (0.3542)	3.2861 (0.3902)	$p < 0.0001^{**}$	3.5700 (0.3213)	3.3020 (0.3590)	$p = 0.0024^{**}$
3. Interpersonal proficiency of English (VV3) and other group	3.6154 (0.3912)	3.4103 (0.4674)	$p = 0.0607$	3.5897 (0.3177)	3.4347 (0.4090)	$p = 0.0954$
4. Pedagogical (subject-specific) proficiency of English (VV3) and other group	3.7000 (0.3702)	3.3730 (0.4623)	$p = 0.0027^{**}$	3.6762 (0.3478)	3.6762 (0.3478)	$p = 0.0014^{**}$
5. Pedagogical proficiency of English (VV3) and other group	3.6708 (0.3877)	3.3958 (0.4457)	$p = 0.0102^*$	3.6417 (0.2880)	3.3861 (0.4044)	$p = 0.0051^{**}$

¹¹ The null hypothesis $H_0: \mu_1 = \mu_2$ is rejected for all variables with the exception of interpersonal language proficiency

6. Overall language proficiency of English (VV8) and other group	3.4219 (0.3612)	3.5894 (0.4683)	$p = 0.0234^*$	3.4130 (0.3499)	3.5404 (0.3286)	$p = 0.1486$
7. Voice skill average score of English (VV3) and other group	3.6762 (0.3553)	3.2758 (0.3917)	$p < 0.0001^{**}$	3.6000 (0.3236)	3.2772 (0.4057)	$p = 0.0008$
8. Overall average score of English (VV4) and other group	3.5420 (0.3959)	3.1850 (0.3819)	$p = 0.0089^{**}$	3.4973 (0.3388)	3.2725 (0.3311)	$p = 0.0555$

$(p)^*$ = significant at 5%; $(p)^{**}$ = significant at 1% level of significance

The following section only provides the results of the tests areas. Discussion on significance of these tests is provided under 4.5.

Average of all variables in determining overall language proficiency

The overall language proficiency is inclusive of all 42 items in Section A of the mentor teacher observation schedule and Section D of the pre-service teacher questionnaire, namely general language proficiency, interpersonal language proficiency, pedagogical language proficiency (both subject-specific and pedagogical— see 2.6 for further discussion on overall perceived classroom proficiency). Within the mentor teachers' sample, there was a significant statistical difference ($p = 0.0011$) between those who observed EHL pre-service teachers compared to those mentor teachers who observed EAL pre-service teachers. These results are correlated by the pre-service teachers' sample that also reported a significant statistical difference ($p = 0.0038$) between those EHL pre-service teachers when compared to EAL pre-service teachers. This indicates that there is a difference in perceived overall proficiency between EHL and EAL pre-service teachers with EHL pre-service teachers scoring higher than EAL pre-service teachers.

General language proficiency

General language proficiency underpins Classroom English proficiency (see 2.3 and 2.6 for further discussion). General language proficiency includes those items which are considered necessary to have a level of proficiency in English which allows for the development of pedagogical and interpersonal language proficiency. These include knowledge of formal grammar, ability to supply formal instruction when required; and ability to provide consistent and accurate feedback.

Within the mentor teachers' sample there was a significant difference ($p < 0.0001$) between the two groups. This indicated that there was a statistical difference between mentor teachers those who observed EHL pre-service teachers and those who observed EAL pre-service teachers. Those who observed EHL pre-service teachers perceived them better than those who observed EAL pre-service teachers. The same is reported within the pre-service teachers' sample where EHL pre-service

teachers perceived themselves as more proficient ($p = 0.0024$) than EAL pre-service teachers.

Interpersonal language proficiency

Interpersonal language proficiency is discussed under 2.8.3 and includes the elements a teacher uses to manage the class, create a social climate and execute certain routines. Interpersonal language proficiency is the exception between the three types of proficiency as there was no statistical difference between the two groups within the pre-service teachers' sample ($p = 0.0954$) and none between the two groups within the mentor teachers' sample ($p = 0.0607$). This implies that home language plays no significant role in how a pre-service teacher uses interpersonal language proficiency in the classroom.

Subject-specific pedagogical language proficiency

Subject-specific pedagogical language proficiency is discussed under 2.8.2 and included the technical language required in subject-specific contexts. Within the mentor teachers' sample there was a highly significant difference ($p = 0.0027$) between the two groups replicating what has been previously found. Mentor teachers who observed pre-service teachers who were EHL speakers perceived their subject-specific pedagogical language proficiency higher than the group which observed EAL pre-service teachers (as in overall language proficiency and general language proficiency above). This is the same result within the pre-service teacher sample where home language speakers of English perceived their subject-specific proficiency to be better ($p = 0.0014$) than EAL pre-service teachers. This implies that EHL pre-service teachers are perceived overall as more proficient in subject-specific language than EAL pre-service teachers.

Pedagogical language proficiency

Pedagogical language proficiency includes those items covered in general language proficiency as well as broader pedagogical terms such as language used to give instruction and ask questions (see 2.8.2). This allows for data which speak directly to subject-specific language to be analysed individually and then part of the broader

proficiency of pedagogical language. Within the mentor teacher sample there was a significant difference at 5% ($p = 0.0102$) between the two groups, compared to the highly significant difference between the two groups within the pre-service teacher group ($p = 0.0051$).

Impact of English at university level on proficiency

This item intended to determine whether taking English as a subject at university level had any impact on the perceived Classroom English proficiency of those who studied English and those who did not (VV8). A total of 39% of pre-service teachers had taken English at university as opposed to 61% who did not. There was only a significant difference between the two groups within the mentor teachers' sample: those mentor teachers who observed pre-service teachers who had studied English at university level and those mentor teachers who observed pre-service teachers who had not studied English at university level ($p = 0.0234$). There was no statistical significance between the corresponding samples of pre-service teachers ($p = 0.1486$) indicating that English at university was not perceived as having any impact on overall perceived ability in Classroom English. This implies that whether a pre-service teacher takes English at tertiary level or not has no impact on their ability to use English successfully as the LoLT.

Voice skills

Within the mentor teachers' sample there was a significant difference ($p < 0.0001$) between the two groups, supporting what has been previously found that mentor teachers who observed pre-service teachers who were EHL speakers of English perceived their voice skills better than the group which observed EAL pre-service teachers. There was also a significant difference ($p = 0.0008$) between how EHL and EAL pre-service teachers perceived their voice skills with EHL pre-service teachers perceiving themselves as better than EAL pre-service teachers

Language of Learning and Teaching (LoLT) in Grade 12

This item intended to determine if the LoLT of a pre-service teacher's Grade 12 year had any significance on their overall perceived Classroom English proficiency. Within

the mentor teacher sample, 85% mentored pre-service teachers who were taught through the medium of English at Grade 12 level while 15% observed those who were taught through the medium of other languages. Within the mentor teacher sample there was a high statistical significance ($p = 0.0089$) between those who mentored pre-service teachers who were taught through the medium of English and those who mentored pre-service teachers who were taught through the medium of other languages. Mentor teachers who observed pre-service teachers who were taught through the medium of English at Grade 12 level perceived them better than those who observed pre-service teachers who were taught through the medium of other languages. However, this was not repeated in the pre-service teacher sample ($p = 0.0555$) which indicated that the perceptions of those pre-service teachers who were taught through the medium of English and those who were taught through the medium of other languages did not differ in how they perceived their Classroom English proficiency.

To undertake comparative analysis between the pre-service teacher sample and the mentor teacher sample, Paired t -tests and Fisher's exact test were employed. The t -test was employed to determine differences in overall averages between the two sample groups. Fisher's exact test was undertaken to determine if there was any statistical difference between how mentor teachers of EHL pre-service teachers perceived their Classroom English proficiency when compared to the perception of mentor teachers who observed EAL pre-service teachers.

Paired t -tests were done to determine if there was any statistical difference between how mentor teachers and pre-service teachers perceive the proficiency of the pre-service teachers.

The test statistical that was used for the **paired t -test** with $n - 1$ degrees of freedom is as follows:

$$t = \frac{\bar{d} - d}{\frac{s_d}{\sqrt{n}}} \text{ where } s_d = \sqrt{\frac{\sum d^2 - (\sum d)^2 / n}{n - 1}} \text{ and}$$

n = number of mentor versus pre-service teacher sets

\bar{d} = difference between average score of mentor and pre - service teacher

Consider the following table for paired T-tests with subscales and p-values when comparing the overall averages of pre-service teacher group to the mentor teacher group.

Table 8: Areas which constitute Classroom English for the difference between average score of mentor and pre-service teacher¹²

Area ¹³	Difference in average scores (SD) ¹⁴	p-value
1. Overall language proficiency TOVERALL – MOVERALL	-0.0247 (0.4012)	$p = 0.6190$
2. General language proficiency TGENERAL – MGENERAL	-0.0421 (0.3990)	$p = 0.3944$
3. Interpersonal language proficiency TINTRPER – MINTRPER	-0.0017 (0.4932)	$p = 0.9778$
4. Pedagogical language proficiency TPEDAGOG – MPEDAGOG	-0.0238 (0.4692)	$p = 0.6815$
5. Pedagogical (subject-specific) language proficiency TPEDAGOG - MPEDAGOG	-0.0186 (0.4828)	$p = 0.7361$
6. Voice related language proficiency TVRSKILL – MVRSKILL	-0.0339 (0.4011)	$p = 0.4951$

According to the table above there is no significant difference between the average scores between mentor and pre-service teacher for any of the language proficiency areas. For all the Classroom English areas except Interpersonal language proficiency, the mentors' average scores were higher for the pre-teachers than the pre-teachers' average scores for themselves (see Appendix BB on CD for complete output). This implies that pre-service teachers held a more critical view of their own Classroom English than their mentor teachers.

¹³ See Appendix BB on CD for complete output

¹⁴ The Fischer's exact test does not provide for a test statistic only a probability value

Fisher's exact test replaced the **chi square** test to test whether an association exists between two variables when the sample is too small to use the chi square test as is the case in this study where the response rate was low. The sampling distribution of the chi square test statistics has an approximate chi square distribution for large samples. There is an approximation problem with the chi square test if more than 20% of the cells in the contingency table have an expected value of less than five. This is the case with this study due to the low response rate.

The hypotheses being tested are as follows:

H_0 : There is no association between the two variables

H_a : There is an association between the two variables

Table 9: Association between the different groups and rating of language proficiency (for both mentor and pre-service teachers for each variable with associated p-values)

Question (Mentor/Teacher)	<i>p – value</i> Mentor	<i>p – value</i> Teacher
Voice projection (V3/V11)	$p = 0.1952$	$p = 0.0283^*$
Voice pitch (V4/V12)	$p = 0.0013^{**}$	$p = 0.2162$
Enunciation of words (V5/V13)	$p = 0.0006^{**}$	$p = 0.0375^*$
Sentence structure (V6/V14)	$p = 0.0039^{**}$	$p = 0.0394^*$
Statements and instructions (V7/V15)	$p = 0.0986$	$p = 0.0421^*$
Important words (V8/V16)	$p = 0.0002^{**}$	$p = 0.0854$
Transitions of ideas (V9/V17)	$p = 0.0746$	$p = 0.0011^{**}$
Facial expressions (V10/V18)	$p = 0.6224$	$p = 0.6684$
Use of gestures (V11/V19)	$p = 0.0458^*$	$p = 0.5164$
Speed of speech (V12/V20)	$p = 0.0025^{**}$	$p = 0.0099^{**}$
Fluency of speech (V13/V21)	$p = 0.0006^{**}$	$p = 0.0101^*$
Ideas in different ways (V14/V22)	$p = 0.1937$	$p = 0.0870$
Use of synonyms (V15/V23)	$p = 0.0408^*$	$p = 0.0827$
Verbal grammar (V16/V24)	$p = 0.0082^{**}$	$p = 0.0213^*$
Written grammar (V17/V25)	$p = 0.0057^{**}$	$p = 0.1448$
Clearly formulated questions (V18/V26)	$p = 0.0096^{**}$	$p = 0.5686$

Spelling (V19/V27)	$p = 0.0261^*$	$p = 0.5694$
Punctuation (V20/V28)	$p = 0.0169^*$	$p = 0.2878$
Understand learners (V21/V29)	$p = 0.0141^*$	$p = 0.2488$
Clarification from learners (V22/V30)	$p = 0.0003^{**}$	$p = 0.0805$
Understanding of specific terms (V23/V31)	$p = 0.5149$	$p = 0.5298$
Pronunciation of specific terms (V24/V32)	$p = 0.0041^{**}$	$p = 0.0095^{**}$
Use of subject-specific terms (V25/V33)	$p = 0.0185^*$	$p = 0.0091^{**}$
Language to explain specific terms (V26/V34)	$p = 0.0065^{**}$	$p = 0.0172^*$
Explain diagrams/models (V27/V35)	$p = 0.0411^*$	$p = 0.0448^*$
Developing tasks (V28/V36)	$p = 0.0128^*$	$p = 0.0907$
Summarise information (V29/V37)	$p = 0.4309$	$p = 0.0035^{**}$
Involve learners (V30/V38)	$p = 0.0163^*$	$p = 0.0350^*$
Questions – pre-knowledge (V31/V39)	$p = 0.5820$	$p = 0.6722$
Level of questioning (V32/V40)	$p = 0.0637$	$p = 0.8518$
Questions to individuals (V33/V41)	$p = 0.0366^*$	$p = 0.5604$
Questions to whole class (V34/V42)	$p = 0.4080$	$p = 0.6233$
Response to questions (V35/V43)	$p = 0.2684$	$p = 0.7282$
Handling incorrect questions (V36/V44)	$p = 0.3481$	$p = 0.3616$
Alternative eliciting responses (V37/V45)	$p = 0.6403$	$p = 0.1183$
Formality with learners (V38/V46)	$p = 0.1537$	$p = 0.4616$
Firmness with learners (V39/V47)	$p = 0.2543$	$p = 0.9296$
Provision of instructions (V40/V48)	$p = 0.1040$	$p = 0.3535$
Contact – individual learner (V41/V49)	$p = 0.3173$	$p = 0.8164$
Contact – teaching aids (V42/V50)	$p = 0.3321$	$p = 0.2803$

$(p)^*$ = significant at 5%; $(p)^{**}$ = significant at 1% level of significance

In Table 9, there was a significant association between the rating of proficiency and whether or not the pre-service teacher spoke English at home for **both mentor and pre-service teacher**. These items mainly related to voice: enunciation of words; sentence structure; speed of speech; fluency of speech; verbal grammar; pronunciation of specific subject terms; use of subject-specific words; language used to explain specific terms and language used to explain diagrams/models. In other

words, for those 10 questions the fact that English is not a home language has a significant influence on the proficiency rating.

For the following 11 items in Table 9, **only mentor teachers'** responses indicated that there was a significant association between the rating of proficiency and whether or not the pre-service teacher spoke English at home. These included pitch; use of important words; use of gestures; use of synonyms; written grammar; clearly formulated questions; spelling; punctuation; learner understanding; clarification of terms for learners; developing tasks and questions to individuals.

Only four items in Table 9, **for pre-service teachers'** sample, indicated that there was a significant association between the rating of proficiency and whether or not English was spoken at home. These were voice projection; statements and instructions; transition of ideas and the summary of information for learners.

4.5 Discussion of results

As discussed in Chapter Two, over 79% of learners (DoE, 2002:20) are taught through the medium of English yet it is the home language of roughly 9% of the population in South Africa (StatsSA, 2011). In the Grade 12 year, learners must take two languages, one as a home language and one as an additional language (learners may take a third additional language but this is not compulsory). The home language subject taken at school is not necessarily the home language of the learners as is the case with this study where 55% of respondents were EAL speakers and 62.5% of respondents reported that they wrote English as a home language in their Grade 12 year (see 4.4.1).

However, where the findings of this study differ from the research provided in Chapter Two is in the perceived level of proficiency of EAL pre-service teachers. Howie et al. (2008:7) assert that poor language skills, as a result of the switch in Grade 4 to English, have a serious negative impact on learner progress. Many learners have not achieved BICS in their home language and must switch to English where they are expected to perform at CALP (Hugo & Nieman, 2010:60). Uys (2006:7) asserts that only 15% of EAL learners are functionally literate in English at the end of Grade 12 and this drops in the rural areas. For these learners to be proficient in Classroom English at the end of the four-year BEd programme is extremely unlikely given that BICS takes three years to achieve in the target

language and another five to seven years to achieve CALP. The EAL pre-service teachers who participated in this study were all perceived to be 'proficient' in Classroom English. This would indicate that the sample of this study had all achieved CALP in English and therefore do not reflect researched averages of proficiency levels among EAL learners.

This is consistent with English Home Language (EHL) pre-service teachers who were rated as 'highly proficient' by both the mentor teachers and themselves. This would be indicative of the sample consisting of pre-service teachers who were on the upper academic scale. However, even though these pre-service teachers were proficient in Classroom English, there was a statistical difference in the proficiency of EHL pre-service teachers and EAL pre-service teachers. This may be a backlash from political inequalities and policy discrepancies as discussed under 2.2 which have had a negative impact on many learners (Dippenaar, 2004:28), especially many EAL learners from previously disadvantaged areas.

This discrepancy still exists when considering Uys's (2006) results which indicate that there has been a worrying drop of functional literacy from 51% to 12% over the last 14 years, as discussed in 2.4. This supports the assertions of Evans and Cleghorn (2010:147) that there is a need to ensure all teachers exiting the teacher education system are proficient in Classroom English, especially for EAL pre-service teachers who are planning to use English as the LoLT (see 2.7). At the time of this study there was no institutional requirement at the University of Pretoria to assess and determine proficiency in Classroom English.

The following section discusses the results and implications under 4.4 in relation to the conceptual framework and literature as outlined in Section 1.5 and Chapter Two.

4.5.1 Perceptions of pre-service teachers proficiency in Classroom English

Classroom English is central to effective teaching (Andrews, 2007: iv; Chesebro & McCroskey, 2001:62; Hugo & Nieman, 2010:60). Though Uys's model focused specifically on second language speakers, the requirement to be proficient in Classroom English was applicable to all pre-service teachers. Uys (2006:55) makes the case that pre-service teachers who are not home language speakers of English require intensive training at undergraduate level in the LoLT. However, this study

indicated that both groups (EHL and EAL pre-service teachers) within the pre-service teacher sample perceived themselves as proficient in Classroom English. This could be a reflection on the type of pre-service teacher who submitted the questionnaires. As all questions scored higher than 3 on the Likert scale, it would imply that only the academically stronger students participated in the study. Given that there still remains a difference between the EHL group and the EAL group, it would imply that this would be more pronounced if the sample was more representative of the population. If this assumption is correct, this would support the notion that many EAL pre-service teachers in the wider population may not have achieved CALP (Cummins, 2008:71). Given that CALP is only achieved after approximately 7 years after BICS (Kaiser et al., 2010:57), the possible lag experienced by EAL pre-service teachers becomes apparent.

On average, the home language speakers of English had a higher average score for Classroom English proficiency ($\bar{x} = 3.595$ and $SE = 0.0538$) than the home language speakers of other languages ($\bar{x} = 3.353$ and $SE = 0.0581$), indicating that both groups perceived their general language proficiency skills to be between 'acceptable' and 'highly acceptable'. The difference between the two groups was highly significant $t(64) = -3.00, p < 0.005. r^2 = 0.1622$ which is a medium effect size. These results were also supported by the mentor teachers ($r^2 = 0.225$) which is also a medium effect size. The mentor teachers who observed English home language pre-service teachers perceived their overall proficiency to be appropriate. This would indicate that, overall, mentor teachers perceived the sample of pre-service teachers as being proficient in Classroom English. This would imply that there is an absence of 'instructional dissonance' (see 2.4) among the sample of pre-service teachers (Evans & Cleghorn, 2012:64).

Classroom English focuses on how English is used in the classroom from a holistic point of view. It includes the three proficiencies of Classroom English (see 2.6). The results of the three proficiencies were averaged to provide a picture of Classroom English proficiency:

- Among the mentor teacher group, there was the perception that EHL pre-service teachers had a better level of Classroom English than EAL pre-service teachers. However, overall both sub-groups indicated that the sample of pre-

service teachers was proficient in Classroom English, as has been reflected in the results thus far.

- Among pre-service teachers, both sub-groups of EAL and EHL speakers perceived their own Classroom English ability to be acceptable with a difference in own EHL speakers perceived their own Classroom English proficiency.

4.5.2 General English language proficiency

General English language proficiency underpins both pedagogical and interpersonal proficiencies and without general proficiency, Classroom English cannot be obtained (Uys, 2006:58; Dippenaar & Peyper, 2011:34). As discussed under 2.9.1, general language proficiency includes elements such as intelligibility of expression, audibility of utterances, stress, pitch and tone, and appropriate facial expression and body movements. Further included are fluency and flexibility of expression this consists of enunciation, fluency, range of expression; accuracy of expression; quality of grammar usage, written questions clearly formulated, and use of spelling. Each of these elements was addressed in the 20 items V11-V30 in the pre-service teacher questionnaire (see Appendix BB on the CD) and the 20 items V3-V22 in the mentor teacher observation schedule (see Appendix BB on the CD).

As illustrated in Figure 2 there were two samples, the sample of pre-service teachers and the sample which included the mentor teachers. These samples were further divided into two groups. Within the pre-service teacher sample, the two groups were EHL pre-service teachers and EAL pre-service teachers. The mentor teacher sample was divided into those who observed EHL pre-service teachers and those who observed EAL pre-service teachers. As a result, the following was found:

- Mentor teachers perceived the sample of pre-service teachers to be proficient in the use of general English language. This was consistent between EAL pre-service teachers and EHL pre-service teachers (see 4.5.1). However, there was a difference between how mentor teachers perceived general language proficiency of EHL and EAL pre-service teachers. Within the mentor teachers' sample there was a significant difference ($p < 0.0001$) between those who observed EHL and EAL pre-service teachers.

- Both groups of pre-service teachers (those who are EHL speakers and those who are EAL speakers) perceived themselves to be proficient in the use of general English language. There was a difference in how EAL pre-service teachers viewed their own proficiency when compared to EHL pre-service teachers with EHL teachers scoring higher.

On average, EHL pre-service teachers had a higher average score for general language proficiency ($\bar{x} = 3.57$ and $SE = 0.0587$) than EAL pre-service teachers ($\bar{x} = 3.302$ and $SE = 0.0598$). The difference between the two groups was highly significant $t(64) = -3.17, p < 0.005; r^2 = 0.1357$ medium effect size. The difference between the two groups may raise questions about the level of general language proficiency that has been attained within the EAL pre-service teachers who did not respond, as pedagogical and interpersonal proficiency are grounded in general language. Though a definite answer cannot be provided, the possible difference between the two groups of pre-service teachers may be the result of differing levels of exposure to academic English. Another possible reason could be vested in teacher confidence. Studies undertaken by Dippenaar (2004) and Hugo and Nieman (2012) determined that teacher confidence is linked to the teachers' confidence in the LoLT and this has a direct impact on the teaching and learning experience. It may be the case that EAL pre-service teachers are not as confident as EHL pre-service teachers. This study is unable to answer this due to the low response rate and the scores indicating that the EAL pre-service teachers who responded were, themselves, proficient in general language proficiency.

Notwithstanding the sample of pre-service teachers perceived as being proficient in the use of general language, it cannot be said with confidence that this would apply to all pre-service teachers completing their studies. This may support the government's review of the minimum qualification for teachers (see 2.2) which provides that qualifying teachers must have endorsement in the languages to be used as the LOLT thus assisting in ensuring classroom language proficiency among all pre-service teachers.

Typically, EHL pre-service teachers rated their own perceived general language proficiency better than EAL pre-service teachers. These results are also supported by the mentor teachers. ($r^2 = 0.2225$ -medium sized effect). Both groups perceived

themselves and were perceived by their mentor teachers as having the appropriate (if not 'highly appropriate') level of general language proficiency required to teach. This would imply that all pre-service teachers in the sample have acquired CALP as described in Section 2.5 and have sufficient general language proficiency that it is possible for them to develop and demonstrate competency in the other two areas of proficiency which constitute Classroom English, namely pedagogical proficiency and interpersonal proficiency, as discussed in sections 2.8.2 and 2.8.3. As illustrated in Table 1, the achieving of BICS indicated that a learner can meaningfully engage in general language usage such as playground vocabulary, language for social interaction and language used to 'get-by' and this forms the foundation for the attaining of CALP. According to Kaiser et al. (2010:57) and Hugo and Nieman (2010:60), many EAL learners in South Africa do not fully achieve BICS or CALP in their schooling career as they often enter the schooling system without understanding a word of English and are not adequately assisted by teachers because the teachers are themselves EAL speakers.

Areas where being a home language speaker of English may have impacted on the results of both mentor teachers and pre-service teachers, were focused mainly in the general language proficiency items which related directly to voice. These items included the enunciation of words (V5/V13), sentence structure (V6/V14), fluency of speech (V12/20), speed of speech (V13/V21), and verbal grammar (V16/V24). From the mentor teachers' perspective, pitch (V4/V12), question formulation (V18/V26), evidence of understanding learners (V21/V29) and seeking clarification from learners (V22/V30) were also areas which were flagged. From the pre-service teacher sample, voice projection (V3/V11), providing statements and instructions (V7/V15) and providing verbal transitions were identified as areas where there was a statistical difference between EHL and EAL pre-service teachers.

The importance of having a command of these items for EAL pre-service teachers who are teaching through the medium of English is highlighted by Uys, (2006:41) who states that when presenting a lesson, the effective non-native speaker of English teacher must make a conscious effort to slow the rate of speech and to enunciate clearly while ensuring that their voice does not become monotonous and slow as failure to do this can result in learning not taking place. The need to speak clearly is highlighted by Chesebro and McCroskey (2001:62) who state that such a

teacher is able to convey the task correctly and provide information effectively. Williams (1997:19) adds that the rate of speech is central to ensuring clarity of the speaker. This is especially important when learners are not home language speakers of English (see 2.3). Uys's research (2006:41) reports on studies which indicate that non-native speakers of English did significantly better in dictation classes when the rate of speech was slowed from 200 words a minute to 130 words a minute. This is in alignment with Evans (2005) who reported an effective rate of speech for the purposes of teaching was 100 words per minute. Uys, (2006) is not the only South African study to emphasise the importance of voice in general language proficiency within the South African classroom. In a study undertaken by Hugo and Nieman (2010) on the impact of English as the LoLT, they argued that within the South African context there are various accepted pronunciations of English, however, the problem lies when these styles influence the learners' comprehension of what is said. Uys (2006:59) argues that Classroom English cannot be divorced from the way language is vocalised in the classroom as the better the level of speech the more likely it is that learners will retain the intended message (Hunt & Touzel, 2001:59).

As discussed under 2.8.4, voice skills are central to the teaching and learning environment as up to 80% of a learner's time is spent listening to the teacher (Morton and Watson, 2001:53). To this end, it was imperative to study how the voice skills of pre-service teachers were perceived. On average, the home language speakers of English had a higher average score for voice-related skills ($\bar{x} = 3.6$ and $SE = 0.0591$) than the home language speakers of other languages ($\bar{x} = 3.277$ and $SE = 0.0676$); the difference between the two groups was highly significant $t(64) = -3.52, p < 0.005$. The difference between the two groups may speak to the confidence levels of each group. Andrews (2007:2) states that learning is mediated through voice and is therefore central to the learning experience. These results were also supported by the mentor teachers. When comparing the two groups within the sample, pre-service teachers who are EHL speakers rate their perception of their voice skills as better than EAL pre-service teachers. Voice is a vital tool for successful teaching (Morton & Watson, 2001:53) and requires variance in pitch, volume and rate of speech to enhance the learning experience (Uys, 2006:59). Within voice usage, key areas which were highlighted between the sub-groups were enunciation, sentence structure, fluency and speed of speech, verbal grammar,

voice pitch, question formulation, evidence of understanding of learners and seeking clarification from learners. These are key issues in the development of teachers as effective facilitators. Andrews (2007:2), Chesebro and McCroskey (2001:62), Richards (2010:103) and Johnson (1990:273) all reflect in their studies that the appropriate use of voice is critical for successful teacher-learner engagement. Elder (2001:152) states that effective teaching requires a firm grasp of features such as the use of directives, questioning techniques and simplification strategies. This is especially the case where learners and teachers are EAL speakers (Richards, 2010:103; Uys, 2006:56). If voice skills are not appropriate or well developed, the pre-service teacher cannot successfully demonstrate general language ability and therefore will not be in a position to obtain pedagogical or interpersonal language proficiency. A link between the use of voice and spelling in the South African context was also reported by Hugo and Nieman (2010:65). They found that learners in classroom where teachers were ESL would write a word as the teacher pronounced it, for example 'ship' for 'sheep'. This link was reflected in the results of this study as mentor teachers perceived there to be significant difference between how EHL and EAL pre-service teachers made use of written English (see Table 9).

4.5.3 Pedagogical language proficiency

As discussed under 2.8.2, pedagogical language proficiency is the ability to use language appropriately in the teaching and learning environment. This includes language used to mediate the learning environment as well as the specialist subject terminology the teacher uses within a specific classroom setting (Uys, 2006:58). As discussed in 2.8.1 teacher content knowledge is possibly the most central element to enhanced learning and therefore is a key aspect within pedagogical language proficiency (Sullivan, 2011:241). These items can be identified as V31-V37 on the pre-service teacher questionnaire and V23-V29 on the mentor teacher observation schedule.

The results of the data analysis were as follows:

- Within the sample of pre-service teachers, there was a difference between how EHL pre-service teachers perceived their pedagogical language proficiency when compared to that of EAL pre-service teachers with scores from EHL speakers being higher than EAL speakers. However, as is the

trend, both groups had mean scores of over 3 (see 4.5.3) indicating that both groups were proficient in the use of pedagogical language. This score may be skewed when considering the limited sample size. This was consistent for both subject-specific terminology and the wider pedagogical language proficiency.

- Within the mentor teacher sample, results were consistent with what was found among pre-service teachers that, EHL pre-service teachers were perceived as having a better grasp of pedagogical language proficiency when compared to EAL pre-service teachers. Findings from the mentor teacher sample also suggested that both groups of pre-service teachers were perceived as being proficient in use of pedagogical language (see 4.5.3).

The importance of teacher subject-specific knowledge was reiterated by the 2013 study undertaken on literacy levels of primary school teachers. The chief researcher, Dr Nick Taylor, reported that teachers' poor ability in subject-specific areas was a major stumbling block to learner success and was directly responsible for the extremely low literacy levels reported in the study (Jansen, 2013:1). This is directly linked to teachers themselves not being fully proficient or confident in subject-specific language (Paton, 2013:7). As stated in Section 2.5, when CALP is achieved, they ought to have sufficient communicative competence to master content-based language which is specific to a certain subject.

The items focusing on subject-specific terminology such as the demonstration of understanding subject-specific terms through teaching, also included correct pronunciation of terms, using specialist terms judiciously, making clear connections between ideas, explaining of concepts in a manner appropriate to the audience, explaining of models and diagrams appropriately. On average, the EHL pre-service teachers had a higher average score for pedagogical language proficiency ($\bar{x} = 3.676$ and $SE = 0.0635$) than EAL pre-service teachers ($\bar{x} = 3.349$ and $SE = 0.0716$). However, both groups perceived their pedagogical language proficiency skills to be between 'acceptable' and 'highly acceptable'. The difference between the two groups was highly significant $t(64) = -3.35$, $p < 0.005$;

$r^2 = 0.1492$ which is a medium effect size. This indicates that statistically there was a highly significant difference between how EHL pre-service teachers perceived their

pedagogical language proficiency and how EAL pre-service teachers perceived their pedagogical language proficiency.

The EHL group's average score for pedagogical language proficiency was significantly higher than the EAL group's average score for pedagogical language proficiency. These results were also supported by the mentor teachers.

($r^2 = 0.1428$ which is also a medium effect size). Mentor teachers who observed EHL pre-service teachers perceived them as having better pedagogical language proficiency than those who observed EAL pre-service teachers.

After an analysis of those items which related purely to subject-specific terminology, the *wider concept of pedagogical language proficiency* was analysed (Uys, 2006:58). This included subject-specific knowledge as well as the ability to summarise information for learners, mark transitions between ideas, ask clearly formulated questions, determine of pre-knowledge, pose questions to individuals and class, responses to learners' questions, vary techniques to elicit responses and the provision of instruction to learners which resulted in using items from other proficiency areas. On average, the home language speakers of English had a higher average score for the *wider concept of pedagogical language proficiency* ($\bar{x} = 3.642$ and $SE = 0.0526$) than the home language speakers of other languages ($\bar{x} = 3.386$ and $SE = 0.0674$), yet again indicating that both groups perceived their *wider concept of pedagogical language proficiency* skills to be between 'acceptable' $t(64) = -2.9, p < 0.01; r^2 = 0.1161$ which is a medium size effect. The EHL group's average score for the *wider concept of pedagogical language proficiency* was significantly higher than the EAL group. These results again reflected that the entire sample had an appropriate overall level of pedagogical proficiency whilst home language speakers of English perceived themselves better than EAL pre-service teachers. This is consistent with what was reported regarding those items which only dealt with subject-specific terminology.

Dippenaar (2004:20) states that if meaningful learning is to take place the teacher should understand the content before being able to explain it to learners. The results in Table 9 highlight that even though both groups of pre-service teachers have gone through the same formal programme, there is a definite difference between how the two groups use pedagogical language in the classroom. This is especially apparent

in the items which deal with pronunciation of subject-specific terms (V24/V32), language used to explain subject-specific terms (V25/V33) and language used to explain diagrams and models (V27/V35). This gap between home language speakers of English and speakers of other languages in the South African classroom is discussed by Uys (2006:77) as part of course development. Uys's (2006:77) results found that the majority of second language content teachers did not possess the language skills associated with effective teaching and learning. Even though the sample of pre-service teachers were considered proficient in the use of pedagogical language, with perceptions either being stated as 'proficient' or 'highly proficient', there still remains a difference in how the two groups within the sample perceived themselves and are perceived regarding how they use pedagogical language in the classroom. This could be as a result of pre-service teachers taking subjects at university in Afrikaans and teaching through the medium of English or, alternatively, that EAL pre-service teachers have not been provided with the necessary skills required to master pedagogical language. This appropriate preparation of EAL of pre-service teachers to use pedagogical language is vital for ensuring that learners successfully grasp subject-specific terminology. This lack of preparation has been linked to the current low mathematics and science results in South African schools (Jansen, 2013:1).

In terms of Minimum Requirements for Teacher Education Qualification (MRTEQ) (DoHET, 2010:10), specific subject language is central to teacher preparation. This would indicate that institutions responsible for qualifying competent teachers would be required to ensure that subject-specific knowledge received central focus. As reported by Paton (2013:7), the National Development Policy recommends that competency tests for teachers entering the profession or those who have completed training courses should become mandatory and those teachers who do not pass competency testing after training should be removed from the profession. However, in order to achieve this level, pre-service teachers need to have achieved CALP in English during their schooling careers which require the mastery of subject-specific knowledge. The difficulty in achieving this is reflected in the National School Effectiveness Study (2013) where the findings included that basic literacy in primary school learners was exceptionally low. Less than 10% of Grade 3 to Grade 5 learners had reached the point where they could undertake sentence writing or

exercise the higher cognitive skills of inferences and interpretation. These learners are already at a disadvantage when it comes to mastering subject-specific content and this places additional pressure on teachers to ensure their own mastery of subject-specific knowledge. It is safe to assume that the sample had achieved CALP, however, when considering that the sample is probably the upper-end of the academic spectrum in the Faculty of Education, the question must be raised regarding the subject-specific proficiency of the population of EAL teachers using English as the LoLT. If a pre-service teacher is still in the process of achieving CALP (given the amount of time it takes to achieve CALP), they would struggle to cope at university and would struggle to master the subject-specific language required to be considered proficient in pedagogical language.

If the pre-service teacher has not mastered pedagogical language, the possibility of learners' understanding content and achieving academic success is hindered (Elder, 2001:152). The importance of ensuring that teachers have a clear command of pedagogical language is vital when considering that all teachers across the curriculum are responsible for the linguistic development of learners (Dippenaar & Peyper: 2011; Kaiser et al, 2010; Uys, 2006;).

Section 4.5.3 highlights specific items in the instruments which were perceived by both mentor teachers and pre-service teachers as requiring further attention. These included the demonstration of subject-specific terms through the use of relevant and practical examples, correct pronunciation of terms, using subject-specific terms judiciously, making clear connections between ideas, explaining concepts clearly and explaining diagrams appropriately. It is vital that pre-service teachers have exposure to methodology subjects which focus on subject-specific language skills as part of their undergraduate programme. This will assist in ensuring that pre-service teachers are confident in how to express themselves in the content classroom.

4.5.4 Interpersonal language proficiency

Interpersonal language proficiency includes those teaching activities which require interpersonal language skills such as establishing and maintaining relationships, exchanging ideas and information, getting things done in the classroom and outside, exchanging messages such as letters, reports and circulars, motivating learners, participating in scheduled meetings and maintaining order and discipline (see 2.8.4).

These items were covered in V38-V50 of the pre-service teacher questionnaire and V30-V42 in the mentor teacher observation schedule. Included are the use of forms of address, use of questioning to determine pre-knowledge, level of questioning, posing questions to individuals and to the class, responses to learners' questions, varying techniques to elicit responses, level of formality, level of firmness and provision of instruction. The data rendered the following key results:

- Mentor teachers perceived the sample of pre-service teachers to be proficient in interpersonal language. This was consistent between EAL pre-service teachers and EHL pre-service teachers. Mentor teachers rated the pre-service teachers higher than the pre-service teachers rated themselves.
- Within the sample of pre-service teachers both groups perceived themselves to be proficient in interpersonal language with an average score over 3. There was a very slight difference in how EHL pre-service teachers viewed their interpersonal language proficiency when compared to EAL pre-service teachers with the EHL group perceiving their interpersonal language skills better than the EAL group. However, the statistical difference between the two groups was minimal indicating there was no statistical difference between the perception of how the EHL group and the EAL group used interpersonal language in the classroom.

On average, the home language speakers of English had a *slightly* higher average score for interpersonal language proficiency ($\bar{x} = 3.59$ and $SE = 0.058$) than the home language speakers of other languages ($\bar{x} = 3.435$ and $SE = 0.0682$), indicating that both groups perceived their interpersonal language proficiency skills to be between 'acceptable' and 'highly acceptable'. The difference between the two groups was not significant ($t(64) = -1.67, p > 0.05$). A possible reason for this result may be found in the nature of interpersonal proficiency; that is that interpersonal proficiency is grounded in how the pre-service teacher relates to learners and it is possible that due to the age proximity both groups were able to adapt their styles to better connect with the learners. These results were also supported by the mentor teachers. This would indicate that there is no difference between how home language speakers of English and speakers of other home languages perceive their interpersonal language proficiency.

The results indicate that both groups have achieved BICS/CALP in the LoLT. As is presented in Table 7 mentor teachers perceived pre-service teachers as better in the interpersonal domain than the pre-service teachers perceived themselves. This is an anomaly when viewed in respect of the rest of the table. In addition, this was the only variable which did not reject the null hypothesis. A possible reason for this may have to do with the proximity in age between pre-service teachers and learners. The majority of pre-service teachers were in their early 20s and taught in the FET phase (Grade 10 to 12 learners) (see Table 6). This may have resulted in pre-service teachers being more 'in-touch' with learners on a social level and therefore able to use techniques to manage interpersonal classroom relationships more successfully than their mentor teachers. Another possible reason may be vested in the pre-service teachers' relative inexperience in the classroom. This may have resulted in the pre-service teachers being harsher on themselves. Uys (2006:56) states that interpersonal language proficiency requires that pre-service teachers' use language appropriately as this contributes to a disciplined, well-organised classroom.

It was also determined that the sample was perceived as sufficiently proficient in items which included the establishment of relationships, idea exchange, interaction with learners, maintaining discipline and motivating pupils, all of which are items in Uys's (2006) model which underpin interpersonal language proficiency.

The MRTEQ document (DoHET, 2010:10) provides for two areas of competency within pedagogical proficiency. These are 'general pedagogical knowledge' and 'specialised pedagogical content knowledge.' Within general pedagogical knowledge is included knowledge of learners, learning, curriculum and general instructional and assessment strategies. Both mentor teachers and pre-service teachers were satisfied with these areas. However, there was a clear distinction between how mentor teachers who observed EHL pre-service teachers compared to those who observed EAL pre-service teachers in how pre-service teachers involve learners in the lesson. This relates back to Dippenaar (2004:20) who states that language confidence is pivotal in creating an inclusive classroom environment. Richards (2010:104) states that when EAL teachers perceive themselves to be weaker in the LoLT, they will have reduced confidence and are more likely not to engage learners and to rely on support material. Though the sample was perceived to be proficient, it

would be interesting to observe if this is the case among the population of final year BEd students.

As discussed in Section 4.5.4, mentor teachers perceived pre-service teachers as having better interpersonal language proficiency than the pre-service teachers perceived themselves in this area. This is not consistent with the rest of the results for this study. When considering the age proximity between pre-service teachers and learners, pre-service teachers may be better 'in touch' with learners and what learners relate to. There is a greater generational gap between mentor teacher and learners and therefore mentor teachers may not as easily relate to learners as pre-service teachers.

As interpersonal language proficiency is concerned with establishing and maintaining a classroom climate conducive to learning, it would indicate that this sample of pre-service teachers are mature enough to handle the classroom situation. This again would support the assertion that the respondents to the survey were pre-service teachers who were of the higher percentile of pre-service teachers within the population. It cannot be stated that this level of interpersonal language proficiency would be found among the entire population.

4.5.5 Impact of English at university level on proficiency

This study found that taking English as an academic subject at university had no significant impact on the perceived Classroom English proficiency of pre-service teachers (see 4.4.2). English as an academic subject at the University of Pretoria is not offered to teachers only but is taken by students enrolled for a wide range of courses. This implies that English as an academic subject would not specifically focus on enhancing the use of English as the LoLT. This would support the rationale why English at university level would have no impact on perceived Classroom English proficiency.

4.6 Summary of key results

Below is a summary of the key results. Please refer to 4.5 for detailed discussions of the results.

4.6.1. Sample is considered proficient in Classroom English

This study used the model of classroom language proficiency as developed by Uys (2006). The model provides for three different types of proficiency which underpin Classroom English. These are general language proficiency, pedagogical language proficiency and interpersonal language proficiency. The data analysis and discussion of findings (see 4.3 and 4.5) provide detailed breakdown of each of the competencies.

4.6.2. Differing perceptions of Classroom English between EHL and EAL pre-service teachers

Though the sample was perceived as being proficient in Classroom English, there was a definite difference between the perceptions of EHL and EAL pre-service teachers in Classroom English. The key areas where there was a difference in perceptions among both pre-service teachers and mentor teachers were in the areas of general language proficiency (specifically around the use of voice) and pedagogical language proficiency (specifically around subject-specific language).

4.6.3. Differing perceptions by EHL pre-service teachers and EAL pre-service teachers of how voice is utilised in the classroom

The differing perceptions in the use of voice may be as a result of differing levels of confidence between EHL and EAL pre-service teachers (Dippenaar, 2004:28). These differing levels of confidence may have a direct impact on the learners' willingness to learn (Richards, 2010:104). The more confident a teacher, the less likely they are to depend on support material and the more easily they engage with learners. An avenue for future research would be to determine the use of voice in the wider population of pre-service teachers

It is vital to address voice usage, especially in EAL pre-service teachers, as voice underpins all learning and teaching in the classroom (Morton & Watson, 2001:53). The correct use of voice creates interesting and more stimulating communication resulting in more meaningful student and teacher interaction and a higher likelihood of retention of knowledge by the learners (Barker, 2013:9). If voice is not correctly employed, learning may be greatly impaired due to the key role played by voice usage in the teaching and learning environment.

4.6.4. Differing perceptions of how pedagogical language is used in the classroom by EHL and EAL pre-service teachers

The items relating to subject-specific language (see 4.5.3) also provided insight into the key differences between the two groups within the pre-service teacher sample. This difference was highlighted mainly in items which dealt with the use of subject-specific language in the classroom. Mastery of pedagogical language is vital because if the pre-service teacher does not have a mastery of pedagogical language the possibility of learners' understanding content and achieving academic success is hindered (Sullivan, 2011:241).

The issue of pedagogical language proficiency in the South African context was raised in a study undertaken by Taylor (Jansen, 2013:1) which found that teachers' poor ability in subject-specific areas was a major stumbling block to learner success and was directly responsible for the extremely low literacy levels reported in the study. Because my study found that the EAL pre-service teachers were proficient and, more than likely, from the upper-end of the academic scale, and that the sample took teaching methodology as part of their BEd programme, it would be interesting to determine if the methodology components of the degree course provide sufficient support to EAL pre-service teachers in developing their pedagogical language proficiency.

4.7 Conclusion

This chapter described the process which was followed in order to analyse the data. This included how data were obtained from the two instruments and prepared for data analysis. Due to the low response rate, data were re-categorised in order to facilitate meaningful interpretation. The data were analysed using both descriptive and inferential statistics and presented through the use of tables and graphs. Statistical methods employed were frequency tables and graphs which were used to represent the biographical data of pre-service teachers, independent T-tests, Mann-Whitney U-tests and Paired T-tests. These were employed to render data surrounding the perception of pre-service teachers' Classroom English. A Fisher's exact test provided a contingency table which highlighted the impact of home language on the perceptions of both the mentor teachers and the pre-service teachers.

The interpretation of the data determined that the sample was considered proficient in the three competencies which constitute Classroom English and therefore are overall proficient. However, the mean averages for the sample of pre-service teachers and mentor teachers indicate these results may be limited due to high scores awarded by both samples. As a result inferences about the Classroom English of the entire population should be made extremely cautiously as not all pre-service teachers would be within the proficiency levels determined in the pre-service teacher sample here analysed.

Even though the sample may not be representative of the true reality, there were significant differences between the perceptions of home language speakers when compared to speakers of other languages, especially in the areas of general language proficiency and pedagogical language proficiency. As it is safe to assume the rest of the population's perceived proficiency would vary in comparison with the sample, the argument is made that this would further serve to highlight areas which may need further addressing within the formal curriculum (specifically for EAL pre-service teachers), namely in the areas of voice in the classroom and subject-specific terminology. Though both samples were considered 'proficient', there was a significant difference between EAL and EHL pre-service teachers' perceived proficiency in both voice and correct usage of subject-specific terminology. The results of this study further support the academic position that EAL pre-service teachers need intensive support during their formal education programme to ensure they are adequately prepared to teach through the medium of English.

The next chapter (Chapter Five) will focus on highlighting key points of the study as well as the limitations of the study and possible recommendations for future research.

CHAPTER 5: SIGNIFICANCE AND IMPLICATIONS OF STUDY

5.1 Introduction

This chapter will provide a summary of the study, highlighting key points from throughout the research process. The chapter provides a brief overview of the research process, limitations of the study, implications of the research and suggestions for future research and will finish with an overall conclusion.

5.2 Overview of research process

This study aimed to answer the research question, ‘What is the perceived Classroom English proficiency of final year pre-service teachers prior to graduating?’ In order to answer this question I followed the process for scholarly research as set out by the University of Pretoria. It was determined that the target group for the study would be final year pre-service teachers who were teaching through the medium of English. This group was chosen because it would provide the best picture of pre-service teachers’ perceived Classroom English proficiency at entry to the profession.

Once a preliminary literature review was undertaken and the CLAsS instrument identified for the purposes of this study, Professor Elder was approached for permission to use CLAsS. Having obtained this, I prepared a proposal which was defended in May 2011 and approved. Thereafter, an application was submitted to the Ethics committee and provisional approval was granted. As part of the application letters of informed consent, as well as draft instruments, were submitted for approval.

The literature review located the study within the South African context by first exploring policy and practice. This included researching the key pieces of legislation and policy which have directly influenced language usage in the classroom. The current language situation in South African schools, as well as the challenge of English as the Language of Learning and Teaching (LoLT), is also discussed.

Stemming from the above, it became apparent that the South African context is complicated with the majority of teachers not fully proficient in teaching through the medium of English. Though policies do encourage mother-tongue education, in reality this is often not the case with 79% of learners being taught through the

medium of English at Grade 4 level with this number rising each year. Currently, there is no mandatory testing of pre-service teachers' classroom language proficiency prior to qualifying. Though this seems set to change with the introduction of the minimum requirements for teacher education qualifications, it remains the current situation.

Given the South African context, Uys's model for determining proficiency in Classroom English (2006) served as the basis for my conceptual framework. The three proficiencies which constitute Classroom English were identified, namely general language proficiency (which underpins proficiency in Classroom English), pedagogical language proficiency and interpersonal language proficiency. The CLAsS instrument developed by Elder was adapted to facilitate data collection which ran from April to June 2012.

This study was located within a postpositivist worldview and made use of a quantitative research design and employed a survey to collect data. A questionnaire for pre-service teachers was developed as well as an observation schedule for mentor teachers, in conjunction with the Department of Statistics at the University of Pretoria. These were both adapted from Elder's CLAsS instrument. The pre-service teacher questionnaire included biographical questions as well as 42 items relating to their own perceived proficiency in Classroom English. These 42 items were grouped into the three proficiencies. The mentor teacher observation schedule consisted of only the 42 items relating to Classroom English proficiency. Validity and reliability of the instruments were tested and the instruments were found to be both valid and highly reliable.

Packs, including the questionnaire and observation schedule as well as letters of informed consent for completion by the headmaster, mentor teacher and pre-service teachers, were distributed to pre-service teachers on 10 April 2012. The total number of packs distributed was 230 ($N = 230$). The observation schedule was completed by the mentor teacher while observing the fifth lesson presented by the pre-service teacher. The schedules were returned on 18 June 2012. The response rate was low, with 66 responses.

Data analysis was undertaken in conjunction with the Department of Statistics of the University of Pretoria. This included employing various statistical tests to sort and

analyse the data. Biographical information described the pre-service teacher respondents. Thereafter, inferential statistics were used to determine the following:

- What was the pre-service teachers' perception of their own Classroom English?
- Was there a difference between EHL and EAL pre-service teachers' perceptions of their Classroom English?
- What were the mentor teachers' perceptions of the pre-service teachers' Classroom English?
- Was there a difference in perception between those mentor teachers who observed EHL pre-service teachers and those who observed EAL pre-service teachers?

5.3 Limitations of study

5.3.1. The low response rate of respondents

The low response rate is a limitation of this study as it limits the ability to generalise the results to the entire population. The low response rate could be attributed to several factors. Firstly, due to ethical constraints, participation must be voluntary and respondents cannot be compelled to partake in the survey. Secondly, there was the lack of incentives; thirdly, another factor which may have resulted in the low response rate was that I was unknown to pre-service teachers, and may have lacked credibility in their eyes.

5.3.2. Study was limited to a single university

This study was conducted with pre-service teacher respondents completing their studies at the University of Pretoria; therefore, transferability of the results of this study may be limited. However, the principles and competencies upon which this study is based are internationally recognised and therefore it may be presumed that these concepts could be applied to other institutions.

Ultimately, to have drawn a comparison between multiple institutions would have rendered a more holistic picture of pre-service teacher English proficiency within South Africa; it was not within my means to do this.

5.3.3. Instruments

The instruments designed elicited mentor teachers' and pre-service teachers' perceptions, which are very subjective in nature. These instruments were not designed as actual instruments of objective testing. This limits the study as results are subjective and personal in nature and cannot be independently verified.

However, even if this is a limitation, it still has merit as proposed by Coetzee-Van Rooy (2011:151) who states that studies on perceptions are valuable as, at a basic level, it is believed that perceptions influence behaviour.

5.3.4. Instrument design

The layout of the instruments may also be a limitation due to the use of a Likert scale and the possible halo effect. It cannot be negated that respondents are treating items which are relating to different aspects of Classroom English independently of one another.

5.3.5. Single administration of instruments

The instruments were only administered once. My reasoning for this was due to the already stressful nature of the teaching environment for both pre-service teachers and the mentor teachers. Elder (2001:156) states that multiple applications of the assessment render a richer and deeper understanding of the proficiency of trainee teachers. However, this study is not to determine actual proficiency but rather perceptions of proficiency at a point in time. This means that the questionnaire acted as a snapshot of proficiency at that time.

5.3.6. Limitation of scope

The body of research on the field of teacher language proficiency is large in scope and is constantly widening. It was beyond the scope of this study to include all possible models of English language proficiency and those chosen for discussion were found to be the most pertinent to this study. Additional fields in this area which may be included in future studies include further expansion of models of general language proficiency, metalinguistics and English for special purposes.

5.3.7. Data analysis

The data rendered addressed the research question, however, could have included further, more in-depth analysis. Due to the small sample size the data was limited and therefore more in-depth statistical applications could not be undertaken. This resulted in more practical applications findings rather than findings of substantive scientific significance.

5.4 Implications of findings

5.4.1 Difference in the perception of how EHL and EAL pre-service teachers utilise Classroom English

Even though the sample proved to be proficient in Classroom English, there remains a statistical difference between how EHL and EAL pre-service teachers are perceived as utilising Classroom English (see 4.5.1). This implies that even where pre-service teachers have gone through the same education programme and are perceived as being proficient in Classroom English, there remains a difference in their language usage.

5.4.2 Continual development of pedagogical language skills is required

As discussed in Chapter Two and Chapter Four, how teachers use pedagogical language has a direct impact on learners' success. This study determined that there remains a perceived difference between how EHL and EAL pre-service teachers express pedagogical language in the classroom. This implies that the current research into how EAL teachers use pedagogical language in the subject classroom is necessary to ensure that EAL pre-service teachers are proficient in pedagogical language.

5.4.3 Instruments proved valid and reliable for use in future research

This study has proven that both the observation schedule and the questionnaire render reliable and valid data as discussed under 3.7.1 and 3.7.2. This means that the instruments may be used in future research and the data rendered from both instruments are valid and reliable.

5.5 Suggestions for further research

5.5.1 Comparative study among different institutions in other provinces

In order to obtain a more inclusive picture of pre-service teachers' Classroom English proficiency, a comparative study among various institutions in the various provinces would need to be undertaken. This would have the potential to provide a national overview of how pre-service teachers are perceived in their use of Classroom English.

5.5.2 Multiple administrations of the instruments

Elder (2001) suggests that multiple administrations of CLAsS render a more holistic picture of a teacher's Classroom English ability. I would suggest that the instruments are administered at set points over the teaching practice period to render a detailed, longitudinal picture of pre-service teachers' Classroom English. Multiple applications would also indicate whether teachers develop Classroom English skills over the course of the internships and to what degree, if any, this happens.

5.5.3 Course design

Should mandatory testing happen, universities will need to develop compulsory courses which are aimed at developing Classroom English (or any language the pre-service teacher plans to use as a LoLT). The development of such courses will need to include a component that provides not only the theory of language usage but provides practical examples of the use of general, pedagogical and interpersonal language proficiencies. More research is required into exactly what such a course would need to entail.

5.5.4 Test design

As currently there is no mandatory test to determine a pre-service teachers' classroom language proficiency but the MRTEQ documents states that this will become a requirement for pre-service teachers, there is a need to develop assessment strategies to assess classroom language proficiency. This is especially important when the LoLT is not the home language of the teacher. Such tests should provide assessors with a high level of comfort that pre-service teachers enter the teaching profession fully equipped with the necessary proficiencies to mediate learning successfully. This study has provided a possible first step in developing

such a test as it has provided clear categories for assessment and a potential method for assessing. More research would be required on how to refine these instruments.

5.5.5 Mandatory testing

A national standardised test appropriate to the South African context would provide a uniform marker to determine pre-service teachers Classroom English prior to qualifying. This would be able to provide a level of comfort to the institutions qualifying teachers that pre-service teachers are proficient to teach through the medium of English. In addition, such a mandatory test would provide comparative data between institutions which could assist in identifying areas of classroom language proficiency which need more work. Such a test should not be a once-off administration but should include a variety of assessments such as written assessments, classroom assessments and simulations. Research would be required into the administration of a national pre-service teacher Classroom English proficiency test.

5.6 Conclusion

This study aimed to answer the research question, 'What is the perceived Classroom English proficiency of final year pre-service teachers prior to graduating?' Through a detailed research process, the answer was that this sample was considered proficient in Classroom English, both from the perspective of the pre-service teachers and their mentor teachers' perspective. However, it is not possible to infer this to the entire population due to the limited sample size.

It was further determined that even though the sample was considered proficient, there was still a difference between English Home Language speakers and English Additional Language regarding speakers perceived Classroom English in the areas of general language proficiency (especially those items related to voice) and pedagogical language proficiency (subject-specific terminology). Taking into account the high levels of proficiency among both EHL and EAL pre-service teachers, it was interesting to note that these areas were identified in the literature review as critical areas for EAL pre-service teacher development. This may serve to assist the notion that EAL pre-service teachers may need additional support in ensuring they are proficient in Classroom English prior to graduating.

As voice is central to the teaching and learning experience and approximately 80% of time spent by learners in the classroom is spent listening to the teacher, it is vital that pre-service teachers are able to use their voices effectively in the classroom.

Recent studies in South Africa have found that a lack of proficiency in pedagogical language is a direct factor impacting on learner achievements and as such, it is vital that pre-service teachers are fully equipped to effectively use pedagogical language in the classroom, especially EAL pre-service teachers. Such preparations should include effective methodology subjects which focus on developing pre-service teachers' pedagogical language proficiency by ensuring pre-service teachers effectively demonstrate the use of pedagogical language in a simulated classroom, prior to qualification.

This study has contributed to the refinement of two instruments which may be further developed into tests to determine Classroom English proficiency of pre-service teachers in the future. Given that it will become mandatory for institutes qualifying teachers to certify proficiency in the languages of learning and teaching, the instruments may be further developed to assist in the assessing of pre-service teachers' Classroom English proficiency.

Language in the South African classroom remains a contentious issue which is never far from questions of history, politics or economics. As was illustrated in Chapter Two, currently in the South African context, English is often perceived as the 'better' choice by parents and schools and as such the hegemony of English remains. The issues of the mismatch between a policy of mother-tongue education and the real-life situation where an overwhelming number of learners are taught through a language other than their mother-tongue continue. However, understanding the importance of teacher language proficiency in the medium of instruction may go a long way to better equipping both teacher and learner to cope with the situation. Changing the English first perception will take time and will depend largely on the wants of parents and learners. Though there is acknowledgement that teacher proficiency does impact on academic success, the absence of a mandatory teacher language proficiency curriculum in the teacher education programmes means that the problem is not being adequately addressed. Ensuring that pre-service teachers are proficient in Classroom English is vital to ensure that learners have sound linguistic role-

models, especially in schools where English is not the mother tongue of teachers or learners. Continued research into this field is vital.

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Tamyrne Peyper

Subject:

FW: Request for permission to use instrument (fwd)

- > Dear Tammy,
- > Delighted for you to use the schedule and or adapt as you see fit. I'd
- > be keen though to have a digest of your findings (eg thesis abstract)
- > when the research is complete.
- >

> Regards,

> Cathie

>

> _____
> Catherine Elder

> Associate Professor, Dept. of Linguistics & Applied Linguistics

> Director, Language Testing Research Centre The University of Melbourne

> Victoria 3010 Australia.

>

> Ph #61 3 8344 5180

> Fax #61 3 8344 5163

> e-mail caelder@unimelb.edu.au

>

>

>

>

> On 12/03/11 5:47 AM, "tsalzmänn@softhome.net" <tsalzmänn@softhome.net>

> wrote:

>

>>

>> Dear Professor Elder,

>>

- >>> I am a Master's student at the University of Pretoria, South Africa
- >>> and I want to study the perceived level of classroom proficiency of
- >>> our second language final year teaching students in their content
- >>> subjects from both mentor teachers and the students' point of view.
- >>> After extensive reading I found the instrument you developed,
- >>> CEclassroom language assessment for maths and science teachers in
- >>> training¹ to be the most relevant and reliable for what I am trying
- >>> to achieve as it speaks directly to classroom competencies and the
- >>> skills required to successfully demonstrate these competencies. I am
- >>> extremely excited about this instrument as currently no tool exists within a South African context to measure this in the classroom.
- >>

- >>> It is for this reason that I would like to request your permission to
- >>> use this schedule and adapt it both for the South African context and
- >>> for completion by students (as reflective practice) and the mentor

>> teacher. I will ensure you receive all due recognition in my thesis.
>>
>> My supervisor is Dr Hanlie Dippenaar, alf.dippenaar@up.ac.za please
>> feel free to contact her in this regard.
>>
>> Please feel free to contact me for any further information.
>>
>> I hope that this request will be met favourably.
>>
>> Kind Regards
>>
>> Tammy Peyper
>> Student no 21309079
>> Email tsalzmänn@softthome.net
>>
>>
>

AGSA e-mail disclaimer and confidentiality note Important Notice: This email is subject to very important restrictions, qualifications and disclaimers ("The Disclaimer") which must be accessed and read by visiting our webpage at the following address: <http://www.agsa.co.za/AboutUs/EmailDisclaimer.aspx>. The Disclaimer is deemed to form part of the content of this email in terms of Section 11 of the Electronic Communications and Transactions Act, 25 of 2002. If you cannot access the Disclaimer, please request a copy thereof by sending an email to disclaimer@agsa.co.za<<mailto:disclaimer@agsa.co.za>>.



**FACULTY OF EDUCATION
DEPARTMENT OF HUMANITIES**

MENTOR TEACHER OBSERVATION SCHEDULE

Dear Mentor Teacher,

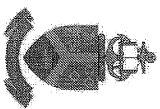
Instructions

- Please complete the following questionnaire ***while observing*** the pre-service teacher presenting his/her ***5th lesson***.
- Completing the questionnaire is a once off.
- The lesson must be presented in English.
- Please circle an appropriate number on the 4 point rating scale in the shaded box provided.
- Please ensure you have completed the 'informed consent form'.
- Please place this questionnaire as well as the questionnaire completed by the pre-service teacher in the envelope marked '***Completed consent form and questionnaires***' and return to the pre-service teacher.
- Should you have any queries please contact Tammy Peyper on 072 674 8800.
- The completion of this questionnaire is anonymous and voluntary.

Thank you for taking the time to participate in this study.

Regards

Tammy Peyper
tpeyper@vodamail.co.za
Cell: 072 674 8800



Mentor teacher's perception of the classroom English proficiency of the Pre-service teacher

Student's code: _____
Mentor's code: _____

V1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	1
V2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	5

Please remember that this is not a formal assessment of the proficiency of the pre-service teacher but rather a rating of how you *perceive* the level of proficiency of the pre-service teacher.

GENERAL LANGUAGE PROFICIENCY

Please rate your pre-service teacher's ...

	Highly satisfactory	Acceptable	Needs attention	Unsatisfactory	
voice projection (everyone in the class can hear what is being said)	4	3	2	1	V3 <input type="text"/> 9
voice pitch (voice is not too high or too low)	4	3	2	1	V4 <input type="text"/> 11
enunciation of words (words are clear)	4	3	2	1	V5 <input type="text"/> 13
sentence structure (sentences are correctly formulated)	4	3	2	1	V6 <input type="text"/> 15
ability to distinguish between questions, statements and instructions (voice used to correctly indicate the difference)	4	3	2	1	V7 <input type="text"/> 17
ability to stress important words (emphasises important words when speaking)	4	3	2	1	V8 <input type="text"/> 19
ability to make transitions from one idea to the next (using words such as "so", "now", "right", "we're going" to show the link between sentences or ideas)	4	3	2	1	V9 <input type="text"/> 21
facial expressions to support what is being said	4	3	2	1	V10 <input type="text"/> 23
use of gestures (body language is not distracting e.g. over-use of hand signals, pacing)	4	3	2	1	V11 <input type="text"/> 25
speed of speech (not too fast and not too slow)	4	3	2	1	V12 <input type="text"/> 27
fluency of speech (express oneself effortlessly)	4	3	2	1	V13 <input type="text"/> 29
ability to express ideas in different ways as to assist learners with understanding (if learners do not understand what is being said, he/she provides different ways of explaining)	4	3	2	1	V14 <input type="text"/> 31
use of synonyms (words that have the same meaning) for difficult words	4	3	2	1	V15 <input type="text"/> 33
accuracy of verbal grammar (spoken sentences are grammatically correct)	4	3	2	1	V16 <input type="text"/> 35
accuracy of written grammar (written sentences are grammatically correct)	4	3	2	1	V17 <input type="text"/> 37
ability to ask clearly formulated questions (the questions are understood by learners)	4	3	2	1	V18 <input type="text"/> 39

Please continue on the next page

Mentor teacher questionnaire

GENERAL LANGUAGE PROFICIENCY (cont.)

Please rate your pre-service teacher's ...

	Highly satisfactory	Acceptable	Needs attention	Unsatisfactory	
spelling	4	3	2	1	V19 <input type="text"/> 41
punctuation	4	3	2	1	V20 <input type="text"/> 43
ability to understand what learners are saying when they speak to him/her	4	3	2	1	V21 <input type="text"/> 45
ability to seek clarification from learners, when necessary (the pre-service teacher asks learners to explain if he/she needs clarification)	4	3	2	1	V22 <input type="text"/> 47

PEDAGOGICAL LANGUAGE PROFICIENCY

Please rate your pre-service teacher's ...

	Highly satisfactory	Acceptable	Needs attention	Unsatisfactory	
demonstration of understanding subject specific terms (subject specific terms are used correctly)	4	3	2	1	V23 <input type="text"/> 49
pronunciation of subject specific terms (terms are pronounced correctly)	4	3	2	1	V24 <input type="text"/> 51
appropriate use of subject specific terms (terms are used within the correct context)	4	3	2	1	V25 <input type="text"/> 53
use of language to explain specific terms (the language used to explain terms is appropriate for the level of the learner)	4	3	2	1	V26 <input type="text"/> 55
explanations of diagrams/models (explanations are understandable)	4	3	2	1	V27 <input type="text"/> 57
use of subject specific terms in developing tasks for learners (terms are used in written tasks)	4	3	2	1	V28 <input type="text"/> 59
ability to summarise information for learners (main ideas are consolidated)	4	3	2	1	V29 <input type="text"/> 61

INTERPERSONAL COMMUNICATION PROFICIENCY

Please rate your pre-service teacher's ...

	Highly satisfactory	Acceptable	Needs attention	Unsatisfactory	
use of forms of address to involve learners (such as using learners' names or terms of encouragement to involve them)	4	3	2	1	V30 <input type="text"/> 63
use of questioning to determine pre-knowledge (questioning is used to elicit an understanding of what learners already know)	4	3	2	1	V31 <input type="text"/> 65
level of questioning (questions are not too easy or too difficult for learners)	4	3	2	1	V32 <input type="text"/> 67
posing of questions to individual learners	4	3	2	1	V33 <input type="text"/> 69
posing of questions to the whole class	4	3	2	1	V34 <input type="text"/> 71
response to learners' questions (the pre-service teacher responds appropriately to learners' questions)	4	3	2	1	V35 <input type="text"/> 73
handling of incorrect answers (the pre-service teacher responds appropriately to incorrect answers)	4	3	2	1	V36 <input type="text"/> 75
ability to use alternative means of eliciting responses from learners (rephrasing questions, offering encouragement and providing clues)	4	3	2	1	V37 <input type="text"/> 77
level of formality when interacting with learners	4	3	2	1	V38 <input type="text"/> 79

Please continue on the next page

Mentor teacher questionnaire

**INTERPERSONAL COMMUNICATION PROFICIENCY
(cont.)**

Please rate your pre-service teacher's ...

	Highly satisfactory	Acceptable	Needs attention	Unsatisfactory	
level of firmness when interacting with learners (not too strict nor too lenient)	4	3	2	1	V39 <input type="text"/> 81
provision of instructions to learners (instructions are clear and concise)	4	3	2	1	V40 <input type="text"/> 83
ability to maintain contact with the class while dealing with individual learners	4	3	2	1	V41 <input type="text"/> 85
ability to maintain contact with the class when using teaching aids (black board, flash cards, data projector etc.)	4	3	2	1	V42 <input type="text"/> 87

Thank you for your time and co-operation

This instrument is based on Elder's Classroom Assessment Schedule (2001)

Mentor teacher questionnaire

1. Chi-Squared test and Fisher's Exact-Test for Mentors' data set

Mrs T Peyper - Research Project - T11018 21:59 Thursday, October 4, 2012 1
 (P01-R4.15.1) : n-Way PROC FREQ of component varbs for ITEM = MGENERAL data set COMBOA

The FREQ Procedure

Table of V3 by TVV3

V3 (V-proj : V3)	TVV3		
Frequency	English	Other	Total
Needs-atten	2	4	6
	2.7273	3.2727	
	0.1939	0.1616	
	3.03	6.06	9.09
	33.33	66.67	
	6.67	11.11	
Acceptable	8	16	24
	10.909	13.091	
	0.7758	0.6465	
	12.12	24.24	36.36
	33.33	66.67	
	26.67	44.44	
H-satisfact	20	16	36
	16.364	19.636	
	0.8081	0.6734	
	30.30	24.24	54.55
	55.56	44.44	
	66.67	44.44	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V3 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.2593	0.1960
Likelihood Ratio Chi-Square	2	3.2971	0.1923
Mantel-Haenszel Chi-Square	1	2.6667	0.1025
Phi Coefficient		0.2222	
Contingency Coefficient		0.2169	
Cramer's V		0.2222	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V3 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0146
 Pr <= P 0.1952

Sample Size = 66

Table of V4 by TVV3

V4(V-pitc : V4)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	4	4
Expected	1.8182	2.1818	
Cell Chi-Square	1.8182	1.5152	
Percent	0.00	6.06	6.06
Row Pct	0.00	100.00	
Col Pct	0.00	11.11	
Acceptable	9	22	31
Expected	14.091	16.909	
Cell Chi-Square	1.8393	1.5327	
Percent	13.64	33.33	46.97
Row Pct	29.03	70.97	
Col Pct	30.00	61.11	
H-satisfact	21	10	31
Expected	14.091	16.909	
Cell Chi-Square	3.3877	2.8231	
Percent	31.82	15.15	46.97
Row Pct	67.74	32.26	
Col Pct	70.00	27.78	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V4 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	12.9161	0.0016
Likelihood Ratio Chi-Square	2	14.6124	0.0007
Mantel-Haenszel Chi-Square	1	12.6300	0.0004
Phi Coefficient		0.4424	
Contingency Coefficient		0.4046	
Cramer's V		0.4424	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	1.621E-04
Pr <= P	0.0013

Sample Size = 66

The FREQ Procedure

Table of V5 by TVV3

V5 (Pron : V5)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	6	7
Expected	3.1818	3.8182	
Cell Chi-Square	1.4961	1.2468	
Percent	1.52	9.09	10.61
Row Pct	14.29	85.71	
Col Pct	3.33	16.67	
Acceptable	8	21	29
Expected	13.182	15.818	
Cell Chi-Square	2.037	1.6975	
Percent	12.12	31.82	43.94
Row Pct	27.59	72.41	
Col Pct	26.67	58.33	
H-satisfact	21	9	30
Expected	13.636	16.364	
Cell Chi-Square	3.9764	3.3136	
Percent	31.82	13.64	45.45
Row Pct	70.00	30.00	
Col Pct	70.00	25.00	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V5 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.7673	0.0010
Likelihood Ratio Chi-Square	2	14.3936	0.0007
Mantel-Haenszel Chi-Square	1	12.4869	0.0004
Phi Coefficient		0.4567	
Contingency Coefficient		0.4154	
Cramer's V		0.4567	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V5 by TVV3

Fisher's Exact Test

 Table Probability (P) 7.792E-05
 Pr <= P 6.363E-04

Sample Size = 66

Table of V6 by TVV3

V6(Sen-struc : V6) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	4	4
	1.8182	2.1818	
	1.8182	1.5152	
	0.00	6.06	6.06
	0.00	100.00	
	0.00	11.11	
Acceptable	8	19	27
	12.273	14.727	
	1.4875	1.2396	
	12.12	28.79	40.91
	29.63	70.37	
	26.67	52.78	
H-satisfact	22	13	35
	15.909	19.091	
	2.3319	1.9433	
	33.33	19.70	53.03
	62.86	37.14	
	73.33	36.11	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V6 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	10.3357	0.0057
Likelihood Ratio Chi-Square	2	11.9540	0.0025
Mantel-Haenszel Chi-Square	1	10.1671	0.0014
Phi Coefficient		0.3957	
Contingency Coefficient		0.3680	
Cramer's V		0.3957	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	5.941E-04
Pr <= P	0.0039

Sample Size = 66

The FREQ Procedure

Table of V7 by TVV3

V7 (Dist-q-s-i : V7)		TVV3		
Frequency	Expected	English	Other	Total
Needs-atten		1	3	4
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55		6.06
	25.00	75.00		
	3.33	8.33		
Acceptable		7	16	23
	10.455	12.545		
	1.1415	0.9513		
	10.61	24.24		34.85
	30.43	69.57		
	23.33	44.44		
H-satisfact		22	17	39
	17.727	21.273		
	1.0298	0.8582		
	33.33	25.76		59.09
	56.41	43.59		
	73.33	47.22		
Total		30	36	66
	45.45	54.55		100.00

Statistics for Table of V7 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6558	0.0975
Likelihood Ratio Chi-Square	2	4.7607	0.0925
Mantel-Haenszel Chi-Square	1	4.2124	0.0401
Phi Coefficient		0.2656	
Contingency Coefficient		0.2567	
Cramer's V		0.2656	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V7 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0091
 Pr <= P 0.0986

Sample Size = 66

Table of V8 by TVV3

V8 (NB-wds : V8) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	4	5
	2.2727	2.7273	
	0.7127	0.5939	
	1.52	6.06	7.58
	20.00	80.00	
	3.33	11.11	
Acceptable	6	22	28
	12.727	15.273	
	3.5558	2.9632	
	9.09	33.33	42.42
	21.43	78.57	
	20.00	61.11	
H-satisfact	23	10	33
	15	18	
	4.2667	3.5556	
	34.85	15.15	50.00
	69.70	30.30	
	76.67	27.78	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V8 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	15.6479	0.0004
Likelihood Ratio Chi-Square	2	16.3637	0.0003
Mantel-Haenszel Chi-Square	1	13.0754	0.0003
Phi Coefficient		0.4869	
Contingency Coefficient		0.4378	
Cramer's V		0.4869	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	3.161E-05
Pr <= P	2.311E-04

Sample Size = 66

The FREQ Procedure

Table of V9 by TVV3

V9(Trans : V9)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	7	17	24
Expected	10.909	13.091	
Cell Chi-Square	1.4008	1.1673	
Percent	10.61	25.76	36.36
Row Pct	29.17	70.83	
Col Pct	23.33	47.22	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V9 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6339	0.0986
Likelihood Ratio Chi-Square	2	4.7329	0.0938
Mantel-Haenszel Chi-Square	1	3.8181	0.0507
Phi Coefficient		0.2650	
Contingency Coefficient		0.2561	
Cramer's V		0.2650	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V9 by TVV3

Fisher's Exact Test

Table Probability (P) 0.0096
Pr <= P 0.0746

Sample Size = 66

Table of V10 by TVV3

V10(Fac-exp : V10)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	1	3		4
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55		6.06
	25.00	75.00		
	3.33	8.33		
Acceptable	12	16		28
	12.727	15.273		
	0.0416	0.0346		
	18.18	24.24		42.42
	42.86	57.14		
	40.00	44.44		
H-satisfact	17	17		34
	15.455	18.545		
	0.1545	0.1288		
	25.76	25.76		51.52
	50.00	50.00		
	56.67	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V10 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0345	0.5962
Likelihood Ratio Chi-Square	2	1.0737	0.5846
Mantel-Haenszel Chi-Square	1	0.9109	0.3399
Phi Coefficient		0.1252	
Contingency Coefficient		0.1242	
Cramer's V		0.1252	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0515
Pr <= P	0.6224

Sample Size = 66

The FREQ Procedure

Table of V11 by TVV3

V11 (Gest : V11)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	3	4
Expected	1.8182	2.1818	
Cell Chi-Square	0.3682	0.3068	
Percent	1.52	4.55	6.06
Row Pct	25.00	75.00	
Col Pct	3.33	8.33	
Acceptable	11	22	33
Expected	15	18	
Cell Chi-Square	1.0667	0.8889	
Percent	16.67	33.33	50.00
Row Pct	33.33	66.67	
Col Pct	36.67	61.11	
H-satisfact	18	11	29
Expected	13.182	15.818	
Cell Chi-Square	1.7611	1.4676	
Percent	27.27	16.67	43.94
Row Pct	62.07	37.93	
Col Pct	60.00	30.56	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V11 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	5.8593	0.0534
Likelihood Ratio Chi-Square	2	5.9445	0.0512
Mantel-Haenszel Chi-Square	1	5.3630	0.0206
Phi Coefficient		0.2980	
Contingency Coefficient		0.2855	
Cramer's V		0.2980	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V11 by TVV3

Fisher's Exact Test

Table Probability (P) 0.0049
Pr <= P 0.0458

Sample Size = 66

Table of V12 by TVV3

V12(S-speed : V12)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	2	2		4
	1.8182	2.1818		
	0.0182	0.0152		
	3.03	3.03		6.06
	50.00	50.00		
	6.67	5.56		
Acceptable	9	25		34
	15.455	18.545		
	2.6957	2.2464		
	13.64	37.88		51.52
	26.47	73.53		
	30.00	69.44		
H-satisfact	19	9		28
	12.727	15.273		
	3.0916	2.5763		
	28.79	13.64		42.42
	67.86	32.14		
	63.33	25.00		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V12 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	10.6433	0.0049
Likelihood Ratio Chi-Square	2	10.9406	0.0042
Mantel-Haenszel Chi-Square	1	6.3321	0.0119
Phi Coefficient		0.4016	
Contingency Coefficient		0.3727	
Cramer's V		0.4016	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	3.940E-04
Pr <= P	0.0025

Sample Size = 66

The FREQ Procedure

Table of V13 by TVV3

V13(S-fluen : V13)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	0	6	6	
	2.7273	3.2727		
	2.7273	2.2727		
	0.00	9.09	9.09	
	0.00	100.00		
	0.00	16.67		
Acceptable	7	18	25	
	11.364	13.636		
	1.6756	1.3964		
	10.61	27.27	37.88	
	28.00	72.00		
	23.33	50.00		
H-satisfact	23	12	35	
	15.909	19.091		
	3.1605	2.6338		
	34.85	18.18	53.03	
	65.71	34.29		
	76.67	33.33		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V13 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.8663	0.0010
Likelihood Ratio Chi-Square	2	16.2977	0.0003
Mantel-Haenszel Chi-Square	1	13.5507	0.0002
Phi Coefficient		0.4584	
Contingency Coefficient		0.4167	
Cramer's V		0.4584	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V13 by TVV3

Fisher's Exact Test

Table Probability (P) 7.271E-05
Pr <= P 6.120E-04

Sample Size = 66

Table of V14 by TVV3

V14(Expr-id : V14)		TVV3		
Frequency		English	Other	Total
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct				
Needs-atten	2	7		9
	4.0909	4.9091		
	1.0687	0.8906		
	3.03	10.61		13.64
	22.22	77.78		
	6.67	19.44		
Acceptable	8	12		20
	9.0909	10.909		
	0.1309	0.1091		
	12.12	18.18		30.30
	40.00	60.00		
	26.67	33.33		
H-satisfact	20	17		37
	16.818	20.182		
	0.602	0.5016		
	30.30	25.76		56.06
	54.05	45.95		
	66.67	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V14 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.3029	0.1918
Likelihood Ratio Chi-Square	2	3.4447	0.1786
Mantel-Haenszel Chi-Square	1	3.2365	0.0720
Phi Coefficient		0.2237	
Contingency Coefficient		0.2183	
Cramer's V		0.2237	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0131
Pr <= P	0.1937

Sample Size = 66

The FREQ Procedure

Table of V15 by TVV3

V15 (Synon : V15)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	5	6
Expected	2.7273	3.2727	
Cell Chi-Square	1.0939	0.9116	
Percent	1.52	7.58	9.09
Row Pct	16.67	83.33	
Col Pct	3.33	13.89	
Acceptable	11	20	31
Expected	14.091	16.909	
Cell Chi-Square	0.678	0.565	
Percent	16.67	30.30	46.97
Row Pct	35.48	64.52	
Col Pct	36.67	55.56	
H-satisfact	18	11	29
Expected	13.182	15.818	
Cell Chi-Square	1.7611	1.4676	
Percent	27.27	16.67	43.94
Row Pct	62.07	37.93	
Col Pct	60.00	30.56	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V15 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.4773	0.0392
Likelihood Ratio Chi-Square	2	6.7222	0.0347
Mantel-Haenszel Chi-Square	1	6.3066	0.0120
Phi Coefficient		0.3133	
Contingency Coefficient		0.2989	
Cramer's V		0.3133	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V15 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0032
Pr <= P                    0.0408
  
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Sample Size = 66

Table of V16 by TVV3

V16(Ver-gram : V16)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
Acceptable	7	17		24
	10.909	13.091		
	1.4008	1.1673		
	10.61	25.76		36.36
	29.17	70.83		
	23.33	47.22		
H-satisfact	23	15		38
	17.273	20.727		
	1.899	1.5825		
	34.85	22.73		57.58
	60.53	39.47		
	76.67	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V16 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	9.3830	0.0092
Likelihood Ratio Chi-Square	2	10.9923	0.0041
Mantel-Haenszel Chi-Square	1	9.2365	0.0024
Phi Coefficient		0.3770	
Contingency Coefficient		0.3528	
Cramer's V		0.3770	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	9.706E-04
Pr <= P	0.0082

Sample Size = 66

The FREQ Procedure

Table of V17 by TVV3

V17(Writ-gram : V17)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	1	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.0091	0.0076	
Percent	1.52	1.52	3.03
Row Pct	50.00	50.00	
Col Pct	3.33	2.78	
Acceptable	6	20	26
Expected	11.818	14.182	
Cell Chi-Square	2.8643	2.3869	
Percent	9.09	30.30	39.39
Row Pct	23.08	76.92	
Col Pct	20.00	55.56	
H-satisfact	23	15	38
Expected	17.273	20.727	
Cell Chi-Square	1.899	1.5825	
Percent	34.85	22.73	57.58
Row Pct	60.53	39.47	
Col Pct	76.67	41.67	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V17 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	8.7495	0.0126
Likelihood Ratio Chi-Square	2	9.1037	0.0105
Mantel-Haenszel Chi-Square	1	6.1969	0.0128
Phi Coefficient		0.3641	
Contingency Coefficient		0.3421	
Cramer's V		0.3641	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V17 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0013
 Pr <= P 0.0057

Sample Size = 66

Table of V18 by TVV3

V18 (Frm-q : V18)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	0	6		6
	2.7273	3.2727		
	2.7273	2.2727		
	0.00	9.09		9.09
	0.00	100.00		
	0.00	16.67		
Acceptable	8	15		23
	10.455	12.545		
	0.5763	0.4802		
	12.12	22.73		34.85
	34.78	65.22		
	26.67	41.67		
H-satisfact	22	15		37
	16.818	20.182		
	1.5966	1.3305		
	33.33	22.73		56.06
	59.46	40.54		
	73.33	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V18 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	8.9835	0.0112
Likelihood Ratio Chi-Square	2	11.2685	0.0036
Mantel-Haenszel Chi-Square	1	8.7371	0.0031
Phi Coefficient		0.3689	
Contingency Coefficient		0.3461	
Cramer's V		0.3689	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.323E-04
Pr <= P	0.0096

Sample Size = 66

The FREQ Procedure

Table of V19 by TVV3

V19(Spell : V19)	TVV3		
Frequency	English	Other	Total
Needs-atten	2	1	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.297	0.2475	
Percent	3.03	1.52	4.55
Row Pct	66.67	33.33	
Col Pct	6.67	2.78	
Acceptable	6	18	24
Expected	10.909	13.091	
Cell Chi-Square	2.2091	1.8409	
Percent	9.09	27.27	36.36
Row Pct	25.00	75.00	
Col Pct	20.00	50.00	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V19 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.4825	0.0391
Likelihood Ratio Chi-Square	2	6.7154	0.0348
Mantel-Haenszel Chi-Square	1	2.3487	0.1254
Phi Coefficient		0.3134	
Contingency Coefficient		0.2991	
Cramer's V		0.3134	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V19 by TVV3

Fisher's Exact Test

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Table Probability (P)          0.0037
Pr <= P                        0.0261
  
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Sample Size = 66

Table of V20 by TVV3

V20(Punct : V20)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	0	2		2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
Acceptable	8	19		27
	12.273	14.727		
	1.4875	1.2396		
	12.12	28.79		40.91
	29.63	70.37		
	26.67	52.78		
H-satisfact	22	15		37
	16.818	20.182		
	1.5966	1.3305		
	33.33	22.73		56.06
	59.46	40.54		
	73.33	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V20 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.3209	0.0257
Likelihood Ratio Chi-Square	2	8.1732	0.0168
Mantel-Haenszel Chi-Square	1	7.2099	0.0073
Phi Coefficient		0.3330	
Contingency Coefficient		0.3160	
Cramer's V		0.3330	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0038
Pr <= P	0.0169

Sample Size = 66

The FREQ Procedure

Table of V21 by TVV3

V21(Learn-say : V21)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	5	17	22
Expected	10	12	
Cell Chi-Square	2.5	2.0833	
Percent	7.58	25.76	33.33
Row Pct	22.73	77.27	
Col Pct	16.67	47.22	
H-satisfact	24	17	41
Expected	18.636	22.364	
Cell Chi-Square	1.5437	1.2864	
Percent	36.36	25.76	62.12
Row Pct	58.54	41.46	
Col Pct	80.00	47.22	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V21 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.5912	0.0225
Likelihood Ratio Chi-Square	2	7.9108	0.0192
Mantel-Haenszel Chi-Square	1	5.8901	0.0152
Phi Coefficient		0.3391	
Contingency Coefficient		0.3212	
Cramer's V		0.3391	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V21 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0022
 Pr <= P 0.0141

Sample Size = 66

Table of V22 by TVV3

V22(Seek-clar : V22) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	2	3
	1.3636	1.6364	
	0.097	0.0808	
	1.52	3.03	4.55
	33.33	66.67	
	3.33	5.56	
Acceptable	4	20	24
	10.909	13.091	
	4.3758	3.6465	
	6.06	30.30	36.36
	16.67	83.33	
	13.33	55.56	
H-satisfact	25	14	39
	17.727	21.273	
	2.9837	2.4864	
	37.88	21.21	59.09
	64.10	35.90	
	83.33	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V22 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.6701	0.0011
Likelihood Ratio Chi-Square	2	14.5828	0.0007
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4551	
Contingency Coefficient		0.4142	
Cramer's V		0.4551	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.717E-05
Pr <= P	3.420E-04

Sample Size = 66

The FREQ Procedure

Table of V30 by TVV3

V30 (Adres : V30)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	2	10	12
Expected	5.4545	6.5455	
Cell Chi-Square	2.1879	1.8232	
Percent	3.03	15.15	18.18
Row Pct	16.67	83.33	
Col Pct	6.67	27.78	
H-satisfact	28	24	52
Expected	23.636	28.364	
Cell Chi-Square	0.8056	0.6713	
Percent	42.42	36.36	78.79
Row Pct	53.85	46.15	
Col Pct	93.33	66.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V30 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.1547	0.0279
Likelihood Ratio Chi-Square	2	8.3564	0.0153
Mantel-Haenszel Chi-Square	1	6.8503	0.0089
Phi Coefficient		0.3292	
Contingency Coefficient		0.3127	
Cramer's V		0.3292	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V30 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0051
Pr <= P                    0.0163
```

Sample Size = 66

Table of V31 by TVV3

V31 (Pre-know : V31) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	4	5
	2.2727	2.7273	
	0.7127	0.5939	
	1.52	6.06	7.58
	20.00	80.00	
	3.33	11.11	
Acceptable	9	11	20
	9.0909	10.909	
	0.0009	0.0008	
	13.64	16.67	30.30
	45.00	55.00	
	30.00	30.56	
H-satisfact	20	21	41
	18.636	22.364	
	0.0998	0.0831	
	30.30	31.82	62.12
	48.78	51.22	
	66.67	58.33	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V31 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4913	0.4744
Likelihood Ratio Chi-Square	2	1.6060	0.4480
Mantel-Haenszel Chi-Square	1	1.0472	0.3061
Phi Coefficient		0.1503	
Contingency Coefficient		0.1486	
Cramer's V		0.1503	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0410
Pr <= P	0.5820

Sample Size = 66

The FREQ Procedure

Table of V32 by TVV3

V32 (Lev-Q : V32)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	10	21	31
Expected	14.091	16.909	
Cell Chi-Square	1.1877	0.9897	
Percent	15.15	31.82	46.97
Row Pct	32.26	67.74	
Col Pct	33.33	58.33	
H-satisfact	19	13	32
Expected	14.545	17.455	
Cell Chi-Square	1.3642	1.1368	
Percent	28.79	19.70	48.48
Row Pct	59.38	40.63	
Col Pct	63.33	36.11	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V32 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.8562	0.0882
Likelihood Ratio Chi-Square	2	4.9148	0.0857
Mantel-Haenszel Chi-Square	1	4.1431	0.0418
Phi Coefficient		0.2713	
Contingency Coefficient		0.2618	
Cramer's V		0.2713	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V32 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0084
Pr <= P	0.0637

Sample Size = 66

Table of V33 by TVV3

V33(Q-ind : V33)	TVV3		Total
Frequency	English	Other	
Needs-atten	0	4	4
Expected	1.8182	2.1818	
Cell Chi-Square	1.8182	1.5152	
Percent	0.00	6.06	6.06
Row Pct	0.00	100.00	
Col Pct	0.00	11.11	
Acceptable	8	15	23
Expected	10.455	12.545	
Cell Chi-Square	0.5763	0.4802	
Percent	12.12	22.73	34.85
Row Pct	34.78	65.22	
Col Pct	26.67	41.67	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V33 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.2779	0.0433
Likelihood Ratio Chi-Square	2	7.8064	0.0202
Mantel-Haenszel Chi-Square	1	6.0299	0.0141
Phi Coefficient		0.3084	
Contingency Coefficient		0.2947	
Cramer's V		0.3084	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0045
Pr <= P	0.0366

Sample Size = 66

The FREQ Procedure

Table of V34 by TVV3

V34(Q-clas : V34)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	3	3
Expected	1.3636	1.6364	
Cell Chi-Square	1.3636	1.1364	
Percent	0.00	4.55	4.55
Row Pct	0.00	100.00	
Col Pct	0.00	8.33	
Acceptable	9	10	19
Expected	8.6364	10.364	
Cell Chi-Square	0.0153	0.0128	
Percent	13.64	15.15	28.79
Row Pct	47.37	52.63	
Col Pct	30.00	27.78	
H-satisfact	21	23	44
Expected	20	24	
Cell Chi-Square	0.05	0.0417	
Percent	31.82	34.85	66.67
Row Pct	47.73	52.27	
Col Pct	70.00	63.89	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V34 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6197	0.2699
Likelihood Ratio Chi-Square	2	3.7563	0.1529
Mantel-Haenszel Chi-Square	1	1.0307	0.3100
Phi Coefficient		0.1992	
Contingency Coefficient		0.1954	
Cramer's V		0.1992	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V34 by TVV3

Fisher's Exact Test

```

-----
Table Probability (P)      0.0337
Pr <= P                    0.4080
  
```

Sample Size = 66

Table of V35 by TVV3

V35 (Resp-1 : V35)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	1	1		2
	0.9091	1.0909		
	0.0091	0.0076		
	1.52	1.52		3.03
	50.00	50.00		
	3.33	2.78		
Acceptable	7	15		22
	10	12		
	0.9	0.75		
	10.61	22.73		33.33
	31.82	68.18		
	23.33	41.67		
H-satisfact	22	20		42
	19.091	22.909		
	0.4433	0.3694		
	33.33	30.30		63.64
	52.38	47.62		
	73.33	55.56		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V35 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.4794	0.2895
Likelihood Ratio Chi-Square	2	2.5259	0.2828
Mantel-Haenszel Chi-Square	1	1.5968	0.2064
Phi Coefficient		0.1938	
Contingency Coefficient		0.1903	
Cramer's V		0.1938	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0318
Pr <= P	0.2684

Sample Size = 66

The FREQ Procedure

Table of V36 by TVV3

V36(Hand-ina : V36)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	3	2		5
	2.2727	2.7273		
	0.2327	0.1939		
	4.55	3.03		7.58
	60.00	40.00		
	10.00	5.56		
Acceptable	8	16		24
	10.909	13.091		
	0.7758	0.6465		
	12.12	24.24		36.36
	33.33	66.67		
	26.67	44.44		
H-satisfact	19	18		37
	16.818	20.182		
	0.283	0.2359		
	28.79	27.27		56.06
	51.35	48.65		
	63.33	50.00		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V36 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.3678	0.3061
Likelihood Ratio Chi-Square	2	2.4006	0.3011
Mantel-Haenszel Chi-Square	1	0.3173	0.5732
Phi Coefficient		0.1894	
Contingency Coefficient		0.1861	
Cramer's V		0.1894	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V36 by TVV3

Fisher's Exact Test

```

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Table Probability (P)      0.0236
Pr <= P                   0.3481
  
```

Sample Size = 66

Table of V37 by TVV3

V37(Use-alt : V37) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	4	7
	3.1818	3.8182	
	0.0104	0.0087	
	4.55	6.06	10.61
	42.86	57.14	
	10.00	11.11	
Acceptable	10	16	26
	11.818	14.182	
	0.2797	0.2331	
	15.15	24.24	39.39
	38.46	61.54	
	33.33	44.44	
H-satisfact	17	16	33
	15	18	
	0.2667	0.2222	
	25.76	24.24	50.00
	51.52	48.48	
	56.67	44.44	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V37 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0208	0.6003
Likelihood Ratio Chi-Square	2	1.0246	0.5991
Mantel-Haenszel Chi-Square	1	0.6354	0.4254
Phi Coefficient		0.1244	
Contingency Coefficient		0.1234	
Cramer's V		0.1244	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0393
Pr <= P	0.6403

Sample Size = 66

The FREQ Procedure

Table of V38 by TVV3

V38 (Form : V38)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	1	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.0091	0.0076	
Percent	1.52	1.52	3.03
Row Pct	50.00	50.00	
Col Pct	3.33	2.78	
Acceptable	7	16	23
Expected	10.455	12.545	
Cell Chi-Square	1.1415	0.9513	
Percent	10.61	24.24	34.85
Row Pct	30.43	69.57	
Col Pct	23.33	44.44	
H-satisfact	22	19	41
Expected	18.636	22.364	
Cell Chi-Square	0.6071	0.5059	
Percent	33.33	28.79	62.12
Row Pct	53.66	46.34	
Col Pct	73.33	52.78	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V38 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.2224	0.1996
Likelihood Ratio Chi-Square	2	3.2911	0.1929
Mantel-Haenszel Chi-Square	1	2.1321	0.1442
Phi Coefficient		0.2210	
Contingency Coefficient		0.2158	
Cramer's V		0.2210	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V38 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0217
Pr <= P                    0.1537
```

Sample Size = 66

Table of V39 by TVV3

V39(Firm : V39)		TVV3		
Frequency		English	Other	Total
Needs-atten	7	2	5	
		3.1818	3.8182	
		0.439	0.3658	
	10.61	3.03	7.58	
		28.57	71.43	
		6.67	13.89	
Acceptable	33	13	20	
		15	18	
		0.2667	0.2222	
	50.00	19.70	30.30	
		39.39	60.61	
		43.33	55.56	
H-satisfact	26	15	11	
		11.818	14.182	
		0.8566	0.7139	
	39.39	22.73	16.67	
		57.69	42.31	
		50.00	30.56	
Total	66	30	36	
		45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V39 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.8642	0.2388
Likelihood Ratio Chi-Square	2	2.8961	0.2350
Mantel-Haenszel Chi-Square	1	2.7474	0.0974
Phi Coefficient		0.2083	
Contingency Coefficient		0.2039	
Cramer's V		0.2083	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0169
Pr <= P	0.2543

Sample Size = 66

The FREQ Procedure

Table of V40 by TVV3

V40 (Instr : V40)		TVV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
Needs-atten	1	2	3	
	1.3636	1.6364		
	0.097	0.0808		
	1.52	3.03	4.55	
	33.33	66.67		
	3.33	5.56		
Acceptable	9	19	28	
	12.727	15.273		
	1.0916	0.9096		
	13.64	28.79	42.42	
	32.14	67.86		
	30.00	52.78		
H-satisfact	20	15	35	
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73	53.03	
	57.14	42.86		
	66.67	41.67		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V40 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.1075	0.1283
Likelihood Ratio Chi-Square	2	4.1618	0.1248
Mantel-Haenszel Chi-Square	1	3.5055	0.0612
Phi Coefficient		0.2495	
Contingency Coefficient		0.2421	
Cramer's V		0.2495	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V40 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0122
Pr <= P                    0.1040
```

Sample Size = 66

Table of V41 by TVV3

V41(Cont-cls : V41)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Unsatisfact	1	0		1
	0.4545	0.5455		
	0.6545	0.5455		
	1.52	0.00		1.52
	100.00	0.00		
	3.33	0.00		
Needs-atten	1	5		6
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58		9.09
	16.67	83.33		
	3.33	13.89		
Acceptable	13	13		26
	11.818	14.182		
	0.1182	0.0985		
	19.70	19.70		39.39
	50.00	50.00		
	43.33	36.11		
H-satisfact	15	18		33
	15	18		
	0	0		
	22.73	27.27		50.00
	45.45	54.55		
	50.00	50.00		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V41 by TVV3

Statistic	DF	Value	Prob
Chi-Square	3	3.4222	0.3310
Likelihood Ratio Chi-Square	3	4.0242	0.2589
Mantel-Haenszel Chi-Square	1	0.0480	0.8266
Phi Coefficient		0.2277	
Contingency Coefficient		0.2220	
Cramer's V		0.2277	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0117
Pr <= P	0.3173

Sample Size = 66

The FREQ Procedure

Table of V42 by TVV3

V42 (Teach-aids : V42)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	1	5	6	
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58	9.09	
	16.67	83.33		
	3.33	13.89		
Acceptable	12	14	26	
	11.818	14.182		
	0.0028	0.0023		
	18.18	21.21	39.39	
	46.15	53.85		
	40.00	38.89		
H-satisfact	17	17	34	
	15.455	18.545		
	0.1545	0.1288		
	25.76	25.76	51.52	
	50.00	50.00		
	56.67	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V42 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.2940	0.3176
Likelihood Ratio Chi-Square	2	2.5188	0.2838
Mantel-Haenszel Chi-Square	1	1.5129	0.2187
Phi Coefficient		0.1864	
Contingency Coefficient		0.1833	
Cramer's V		0.1864	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V42 by TVV3

Fisher's Exact Test

Table Probability (P) 0.0245
Pr <= P 0.3321

Sample Size = 66

The FREQ Procedure

Table of V14 by TVV3

V14 (Expr-id : V14)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	2	7		9
	4.0909	4.9091		
	1.0687	0.8906		
	3.03	10.61		13.64
	22.22	77.78		
	6.67	19.44		
Acceptable	8	12		20
	9.0909	10.909		
	0.1309	0.1091		
	12.12	18.18		30.30
	40.00	60.00		
	26.67	33.33		
H-satisfact	20	17		37
	16.818	20.182		
	0.602	0.5016		
	30.30	25.76		56.06
	54.05	45.95		
	66.67	47.22		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V14 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.3029	0.1918
Likelihood Ratio Chi-Square	2	3.4447	0.1786
Mantel-Haenszel Chi-Square	1	3.2365	0.0720
Phi Coefficient		0.2237	
Contingency Coefficient		0.2183	
Cramer's V		0.2237	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V14 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0131
Pr <= P                    0.1937
```

Sample Size = 66

Table of V22 by TVV3

V22(Seek-clar : V22) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	2	3
	1.3636	1.6364	
	0.097	0.0808	
	1.52	3.03	4.55
	33.33	66.67	
	3.33	5.56	
Acceptable	4	20	24
	10.909	13.091	
	4.3758	3.6465	
	6.06	30.30	36.36
	16.67	83.33	
	13.33	55.56	
H-satisfact	25	14	39
	17.727	21.273	
	2.9837	2.4864	
	37.88	21.21	59.09
	64.10	35.90	
	83.33	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V22 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.6701	0.0011
Likelihood Ratio Chi-Square	2	14.5828	0.0007
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4551	
Contingency Coefficient		0.4142	
Cramer's V		0.4551	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.717E-05
Pr <= P	3.420E-04

Sample Size = 66

The FREQ Procedure

Table of V30 by TVV3

V30 (Adres : V30)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	2	10	12
Expected	5.4545	6.5455	
Cell Chi-Square	2.1879	1.8232	
Percent	3.03	15.15	18.18
Row Pct	16.67	83.33	
Col Pct	6.67	27.78	
H-satisfact	28	24	52
Expected	23.636	28.364	
Cell Chi-Square	0.8056	0.6713	
Percent	42.42	36.36	78.79
Row Pct	53.85	46.15	
Col Pct	93.33	66.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V30 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.1547	0.0279
Likelihood Ratio Chi-Square	2	8.3564	0.0153
Mantel-Haenszel Chi-Square	1	6.8503	0.0089
Phi Coefficient		0.3292	
Contingency Coefficient		0.3127	
Cramer's V		0.3292	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V30 by TVV3

Fisher's Exact Test

```

-----
Table Probability (P)      0.0051
Pr <= P                    0.0163
  
```

Sample Size = 66

Table of V35 by TVV3

V35 (Resp-1 : V35)		TVV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
Needs-atten	1	1	2	
	0.9091	1.0909		
	0.0091	0.0076		
	1.52	1.52	3.03	
	50.00	50.00		
	3.33	2.78		
Acceptable	7	15	22	
	10	12		
	0.9	0.75		
	10.61	22.73	33.33	
	31.82	68.18		
	23.33	41.67		
H-satisfact	22	20	42	
	19.091	22.909		
	0.4433	0.3694		
	33.33	30.30	63.64	
	52.38	47.62		
	73.33	55.56		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V35 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.4794	0.2895
Likelihood Ratio Chi-Square	2	2.5259	0.2828
Mantel-Haenszel Chi-Square	1	1.5968	0.2064
Phi Coefficient		0.1938	
Contingency Coefficient		0.1903	
Cramer's V		0.1938	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0318
Pr <= P	0.2684

Sample Size = 66

The FREQ Procedure

Table of V36 by TVV3

V36(Hand-ina : V36)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	3	2	5	
	2.2727	2.7273		
	0.2327	0.1939		
	4.55	3.03	7.58	
	60.00	40.00		
	10.00	5.56		
Acceptable	8	16	24	
	10.909	13.091		
	0.7758	0.6465		
	12.12	24.24	36.36	
	33.33	66.67		
	26.67	44.44		
H-satisfact	19	18	37	
	16.818	20.182		
	0.283	0.2359		
	28.79	27.27	56.06	
	51.35	48.65		
	63.33	50.00		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V36 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.3678	0.3061
Likelihood Ratio Chi-Square	2	2.4006	0.3011
Mantel-Haenszel Chi-Square	1	0.3173	0.5732
Phi Coefficient		0.1894	
Contingency Coefficient		0.1861	
Cramer's V		0.1894	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V36 by TVV3

Fisher's Exact Test

```

-----
Table Probability (P)      0.0236
Pr <= P                    0.3481
  
```

Sample Size = 66

Table of V37 by TVV3

V37(Use-alt : V37) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	4	7
	3.1818	3.8182	
	0.0104	0.0087	
	4.55	6.06	10.61
	42.86	57.14	
	10.00	11.11	
Acceptable	10	16	26
	11.818	14.182	
	0.2797	0.2331	
	15.15	24.24	39.39
	38.46	61.54	
	33.33	44.44	
H-satisfact	17	16	33
	15	18	
	0.2667	0.2222	
	25.76	24.24	50.00
	51.52	48.48	
	56.67	44.44	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V37 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0208	0.6003
Likelihood Ratio Chi-Square	2	1.0246	0.5991
Mantel-Haenszel Chi-Square	1	0.6354	0.4254
Phi Coefficient		0.1244	
Contingency Coefficient		0.1234	
Cramer's V		0.1244	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0393
Pr <= P	0.6403

Sample Size = 66

The FREQ Procedure

Table of V38 by TVV3

V38 (Form : V38)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	1	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.0091	0.0076	
Percent	1.52	1.52	3.03
Row Pct	50.00	50.00	
Col Pct	3.33	2.78	
Acceptable	7	16	23
Expected	10.455	12.545	
Cell Chi-Square	1.1415	0.9513	
Percent	10.61	24.24	34.85
Row Pct	30.43	69.57	
Col Pct	23.33	44.44	
H-satisfact	22	19	41
Expected	18.636	22.364	
Cell Chi-Square	0.6071	0.5059	
Percent	33.33	28.79	62.12
Row Pct	53.66	46.34	
Col Pct	73.33	52.78	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V38 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.2224	0.1996
Likelihood Ratio Chi-Square	2	3.2911	0.1929
Mantel-Haenszel Chi-Square	1	2.1321	0.1442
Phi Coefficient		0.2210	
Contingency Coefficient		0.2158	
Cramer's V		0.2210	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V38 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0217
Pr <= P                    0.1537
```

Sample Size = 66

Table of V39 by TVV3

V39(Firm : V39)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	2	5	7	
	3.1818	3.8182		
	0.439	0.3658		
	3.03	7.58	10.61	
	28.57	71.43		
	6.67	13.89		
Acceptable	13	20	33	
	15	18		
	0.2667	0.2222		
	19.70	30.30	50.00	
	39.39	60.61		
	43.33	55.56		
H-satisfact	15	11	26	
	11.818	14.182		
	0.8566	0.7139		
	22.73	16.67	39.39	
	57.69	42.31		
	50.00	30.56		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V39 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.8642	0.2388
Likelihood Ratio Chi-Square	2	2.8961	0.2350
Mantel-Haenszel Chi-Square	1	2.7474	0.0974
Phi Coefficient		0.2083	
Contingency Coefficient		0.2039	
Cramer's V		0.2083	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0169
Pr <= P	0.2543

Sample Size = 66

The FREQ Procedure

Table of V40 by TVV3

V40 (Instr : V40)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	1	2		3
	1.3636	1.6364		
	0.097	0.0808		
	1.52	3.03		4.55
	33.33	66.67		
	3.33	5.56		
Acceptable	9	19		28
	12.727	15.273		
	1.0916	0.9096		
	13.64	28.79		42.42
	32.14	67.86		
	30.00	52.78		
H-satisfact	20	15		35
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73		53.03
	57.14	42.86		
	66.67	41.67		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V40 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.1075	0.1283
Likelihood Ratio Chi-Square	2	4.1618	0.1248
Mantel-Haenszel Chi-Square	1	3.5055	0.0612
Phi Coefficient		0.2495	
Contingency Coefficient		0.2421	
Cramer's V		0.2495	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V40 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0122
 Pr <= P 0.1040

Sample Size = 66

Table of V41 by TVV3

V41(Cont-cls : V41)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Unsatisfact	1	0		1
	0.4545	0.5455		
	0.6545	0.5455		
	1.52	0.00		1.52
	100.00	0.00		
	3.33	0.00		
Needs-atten	1	5		6
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58		9.09
	16.67	83.33		
	3.33	13.89		
Acceptable	13	13		26
	11.818	14.182		
	0.1182	0.0985		
	19.70	19.70		39.39
	50.00	50.00		
	43.33	36.11		
H-satisfact	15	18		33
	15	18		
	0	0		
	22.73	27.27		50.00
	45.45	54.55		
	50.00	50.00		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V41 by TVV3

Statistic	DF	Value	Prob
Chi-Square	3	3.4222	0.3310
Likelihood Ratio Chi-Square	3	4.0242	0.2589
Mantel-Haenszel Chi-Square	1	0.0480	0.8266
Phi Coefficient		0.2277	
Contingency Coefficient		0.2220	
Cramer's V		0.2277	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0117
Pr <= P	0.3173

Sample Size = 66

The FREQ Procedure

Table of V42 by TVV3

V42 (Teach-aids : V42)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	1	5	6	
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58	9.09	
	16.67	83.33		
	3.33	13.89		
Acceptable	12	14	26	
	11.818	14.182		
	0.0028	0.0023		
	18.18	21.21	39.39	
	46.15	53.85		
	40.00	38.89		
H-satisfact	17	17	34	
	15.455	18.545		
	0.1545	0.1288		
	25.76	25.76	51.52	
	50.00	50.00		
	56.67	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V42 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.2940	0.3176
Likelihood Ratio Chi-Square	2	2.5188	0.2838
Mantel-Haenszel Chi-Square	1	1.5129	0.2187
Phi Coefficient		0.1864	
Contingency Coefficient		0.1833	
Cramer's V		0.1864	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V42 by TVV3

Fisher's Exact Test

Table Probability (P) 0.0245
Pr <= P 0.3321

Sample Size = 66

The FREQ Procedure

Table of V9 by TVV3

V9(Trans : V9)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	7	17	24
Expected	10.909	13.091	
Cell Chi-Square	1.4008	1.1673	
Percent	10.61	25.76	36.36
Row Pct	29.17	70.83	
Col Pct	23.33	47.22	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V9 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6339	0.0986
Likelihood Ratio Chi-Square	2	4.7329	0.0938
Mantel-Haenszel Chi-Square	1	3.8181	0.0507
Phi Coefficient		0.2650	
Contingency Coefficient		0.2561	
Cramer's V		0.2650	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V9 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0096
 Pr <= P 0.0746

Sample Size = 66

Table of V18 by TVV3

V18 (Frm-q : V18)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	0	6		6
	2.7273	3.2727		
	2.7273	2.2727		
	0.00	9.09		9.09
	0.00	100.00		
	0.00	16.67		
Acceptable	8	15		23
	10.455	12.545		
	0.5763	0.4802		
	12.12	22.73		34.85
	34.78	65.22		
	26.67	41.67		
H-satisfact	22	15		37
	16.818	20.182		
	1.5966	1.3305		
	33.33	22.73		56.06
	59.46	40.54		
	73.33	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V18 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	8.9835	0.0112
Likelihood Ratio Chi-Square	2	11.2685	0.0036
Mantel-Haenszel Chi-Square	1	8.7371	0.0031
Phi Coefficient		0.3689	
Contingency Coefficient		0.3461	
Cramer's V		0.3689	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.323E-04
Pr <= P	0.0096

Sample Size = 66

The FREQ Procedure

Table of V23 by TVV3

V23 (Ss-cor : V23)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	8	14	22
Expected	10	12	
Cell Chi-Square	0.4	0.3333	
Percent	12.12	21.21	33.33
Row Pct	36.36	63.64	
Col Pct	26.67	38.89	
H-satisfact	21	20	41
Expected	18.636	22.364	
Cell Chi-Square	0.2998	0.2498	
Percent	31.82	30.30	62.12
Row Pct	51.22	48.78	
Col Pct	70.00	55.56	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V23 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4607	0.4817
Likelihood Ratio Chi-Square	2	1.4753	0.4782
Mantel-Haenszel Chi-Square	1	1.3356	0.2478
Phi Coefficient		0.1488	
Contingency Coefficient		0.1471	
Cramer's V		0.1488	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V23 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0468
Pr <= P                    0.5149
```

Sample Size = 66

Table of V24 by TVV3

V24 (Pron-Ss : V24) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
Acceptable	7	19	26
	11.818	14.182	
	1.9643	1.6369	
	10.61	28.79	39.39
	26.92	73.08	
	23.33	52.78	
H-satisfact	23	14	37
	16.818	20.182	
	2.2722	1.8935	
	34.85	21.21	56.06
	62.16	37.84	
	76.67	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V24 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	10.2670	0.0059
Likelihood Ratio Chi-Square	2	11.5780	0.0031
Mantel-Haenszel Chi-Square	1	10.0581	0.0015
Phi Coefficient		0.3944	
Contingency Coefficient		0.3669	
Cramer's V		0.3944	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	7.282E-04
Pr <= P	0.0041

Sample Size = 66

The FREQ Procedure

Table of V25 by TVV3

V25 (Ss-cotxt : V25)	TVV3		
Frequency	English	Other	Total
Needs-atten	2	2	4
Expected	1.8182	2.1818	
Cell Chi-Square	0.0182	0.0152	
Percent	3.03	3.03	6.06
Row Pct	50.00	50.00	
Col Pct	6.67	5.56	
Acceptable	5	17	22
Expected	10	12	
Cell Chi-Square	2.5	2.0833	
Percent	7.58	25.76	33.33
Row Pct	22.73	77.27	
Col Pct	16.67	47.22	
H-satisfact	23	17	40
Expected	18.182	21.818	
Cell Chi-Square	1.2768	1.064	
Percent	34.85	25.76	60.61
Row Pct	57.50	42.50	
Col Pct	76.67	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V25 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.9575	0.0308
Likelihood Ratio Chi-Square	2	7.2734	0.0263
Mantel-Haenszel Chi-Square	1	3.5047	0.0612
Phi Coefficient		0.3247	
Contingency Coefficient		0.3088	
Cramer's V		0.3247	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V25 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0025
 Pr <= P 0.0185

Sample Size = 66

Table of V26 by TVV3

V26(Exp-Ss : V26) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	4	5
	2.2727	2.7273	
	0.7127	0.5939	
	1.52	6.06	7.58
	20.00	80.00	
	3.33	11.11	
Acceptable	6	18	24
	10.909	13.091	
	2.2091	1.8409	
	9.09	27.27	36.36
	25.00	75.00	
	20.00	50.00	
H-satisfact	23	14	37
	16.818	20.182	
	2.2722	1.8935	
	34.85	21.21	56.06
	62.16	37.84	
	76.67	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V26 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	9.5224	0.0086
Likelihood Ratio Chi-Square	2	9.8715	0.0072
Mantel-Haenszel Chi-Square	1	8.3345	0.0039
Phi Coefficient		0.3798	
Contingency Coefficient		0.3551	
Cramer's V		0.3798	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	7.450E-04
Pr <= P	0.0065

Sample Size = 66

The FREQ Procedure

Table of V27 by TVV3

V27 (Ex-mod : V27)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	9	19	28
Expected	12.727	15.273	
Cell Chi-Square	1.0916	0.9096	
Percent	13.64	28.79	42.42
Row Pct	32.14	67.86	
Col Pct	30.00	52.78	
H-satisfact	21	15	36
Expected	16.364	19.636	
Cell Chi-Square	1.3136	1.0947	
Percent	31.82	22.73	54.55
Row Pct	58.33	41.67	
Col Pct	70.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V27 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.0762	0.0479
Likelihood Ratio Chi-Square	2	6.8826	0.0320
Mantel-Haenszel Chi-Square	1	5.9631	0.0146
Phi Coefficient		0.3034	
Contingency Coefficient		0.2903	
Cramer's V		0.3034	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V27 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0070
Pr <= P                    0.0411
  
```

Sample Size = 66

Table of V28 by TVV3

V28 (Ss-task-dev : V28) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	1	1
	0.4545	0.5455	
	0.4545	0.3788	
	0.00	1.52	1.52
	0.00	100.00	
	0.00	2.78	
Acceptable	9	22	31
	14.091	16.909	
	1.8393	1.5327	
	13.64	33.33	46.97
	29.03	70.97	
	30.00	61.11	
H-satisfact	21	13	34
	15.455	18.545	
	1.9898	1.6582	
	31.82	19.70	51.52
	61.76	38.24	
	70.00	36.11	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V28 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.8534	0.0197
Likelihood Ratio Chi-Square	2	8.3640	0.0153
Mantel-Haenszel Chi-Square	1	7.7297	0.0054
Phi Coefficient		0.3450	
Contingency Coefficient		0.3261	
Cramer's V		0.3450	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0034
Pr <= P	0.0128

Sample Size = 66

The FREQ Procedure

Table of V29 by TVV3

V29 (Sum : V29)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	4	5
Expected	2.2727	2.7273	
Cell Chi-Square	0.7127	0.5939	
Percent	1.52	6.06	7.58
Row Pct	20.00	80.00	
Col Pct	3.33	11.11	
Acceptable	9	13	22
Expected	10	12	
Cell Chi-Square	0.1	0.0833	
Percent	13.64	19.70	33.33
Row Pct	40.91	59.09	
Col Pct	30.00	36.11	
H-satisfact	20	19	39
Expected	17.727	21.273	
Cell Chi-Square	0.2914	0.2428	
Percent	30.30	28.79	59.09
Row Pct	51.28	48.72	
Col Pct	66.67	52.78	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V29 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.0242	0.3635
Likelihood Ratio Chi-Square	2	2.1382	0.3433
Mantel-Haenszel Chi-Square	1	1.8853	0.1697
Phi Coefficient		0.1751	
Contingency Coefficient		0.1725	
Cramer's V		0.1751	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V29 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0311
Pr <= P	0.4309

Sample Size = 66

Table of V31 by TVV3

V31(Pre-know : V31) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	4	5
	2.2727	2.7273	
	0.7127	0.5939	
	1.52	6.06	7.58
	20.00	80.00	
	3.33	11.11	
Acceptable	9	11	20
	9.0909	10.909	
	0.0009	0.0008	
	13.64	16.67	30.30
	45.00	55.00	
	30.00	30.56	
H-satisfact	20	21	41
	18.636	22.364	
	0.0998	0.0831	
	30.30	31.82	62.12
	48.78	51.22	
	66.67	58.33	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V31 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4913	0.4744
Likelihood Ratio Chi-Square	2	1.6060	0.4480
Mantel-Haenszel Chi-Square	1	1.0472	0.3061
Phi Coefficient		0.1503	
Contingency Coefficient		0.1486	
Cramer's V		0.1503	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0410
Pr <= P	0.5820

Sample Size = 66

The FREQ Procedure

Table of V33 by TVV3

V33(Q-ind : V33)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	4	4
Expected	1.8182	2.1818	
Cell Chi-Square	1.8182	1.5152	
Percent	0.00	6.06	6.06
Row Pct	0.00	100.00	
Col Pct	0.00	11.11	
Acceptable	8	15	23
Expected	10.455	12.545	
Cell Chi-Square	0.5763	0.4802	
Percent	12.12	22.73	34.85
Row Pct	34.78	65.22	
Col Pct	26.67	41.67	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V33 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.2779	0.0433
Likelihood Ratio Chi-Square	2	7.8064	0.0202
Mantel-Haenszel Chi-Square	1	6.0299	0.0141
Phi Coefficient		0.3084	
Contingency Coefficient		0.2947	
Cramer's V		0.3084	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V33 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0045
Pr <= P                    0.0366
  
```

Sample Size = 66

Table of V34 by TVV3

V34(Q-clas : V34) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
Acceptable	9	10	19
	8.6364	10.364	
	0.0153	0.0128	
	13.64	15.15	28.79
	47.37	52.63	
	30.00	27.78	
H-satisfact	21	23	44
	20	24	
	0.05	0.0417	
	31.82	34.85	66.67
	47.73	52.27	
	70.00	63.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V34 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6197	0.2699
Likelihood Ratio Chi-Square	2	3.7563	0.1529
Mantel-Haenszel Chi-Square	1	1.0307	0.3100
Phi Coefficient		0.1992	
Contingency Coefficient		0.1954	
Cramer's V		0.1992	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0337
Pr <= P	0.4080

Sample Size = 66

The FREQ Procedure

Table of V35 by TVV3

V35 (Resp-1 : V35)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	1	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.0091	0.0076	
Percent	1.52	1.52	3.03
Row Pct	50.00	50.00	
Col Pct	3.33	2.78	
Acceptable	7	15	22
Expected	10	12	
Cell Chi-Square	0.9	0.75	
Percent	10.61	22.73	33.33
Row Pct	31.82	68.18	
Col Pct	23.33	41.67	
H-satisfact	22	20	42
Expected	19.091	22.909	
Cell Chi-Square	0.4433	0.3694	
Percent	33.33	30.30	63.64
Row Pct	52.38	47.62	
Col Pct	73.33	55.56	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V35 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.4794	0.2895
Likelihood Ratio Chi-Square	2	2.5259	0.2828
Mantel-Haenszel Chi-Square	1	1.5968	0.2064
Phi Coefficient		0.1938	
Contingency Coefficient		0.1903	
Cramer's V		0.1938	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V35 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0318
Pr <= P	0.2684

Sample Size = 66

Table of V36 by TVV3

V36(Hand-ina : V36) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	2	5
	2.2727	2.7273	
	0.2327	0.1939	
	4.55	3.03	7.58
	60.00	40.00	
	10.00	5.56	
Acceptable	8	16	24
	10.909	13.091	
	0.7758	0.6465	
	12.12	24.24	36.36
	33.33	66.67	
	26.67	44.44	
H-satisfact	19	18	37
	16.818	20.182	
	0.283	0.2359	
	28.79	27.27	56.06
	51.35	48.65	
	63.33	50.00	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V36 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.3678	0.3061
Likelihood Ratio Chi-Square	2	2.4006	0.3011
Mantel-Haenszel Chi-Square	1	0.3173	0.5732
Phi Coefficient		0.1894	
Contingency Coefficient		0.1861	
Cramer's V		0.1894	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0236
Pr <= P	0.3481

Sample Size = 66

The FREQ Procedure

Table of V37 by TVV3

V37(Use-alt : V37)	TVV3		
Frequency	English	Other	Total
Needs-atten	3	4	7
Expected	3.1818	3.8182	
Cell Chi-Square	0.0104	0.0087	
Percent	4.55	6.06	10.61
Row Pct	42.86	57.14	
Col Pct	10.00	11.11	
Acceptable	10	16	26
Expected	11.818	14.182	
Cell Chi-Square	0.2797	0.2331	
Percent	15.15	24.24	39.39
Row Pct	38.46	61.54	
Col Pct	33.33	44.44	
H-satisfact	17	16	33
Expected	15	18	
Cell Chi-Square	0.2667	0.2222	
Percent	25.76	24.24	50.00
Row Pct	51.52	48.48	
Col Pct	56.67	44.44	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V37 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0208	0.6003
Likelihood Ratio Chi-Square	2	1.0246	0.5991
Mantel-Haenszel Chi-Square	1	0.6354	0.4254
Phi Coefficient		0.1244	
Contingency Coefficient		0.1234	
Cramer's V		0.1244	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V37 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0393
Pr <= P                    0.6403
```

Sample Size = 66

Table of V40 by TVV3

V40(Instr : V40)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	1	2		3
	1.3636	1.6364		
	0.097	0.0808		
	1.52	3.03		4.55
	33.33	66.67		
	3.33	5.56		
Acceptable	9	19		28
	12.727	15.273		
	1.0916	0.9096		
	13.64	28.79		42.42
	32.14	67.86		
	30.00	52.78		
H-satisfact	20	15		35
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73		53.03
	57.14	42.86		
	66.67	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V40 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.1075	0.1283
Likelihood Ratio Chi-Square	2	4.1618	0.1248
Mantel-Haenszel Chi-Square	1	3.5055	0.0612
Phi Coefficient		0.2495	
Contingency Coefficient		0.2421	
Cramer's V		0.2495	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0122
Pr <= P	0.1040

Sample Size = 66

The FREQ Procedure

Table of V3 by TVV3

V3 (V-proj : V3)	TVV3		
Frequency	English	Other	Total
Needs-atten	2	4	6
Expected	2.7273	3.2727	
Cell Chi-Square	0.1939	0.1616	
Percent	3.03	6.06	9.09
Row Pct	33.33	66.67	
Col Pct	6.67	11.11	
Acceptable	8	16	24
Expected	10.909	13.091	
Cell Chi-Square	0.7758	0.6465	
Percent	12.12	24.24	36.36
Row Pct	33.33	66.67	
Col Pct	26.67	44.44	
H-satisfact	20	16	36
Expected	16.364	19.636	
Cell Chi-Square	0.8081	0.6734	
Percent	30.30	24.24	54.55
Row Pct	55.56	44.44	
Col Pct	66.67	44.44	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V3 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.2593	0.1960
Likelihood Ratio Chi-Square	2	3.2971	0.1923
Mantel-Haenszel Chi-Square	1	2.6667	0.1025
Phi Coefficient		0.2222	
Contingency Coefficient		0.2169	
Cramer's V		0.2222	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V3 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0146
 Pr <= P 0.1952

Sample Size = 66

Table of V4 by TVV3

V4(V-pitc : V4)		TVV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
Needs-atten	0	4	4	
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06	6.06	
	0.00	100.00		
	0.00	11.11		
Acceptable	9	22	31	
	14.091	16.909		
	1.8393	1.5327		
	13.64	33.33	46.97	
	29.03	70.97		
	30.00	61.11		
H-satisfact	21	10	31	
	14.091	16.909		
	3.3877	2.8231		
	31.82	15.15	46.97	
	67.74	32.26		
	70.00	27.78		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V4 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	12.9161	0.0016
Likelihood Ratio Chi-Square	2	14.6124	0.0007
Mantel-Haenszel Chi-Square	1	12.6300	0.0004
Phi Coefficient		0.4424	
Contingency Coefficient		0.4046	
Cramer's V		0.4424	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	1.621E-04
Pr <= P	0.0013

Sample Size = 66

The FREQ Procedure

Table of V5 by TVV3

V5 (Pron : V5)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	6	7
Expected	3.1818	3.8182	
Cell Chi-Square	1.4961	1.2468	
Percent	1.52	9.09	10.61
Row Pct	14.29	85.71	
Col Pct	3.33	16.67	
Acceptable	8	21	29
Expected	13.182	15.818	
Cell Chi-Square	2.037	1.6975	
Percent	12.12	31.82	43.94
Row Pct	27.59	72.41	
Col Pct	26.67	58.33	
H-satisfact	21	9	30
Expected	13.636	16.364	
Cell Chi-Square	3.9764	3.3136	
Percent	31.82	13.64	45.45
Row Pct	70.00	30.00	
Col Pct	70.00	25.00	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V5 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.7673	0.0010
Likelihood Ratio Chi-Square	2	14.3936	0.0007
Mantel-Haenszel Chi-Square	1	12.4869	0.0004
Phi Coefficient		0.4567	
Contingency Coefficient		0.4154	
Cramer's V		0.4567	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V5 by TVV3

Fisher's Exact Test

 Table Probability (P) 7.792E-05
 Pr <= P 6.363E-04

Sample Size = 66

Table of V7 by TVV3

V7(Dist-q-s-i : V7) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	3	4
	1.8182	2.1818	
	0.3682	0.3068	
	1.52	4.55	6.06
	25.00	75.00	
	3.33	8.33	
Acceptable	7	16	23
	10.455	12.545	
	1.1415	0.9513	
	10.61	24.24	34.85
	30.43	69.57	
	23.33	44.44	
H-satisfact	22	17	39
	17.727	21.273	
	1.0298	0.8582	
	33.33	25.76	59.09
	56.41	43.59	
	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V7 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6558	0.0975
Likelihood Ratio Chi-Square	2	4.7607	0.0925
Mantel-Haenszel Chi-Square	1	4.2124	0.0401
Phi Coefficient		0.2656	
Contingency Coefficient		0.2567	
Cramer's V		0.2656	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0091
Pr <= P	0.0986

Sample Size = 66

The FREQ Procedure

Table of V8 by TVV3

V8 (NB-wds : V8)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	4	5
Expected	2.2727	2.7273	
Cell Chi-Square	0.7127	0.5939	
Percent	1.52	6.06	7.58
Row Pct	20.00	80.00	
Col Pct	3.33	11.11	
Acceptable	6	22	28
Expected	12.727	15.273	
Cell Chi-Square	3.5558	2.9632	
Percent	9.09	33.33	42.42
Row Pct	21.43	78.57	
Col Pct	20.00	61.11	
H-satisfact	23	10	33
Expected	15	18	
Cell Chi-Square	4.2667	3.5556	
Percent	34.85	15.15	50.00
Row Pct	69.70	30.30	
Col Pct	76.67	27.78	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V8 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	15.6479	0.0004
Likelihood Ratio Chi-Square	2	16.3637	0.0003
Mantel-Haenszel Chi-Square	1	13.0754	0.0003
Phi Coefficient		0.4869	
Contingency Coefficient		0.4378	
Cramer's V		0.4869	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V8 by TVV3

Fisher's Exact Test

 Table Probability (P) 3.161E-05
 Pr <= P 2.311E-04

Sample Size = 66

Table of V9 by TVV3

V9(Trans : V9)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	1	2		3
	1.3636	1.6364		
	0.097	0.0808		
	1.52	3.03		4.55
	33.33	66.67		
	3.33	5.56		
Acceptable	7	17		24
	10.909	13.091		
	1.4008	1.1673		
	10.61	25.76		36.36
	29.17	70.83		
	23.33	47.22		
H-satisfact	22	17		39
	17.727	21.273		
	1.0298	0.8582		
	33.33	25.76		59.09
	56.41	43.59		
	73.33	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V9 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6339	0.0986
Likelihood Ratio Chi-Square	2	4.7329	0.0938
Mantel-Haenszel Chi-Square	1	3.8181	0.0507
Phi Coefficient		0.2650	
Contingency Coefficient		0.2561	
Cramer's V		0.2650	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0096
Pr <= P	0.0746

Sample Size = 66

The FREQ Procedure

Table of V10 by TVV3

V10 (Fac-exp : V10)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	3	4
Expected	1.8182	2.1818	
Cell Chi-Square	0.3682	0.3068	
Percent	1.52	4.55	6.06
Row Pct	25.00	75.00	
Col Pct	3.33	8.33	
Acceptable	12	16	28
Expected	12.727	15.273	
Cell Chi-Square	0.0416	0.0346	
Percent	18.18	24.24	42.42
Row Pct	42.86	57.14	
Col Pct	40.00	44.44	
H-satisfact	17	17	34
Expected	15.455	18.545	
Cell Chi-Square	0.1545	0.1288	
Percent	25.76	25.76	51.52
Row Pct	50.00	50.00	
Col Pct	56.67	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V10 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0345	0.5962
Likelihood Ratio Chi-Square	2	1.0737	0.5846
Mantel-Haenszel Chi-Square	1	0.9109	0.3399
Phi Coefficient		0.1252	
Contingency Coefficient		0.1242	
Cramer's V		0.1252	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V10 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0515
Pr <= P                    0.6224
```

Sample Size = 66

Table of V11 by TVV3

V11 (Gest : V11)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	3	4
Expected	1.8182	2.1818	
Cell Chi-Square	0.3682	0.3068	
Percent	1.52	4.55	6.06
Row Pct	25.00	75.00	
Col Pct	3.33	8.33	
Acceptable	11	22	33
Expected	15	18	
Cell Chi-Square	1.0667	0.8889	
Percent	16.67	33.33	50.00
Row Pct	33.33	66.67	
Col Pct	36.67	61.11	
H-satisfact	18	11	29
Expected	13.182	15.818	
Cell Chi-Square	1.7611	1.4676	
Percent	27.27	16.67	43.94
Row Pct	62.07	37.93	
Col Pct	60.00	30.56	
Total	30	36	66
Expected	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V11 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	5.8593	0.0534
Likelihood Ratio Chi-Square	2	5.9445	0.0512
Mantel-Haenszel Chi-Square	1	5.3630	0.0206
Phi Coefficient		0.2980	
Contingency Coefficient		0.2855	
Cramer's V		0.2980	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0049
Pr <= P	0.0458

Sample Size = 66

The FREQ Procedure

Table of V12 by TVV3

V12(S-speed : V12)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	2	2	4	
	1.8182	2.1818		
	0.0182	0.0152		
	3.03	3.03	6.06	
	50.00	50.00		
	6.67	5.56		
Acceptable	9	25	34	
	15.455	18.545		
	2.6957	2.2464		
	13.64	37.88	51.52	
	26.47	73.53		
	30.00	69.44		
H-satisfact	19	9	28	
	12.727	15.273		
	3.0916	2.5763		
	28.79	13.64	42.42	
	67.86	32.14		
	63.33	25.00		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V12 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	10.6433	0.0049
Likelihood Ratio Chi-Square	2	10.9406	0.0042
Mantel-Haenszel Chi-Square	1	6.3321	0.0119
Phi Coefficient		0.4016	
Contingency Coefficient		0.3727	
Cramer's V		0.4016	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V12 by TVV3

Fisher's Exact Test

 Table Probability (P) 3.940E-04
 Pr <= P 0.0025

Sample Size = 66

Table of V13 by TVV3

V13(S-fluen : V13)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	0	6		6
	2.7273	3.2727		
	2.7273	2.2727		
	0.00	9.09		9.09
	0.00	100.00		
	0.00	16.67		
Acceptable	7	18		25
	11.364	13.636		
	1.6756	1.3964		
	10.61	27.27		37.88
	28.00	72.00		
	23.33	50.00		
H-satisfact	23	12		35
	15.909	19.091		
	3.1605	2.6338		
	34.85	18.18		53.03
	65.71	34.29		
	76.67	33.33		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V13 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.8663	0.0010
Likelihood Ratio Chi-Square	2	16.2977	0.0003
Mantel-Haenszel Chi-Square	1	13.5507	0.0002
Phi Coefficient		0.4584	
Contingency Coefficient		0.4167	
Cramer's V		0.4584	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	7.271E-05
Pr <= P	6.120E-04

Sample Size = 66

The FREQ Procedure

Table of V14 by TVV3

V14 (Expr-id : V14)	TVV3		Total
Frequency	English	Other	
Needs-atten	2	7	9
Expected	4.0909	4.9091	
Cell Chi-Square	1.0687	0.8906	
Percent	3.03	10.61	13.64
Row Pct	22.22	77.78	
Col Pct	6.67	19.44	
Acceptable	8	12	20
Expected	9.0909	10.909	
Cell Chi-Square	0.1309	0.1091	
Percent	12.12	18.18	30.30
Row Pct	40.00	60.00	
Col Pct	26.67	33.33	
H-satisfact	20	17	37
Expected	16.818	20.182	
Cell Chi-Square	0.602	0.5016	
Percent	30.30	25.76	56.06
Row Pct	54.05	45.95	
Col Pct	66.67	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V14 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.3029	0.1918
Likelihood Ratio Chi-Square	2	3.4447	0.1786
Mantel-Haenszel Chi-Square	1	3.2365	0.0720
Phi Coefficient		0.2237	
Contingency Coefficient		0.2183	
Cramer's V		0.2237	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V14 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0131
Pr <= P                    0.1937
```

Sample Size = 66

Table of V16 by TVV3

V16(Ver-gram : V16)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
Acceptable	7	17		24
	10.909	13.091		
	1.4008	1.1673		
	10.61	25.76		36.36
	29.17	70.83		
	23.33	47.22		
H-satisfact	23	15		38
	17.273	20.727		
	1.899	1.5825		
	34.85	22.73		57.58
	60.53	39.47		
	76.67	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V16 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	9.3830	0.0092
Likelihood Ratio Chi-Square	2	10.9923	0.0041
Mantel-Haenszel Chi-Square	1	9.2365	0.0024
Phi Coefficient		0.3770	
Contingency Coefficient		0.3528	
Cramer's V		0.3770	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	9.706E-04
Pr <= P	0.0082

Sample Size = 66

The FREQ Procedure

Table of V21 by TVV3

V21(Learn-say : V21)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	5	17	22
Expected	10	12	
Cell Chi-Square	2.5	2.0833	
Percent	7.58	25.76	33.33
Row Pct	22.73	77.27	
Col Pct	16.67	47.22	
H-satisfact	24	17	41
Expected	18.636	22.364	
Cell Chi-Square	1.5437	1.2864	
Percent	36.36	25.76	62.12
Row Pct	58.54	41.46	
Col Pct	80.00	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V21 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.5912	0.0225
Likelihood Ratio Chi-Square	2	7.9108	0.0192
Mantel-Haenszel Chi-Square	1	5.8901	0.0152
Phi Coefficient		0.3391	
Contingency Coefficient		0.3212	
Cramer's V		0.3391	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V21 by TVV3

Fisher's Exact Test

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-----
Table Probability (P)      0.0022
Pr <= P                    0.0141
```

Sample Size = 66

Table of V22 by TVV3

V22(Seek-clar : V22) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	2	3
	1.3636	1.6364	
	0.097	0.0808	
	1.52	3.03	4.55
	33.33	66.67	
	3.33	5.56	
Acceptable	4	20	24
	10.909	13.091	
	4.3758	3.6465	
	6.06	30.30	36.36
	16.67	83.33	
	13.33	55.56	
H-satisfact	25	14	39
	17.727	21.273	
	2.9837	2.4864	
	37.88	21.21	59.09
	64.10	35.90	
	83.33	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V22 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.6701	0.0011
Likelihood Ratio Chi-Square	2	14.5828	0.0007
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4551	
Contingency Coefficient		0.4142	
Cramer's V		0.4551	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.717E-05
Pr <= P	3.420E-04

Sample Size = 66

2. Chi-Squared test and Fisher's Exact-Test for Pre-Service teachers' data set

Mrs T Peyper - Research Project - T11018 21:29 Thursday, October 4, 2012 1
(P02-R8.14.1) : n-Way PROC FREQ of component varbs for ITEM = GENERAL data set TEACHER

The FREQ Procedure

Table of V11 by VV3

V11 (V-proj : V11)		VV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	0	2	2	
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03	3.03	
	0.00	100.00		
	0.00	5.56		
Acceptable	7	17	24	
	10.909	13.091		
	1.4008	1.1673		
	10.61	25.76	36.36	
	29.17	70.83		
	23.33	47.22		
H-satisfact	23	17	40	
	18.182	21.818		
	1.2768	1.064		
	34.85	25.76	60.61	
	57.50	42.50		
	76.67	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V11 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.5756	0.0373
Likelihood Ratio Chi-Square	2	7.4263	0.0244
Mantel-Haenszel Chi-Square	1	6.4755	0.0109
Phi Coefficient		0.3156	
Contingency Coefficient		0.3010	
Cramer's V		0.3156	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V11 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0056
 Pr <= P 0.0283

Sample Size = 66

Table of V12 by VV3

V12(V-pitc : V12)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	0	1		1
	0.4545	0.5455		
	0.4545	0.3788		
	0.00	1.52		1.52
	0.00	100.00		
	0.00	2.78		
Acceptable	12	20		32
	14.545	17.455		
	0.4455	0.3712		
	18.18	30.30		48.48
	37.50	62.50		
	40.00	55.56		
H-satisfact	18	15		33
	15	18		
	0.6	0.5		
	27.27	22.73		50.00
	54.55	45.45		
	60.00	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V12 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7500	0.2528
Likelihood Ratio Chi-Square	2	3.1346	0.2086
Mantel-Haenszel Chi-Square	1	2.5645	0.1093
Phi Coefficient		0.2041	
Contingency Coefficient		0.2000	
Cramer's V		0.2041	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0424
Pr <= P	0.2162

Sample Size = 66

The FREQ Procedure

Table of V13 by VV3

V13 (Pron : V13)	VV3		Total
Frequency	English	Other	
Needs-atten	2	5	7
Expected	3.1818	3.8182	
Cell Chi-Square	0.439	0.3658	
Percent	3.03	7.58	10.61
Row Pct	28.57	71.43	
Col Pct	6.67	13.89	
Acceptable	12	23	35
Expected	15.909	19.091	
Cell Chi-Square	0.9605	0.8004	
Percent	18.18	34.85	53.03
Row Pct	34.29	65.71	
Col Pct	40.00	63.89	
H-satisfact	16	8	24
Expected	10.909	13.091	
Cell Chi-Square	2.3758	1.9798	
Percent	24.24	12.12	36.36
Row Pct	66.67	33.33	
Col Pct	53.33	22.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V13 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.9213	0.0314
Likelihood Ratio Chi-Square	2	7.0169	0.0299
Mantel-Haenszel Chi-Square	1	5.8711	0.0154
Phi Coefficient		0.3238	
Contingency Coefficient		0.3081	
Cramer's V		0.3238	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V13 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0023
 Pr <= P 0.0375

Sample Size = 66

Table of V14 by VV3

V14(Sen-struct : V14) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	4	4
	1.8462	2.1538	
	1.8462	1.5824	
	0.00	6.15	6.15
	0.00	100.00	
	0.00	11.43	
Acceptable	13	20	33
	15.231	17.769	
	0.3267	0.2801	
	20.00	30.77	50.77
	39.39	60.61	
	43.33	57.14	
H-satisfact	17	11	28
	12.923	15.077	
	1.2862	1.1024	
	26.15	16.92	43.08
	60.71	39.29	
	56.67	31.43	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V14 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.4240	0.0403
Likelihood Ratio Chi-Square	2	7.9521	0.0188
Mantel-Haenszel Chi-Square	1	6.0071	0.0142
Phi Coefficient		0.3144	
Contingency Coefficient		0.2999	
Cramer's V		0.3144	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0041
Pr <= P	0.0394

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V15 by VV3

V15 (Dist-q-s-i : V15)		VV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	1	1	2	
	0.9091	1.0909		
	0.0091	0.0076		
	1.52	1.52	3.03	
	50.00	50.00		
	3.33	2.78		
Acceptable	6	17	23	
	10.455	12.545		
	1.898	1.5817		
	9.09	25.76	34.85	
	26.09	73.91		
	20.00	47.22		
H-satisfact	23	18	41	
	18.636	22.364		
	1.0217	0.8514		
	34.85	27.27	62.12	
	56.10	43.90		
	76.67	50.00		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V15 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.3695	0.0682
Likelihood Ratio Chi-Square	2	5.5475	0.0624
Mantel-Haenszel Chi-Square	1	3.6341	0.0566
Phi Coefficient		0.2852	
Contingency Coefficient		0.2743	
Cramer's V		0.2852	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V15 by VV3

Fisher's Exact Test

Table Probability (P) 0.0074
Pr <= P 0.0421

Sample Size = 66

Table of V16 by VV3

V16(NB-wds : V16)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	1	5		6
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58		9.09
	16.67	83.33		
	3.33	13.89		
Acceptable	7	14		21
	9.5455	11.455		
	0.6788	0.5657		
	10.61	21.21		31.82
	33.33	66.67		
	23.33	38.89		
H-satisfact	22	17		39
	17.727	21.273		
	1.0298	0.8582		
	33.33	25.76		59.09
	56.41	43.59		
	73.33	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V16 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.1380	0.0766
Likelihood Ratio Chi-Square	2	5.3862	0.0677
Mantel-Haenszel Chi-Square	1	5.0175	0.0251
Phi Coefficient		0.2790	
Contingency Coefficient		0.2687	
Cramer's V		0.2790	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0065
Pr <= P	0.0854

Sample Size = 66

The FREQ Procedure

Table of V17 by VV3

V17(Trans : V17)	VV3		
Frequency	English	Other	Total
Needs-atten	0	5	5
Expected	2.2727	2.7273	
Cell Chi-Square	2.2727	1.8939	
Percent	0.00	7.58	7.58
Row Pct	0.00	100.00	
Col Pct	0.00	13.89	
Acceptable	5	16	21
Expected	9.5455	11.455	
Cell Chi-Square	2.1645	1.8038	
Percent	7.58	24.24	31.82
Row Pct	23.81	76.19	
Col Pct	16.67	44.44	
H-satisfact	25	15	40
Expected	18.182	21.818	
Cell Chi-Square	2.5568	2.1307	
Percent	37.88	22.73	60.61
Row Pct	62.50	37.50	
Col Pct	83.33	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V17 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	12.8224	0.0016
Likelihood Ratio Chi-Square	2	14.9714	0.0006
Mantel-Haenszel Chi-Square	1	12.4164	0.0004
Phi Coefficient		0.4408	
Contingency Coefficient		0.4033	
Cramer's V		0.4408	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V17 by VV3

Fisher's Exact Test

 Table Probability (P) 1.484E-04
 Pr <= P 0.0011

Sample Size = 66

Table of V18 by VV3

V18 (Fac-exp : V18) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Unsatisfact	0	1	1
	0.4545	0.5455	
	0.4545	0.3788	
	0.00	1.52	1.52
	0.00	100.00	
	0.00	2.78	
Needs-atten	1	3	4
	1.8182	2.1818	
	0.3682	0.3068	
	1.52	4.55	6.06
	25.00	75.00	
	3.33	8.33	
Acceptable	14	13	27
	12.273	14.727	
	0.2431	0.2026	
	21.21	19.70	40.91
	51.85	48.15	
	46.67	36.11	
H-satisfact	15	19	34
	15.455	18.545	
	0.0134	0.0111	
	22.73	28.79	51.52
	44.12	55.88	
	50.00	52.78	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V18 by VV3

Statistic	DF	Value	Prob
Chi-Square	3	1.9785	0.5769
Likelihood Ratio Chi-Square	3	2.3953	0.4945
Mantel-Haenszel Chi-Square	1	0.2136	0.6439
Phi Coefficient		0.1731	
Contingency Coefficient		0.1706	
Cramer's V		0.1731	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0270
Pr <= P	0.6684

Sample Size = 66

The FREQ Procedure

Table of V19 by VV3

V19 (Gest : V19)	VV3		Total
Frequency	English	Other	
Needs-atten	4	5	9
Expected	4.1538	4.8462	
Cell Chi-Square	0.0057	0.0049	
Percent	6.15	7.69	13.85
Row Pct	44.44	55.56	
Col Pct	13.33	14.29	
Acceptable	9	15	24
Expected	11.077	12.923	
Cell Chi-Square	0.3894	0.3338	
Percent	13.85	23.08	36.92
Row Pct	37.50	62.50	
Col Pct	30.00	42.86	
H-satisfact	17	15	32
Expected	14.769	17.231	
Cell Chi-Square	0.3369	0.2888	
Percent	26.15	23.08	49.23
Row Pct	53.13	46.88	
Col Pct	56.67	42.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V19 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.3595	0.5067
Likelihood Ratio Chi-Square	2	1.3675	0.5047
Mantel-Haenszel Chi-Square	1	0.6856	0.4077
Phi Coefficient		0.1446	
Contingency Coefficient		0.1431	
Cramer's V		0.1446	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V19 by VV3

Fisher's Exact Test

Table Probability (P) 0.0310
Pr <= P 0.5164

Effective Sample Size = 65
Frequency Missing = 1

Table of V20 by VV3

V20(S-speed : V20) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	8	11
	5	6	
	0.8	0.6667	
	4.55	12.12	16.67
	27.27	72.73	
	10.00	22.22	
Acceptable	13	23	36
	16.364	19.636	
	0.6914	0.5762	
	19.70	34.85	54.55
	36.11	63.89	
	43.33	63.89	
H-satisfact	14	5	19
	8.6364	10.364	
	3.3311	2.7759	
	21.21	7.58	28.79
	73.68	26.32	
	46.67	13.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V20 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.8413	0.0120
Likelihood Ratio Chi-Square	2	9.0656	0.0108
Mantel-Haenszel Chi-Square	1	7.4194	0.0065
Phi Coefficient		0.3660	
Contingency Coefficient		0.3437	
Cramer's V		0.3660	

Fisher's Exact Test

Table Probability (P)	8.037E-04
Pr <= P	0.0099

Sample Size = 66

The FREQ Procedure

Table of V21 by VV3

V21(S-fluen : V21)	VV3		
Frequency	English	Other	Total
Needs-atten	2	7	9
Expected	4.1538	4.8462	
Cell Chi-Square	1.1168	0.9573	
Percent	3.08	10.77	13.85
Row Pct	22.22	77.78	
Col Pct	6.67	20.00	
Acceptable	10	20	30
Expected	13.846	16.154	
Cell Chi-Square	1.0684	0.9158	
Percent	15.38	30.77	46.15
Row Pct	33.33	66.67	
Col Pct	33.33	57.14	
H-satisfact	18	8	26
Expected	12	14	
Cell Chi-Square	3	2.5714	
Percent	27.69	12.31	40.00
Row Pct	69.23	30.77	
Col Pct	60.00	22.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V21 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	9.6296	0.0081
Likelihood Ratio Chi-Square	2	9.9020	0.0071
Mantel-Haenszel Chi-Square	1	8.6211	0.0033
Phi Coefficient		0.3849	
Contingency Coefficient		0.3592	
Cramer's V		0.3849	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V21 by VV3

Fisher's Exact Test

 Table Probability (P) 5.616E-04
 Pr <= P 0.0101

 Effective Sample Size = 65
 Frequency Missing = 1

Table of V22 by VV3

V22(Expr-id : V22) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	2	2
	0.9231	1.0769	
	0.9231	0.7912	
	0.00	3.08	3.08
	0.00	100.00	
	0.00	5.71	
Acceptable	11	19	30
	13.846	16.154	
	0.585	0.5015	
	16.92	29.23	46.15
	36.67	63.33	
	36.67	54.29	
H-satisfact	19	14	33
	15.231	17.769	
	0.9328	0.7995	
	29.23	21.54	50.77
	57.58	42.42	
	63.33	40.00	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V22 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.5331	0.1037
Likelihood Ratio Chi-Square	2	5.3075	0.0704
Mantel-Haenszel Chi-Square	1	4.3151	0.0378
Phi Coefficient		0.2641	
Contingency Coefficient		0.2553	
Cramer's V		0.2641	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0149
Pr <= P	0.0870

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V23 by VV3

V23 (Synon : V23)	VV3		
Frequency	English	Other	Total
Needs-atten	1	7	8
Expected	3.6364	4.3636	
Cell Chi-Square	1.9114	1.5928	
Percent	1.52	10.61	12.12
Row Pct	12.50	87.50	
Col Pct	3.33	19.44	
Acceptable	15	19	34
Expected	15.455	18.545	
Cell Chi-Square	0.0134	0.0111	
Percent	22.73	28.79	51.52
Row Pct	44.12	55.88	
Col Pct	50.00	52.78	
H-satisfact	14	10	24
Expected	10.909	13.091	
Cell Chi-Square	0.8758	0.7298	
Percent	21.21	15.15	36.36
Row Pct	58.33	41.67	
Col Pct	46.67	27.78	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V23 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.1342	0.0768
Likelihood Ratio Chi-Square	2	5.6573	0.0591
Mantel-Haenszel Chi-Square	1	4.6334	0.0314
Phi Coefficient		0.2789	
Contingency Coefficient		0.2687	
Cramer's V		0.2789	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V23 by VV3

Fisher's Exact Test

Table Probability (P)	0.0053
Pr <= P	0.0827

Sample Size = 66

Table of V24 by VV3

V24(Ver-gram : V24) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
Acceptable	15	25	40
	18.182	21.818	
	0.5568	0.464	
	22.73	37.88	60.61
	37.50	62.50	
	50.00	69.44	
H-satisfact	15	8	23
	10.455	12.545	
	1.9763	1.6469	
	22.73	12.12	34.85
	65.22	34.78	
	50.00	22.22	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V24 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	7.1440	0.0281
Likelihood Ratio Chi-Square	2	8.3040	0.0157
Mantel-Haenszel Chi-Square	1	6.9561	0.0084
Phi Coefficient		0.3290	
Contingency Coefficient		0.3125	
Cramer's V		0.3290	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0036
Pr <= P	0.0213

Sample Size = 66

Table of V25 by VV3

V25 (Writ-gram : V25) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Acceptable	19	16	35
	15.909	19.091	
	0.6005	0.5004	
	28.79	24.24	53.03
	54.29	45.71	
	63.33	44.44	
H-satisfact	11	20	31
	14.091	16.909	
	0.678	0.565	
	16.67	30.30	46.97
	35.48	64.52	
	36.67	55.56	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V25 by VV3

Statistic	DF	Value	Prob
Chi-Square	1	2.3440	0.1258
Likelihood Ratio Chi-Square	1	2.3622	0.1243
Continuity Adj. Chi-Square	1	1.6470	0.1994
Mantel-Haenszel Chi-Square	1	2.3084	0.1287
Phi Coefficient		0.1885	
Contingency Coefficient		0.1852	
Cramer's V		0.1885	

Fisher's Exact Test

Cell (1,1) Frequency (F)	19
Left-sided Pr <= F	0.9628
Right-sided Pr >= F	0.0995
Table Probability (P)	0.0623
Two-sided Pr <= P	0.1448

Sample Size = 66

The FREQ Procedure

Table of V26 by VV3

V26(Frm-q : V26)	VV3		
Frequency	English	Other	Total
Needs-atten	1	3	4
Expected	1.8182	2.1818	
Cell Chi-Square	0.3682	0.3068	
Percent	1.52	4.55	6.06
Row Pct	25.00	75.00	
Col Pct	3.33	8.33	
Acceptable	10	15	25
Expected	11.364	13.636	
Cell Chi-Square	0.1636	0.1364	
Percent	15.15	22.73	37.88
Row Pct	40.00	60.00	
Col Pct	33.33	41.67	
H-satisfact	19	18	37
Expected	16.818	20.182	
Cell Chi-Square	0.283	0.2359	
Percent	28.79	27.27	56.06
Row Pct	51.35	48.65	
Col Pct	63.33	50.00	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V26 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4939	0.4738
Likelihood Ratio Chi-Square	2	1.5341	0.4644
Mantel-Haenszel Chi-Square	1	1.4592	0.2271
Phi Coefficient		0.1504	
Contingency Coefficient		0.1488	
Cramer's V		0.1504	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V26 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0419
 Pr <= P 0.5686

Sample Size = 66

Table of V27 by VV3

V27(Spell : V27) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	1	4
	1.8182	2.1818	
	0.7682	0.6402	
	4.55	1.52	6.06
	75.00	25.00	
	10.00	2.78	
Acceptable	11	15	26
	11.818	14.182	
	0.0566	0.0472	
	16.67	22.73	39.39
	42.31	57.69	
	36.67	41.67	
H-satisfact	16	20	36
	16.364	19.636	
	0.0081	0.0067	
	24.24	30.30	54.55
	44.44	55.56	
	53.33	55.56	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V27 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.5270	0.4660
Likelihood Ratio Chi-Square	2	1.5635	0.4576
Mantel-Haenszel Chi-Square	1	0.3875	0.5336
Phi Coefficient		0.1521	
Contingency Coefficient		0.1504	
Cramer's V		0.1521	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0409
Pr <= P	0.5694

Sample Size = 66

The FREQ Procedure

Table of V28 by VV3

V28 (Punct : V28)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	12	18	30
Expected	13.636	16.364	
Cell Chi-Square	0.1964	0.1636	
Percent	18.18	27.27	45.45
Row Pct	40.00	60.00	
Col Pct	40.00	50.00	
H-satisfact	18	16	34
Expected	15.455	18.545	
Cell Chi-Square	0.4193	0.3494	
Percent	27.27	24.24	51.52
Row Pct	52.94	47.06	
Col Pct	60.00	44.44	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V28 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7953	0.2472
Likelihood Ratio Chi-Square	2	3.5522	0.1693
Mantel-Haenszel Chi-Square	1	2.3141	0.1282
Phi Coefficient		0.2058	
Contingency Coefficient		0.2016	
Cramer's V		0.2058	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V28 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0346
 Pr <= P 0.2878

Sample Size = 66

Table of V29 by VV3

V29(Learn-say : V29) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	5	6
	2.7273	3.2727	
	1.0939	0.9116	
	1.52	7.58	9.09
	16.67	83.33	
	3.33	13.89	
Acceptable	11	15	26
	11.818	14.182	
	0.0566	0.0472	
	16.67	22.73	39.39
	42.31	57.69	
	36.67	41.67	
H-satisfact	18	16	34
	15.455	18.545	
	0.4193	0.3494	
	27.27	24.24	51.52
	52.94	47.06	
	60.00	44.44	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V29 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.8780	0.2372
Likelihood Ratio Chi-Square	2	3.1004	0.2122
Mantel-Haenszel Chi-Square	1	2.5788	0.1083
Phi Coefficient		0.2088	
Contingency Coefficient		0.2044	
Cramer's V		0.2088	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0185
Pr <= P	0.2488

Sample Size = 66

The FREQ Procedure

Table of V30 by VV3

V30 (Seek-clar : V30)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	6	14	20
Expected	9.0909	10.909	
Cell Chi-Square	1.0509	0.8758	
Percent	9.09	21.21	30.30
Row Pct	30.00	70.00	
Col Pct	20.00	38.89	
H-satisfact	24	20	44
Expected	20	24	
Cell Chi-Square	0.8	0.6667	
Percent	36.36	30.30	66.67
Row Pct	54.55	45.45	
Col Pct	80.00	55.56	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V30 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.0600	0.0797
Likelihood Ratio Chi-Square	2	5.8818	0.0528
Mantel-Haenszel Chi-Square	1	4.9670	0.0258
Phi Coefficient		0.2769	
Contingency Coefficient		0.2668	
Cramer's V		0.2769	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V30 by VV3

Fisher's Exact Test

Table Probability (P) 0.0124
Pr <= P 0.0805

Sample Size = 66

The FREQ Procedure

Table of V38 by VV3

V38 (Adres : V38)		VV3		
Frequency		English	Other	Total
2	0	3		3
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55		4.55
	0.00	100.00		
	0.00	8.33		
3	3	10		13
	5.9091	7.0909		
	1.4322	1.1935		
	4.55	15.15		19.70
	23.08	76.92		
	10.00	27.78		
4	27	23		50
	22.727	27.273		
	0.8033	0.6694		
	40.91	34.85		75.76
	54.00	46.00		
	90.00	63.89		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V38 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.5983	0.0369
Likelihood Ratio Chi-Square	2	7.9095	0.0192
Mantel-Haenszel Chi-Square	1	6.4613	0.0110
Phi Coefficient		0.3162	
Contingency Coefficient		0.3015	
Cramer's V		0.3162	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V38 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0056
 Pr <= P 0.0350

Sample Size = 66

Table of V39 by VV3

V39(Pre-know : V39) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	1	1
	0.4545	0.5455	
	0.4545	0.3788	
	0.00	1.52	1.52
	0.00	100.00	
	0.00	2.78	
3	7	11	18
	8.1818	9.8182	
	0.1707	0.1423	
	10.61	16.67	27.27
	38.89	61.11	
	23.33	30.56	
4	23	24	47
	21.364	25.636	
	0.1253	0.1044	
	34.85	36.36	71.21
	48.94	51.06	
	76.67	66.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V39 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.3761	0.5026
Likelihood Ratio Chi-Square	2	1.7577	0.4153
Mantel-Haenszel Chi-Square	1	1.0895	0.2966
Phi Coefficient		0.1444	
Contingency Coefficient		0.1429	
Cramer's V		0.1444	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0930
Pr <= P	0.6722

Sample Size = 66

The FREQ Procedure

Table of V40 by VV3

V40 (Lev-Q : V40)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55	6.06	
	25.00	75.00		
	3.33	8.33		
3	15	17	32	
	14.545	17.455		
	0.0142	0.0118		
	22.73	25.76	48.48	
	46.88	53.13		
	50.00	47.22		
4	14	16	30	
	13.636	16.364		
	0.0097	0.0081		
	21.21	24.24	45.45	
	46.67	53.33		
	46.67	44.44		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V40 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.7188	0.6981
Likelihood Ratio Chi-Square	2	0.7588	0.6843
Mantel-Haenszel Chi-Square	1	0.2335	0.6289
Phi Coefficient		0.1044	
Contingency Coefficient		0.1038	
Cramer's V		0.1044	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V40 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0597
 Pr <= P 0.8518

Sample Size = 66

Table of V41 by VV3

V41(Q-ind : V41)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	
Row Pct	Col Pct	English	Other	Total
2	1	4		5
	2.2727	2.7273		
	0.7127	0.5939		
	1.52	6.06		7.58
	20.00	80.00		
	3.33	11.11		
3	13	15		28
	12.727	15.273		
	0.0058	0.0049		
	19.70	22.73		42.42
	46.43	53.57		
	43.33	41.67		
4	16	17		33
	15	18		
	0.0667	0.0556		
	24.24	25.76		50.00
	48.48	51.52		
	53.33	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V41 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4396	0.4868
Likelihood Ratio Chi-Square	2	1.5545	0.4597
Mantel-Haenszel Chi-Square	1	0.7855	0.3755
Phi Coefficient		0.1477	
Contingency Coefficient		0.1461	
Cramer's V		0.1477	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0396
Pr <= P	0.5604

Sample Size = 66

Table of V42 by VV3

V42(Q-clas : V42)		VV3		
Frequency	Expected	English	Other	Total
3	12	17	29	
	13.182	15.818		
	0.106	0.0883		
	18.18	25.76	43.94	
	41.38	58.62		
	40.00	47.22		
4	18	19	37	
	16.818	20.182		
	0.083	0.0692		
	27.27	28.79	56.06	
	48.65	51.35		
	60.00	52.78		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V42 by VV3

Statistic	DF	Value	Prob
Chi-Square	1	0.3465	0.5561
Likelihood Ratio Chi-Square	1	0.3472	0.5557
Continuity Adj. Chi-Square	1	0.1153	0.7342
Mantel-Haenszel Chi-Square	1	0.3413	0.5591
Phi Coefficient		-0.0725	
Contingency Coefficient		0.0723	
Cramer's V		-0.0725	

Fisher's Exact Test

Cell (1,1) Frequency (F)	12
Left-sided Pr <= F	0.3676
Right-sided Pr >= F	0.7987
Table Probability (P)	0.1662
Two-sided Pr <= P	0.6233

Sample Size = 66

The FREQ Procedure

Table of V43 by VV3

V43 (Res-I-q : V43)		VV3		
Frequency	Expected	English	Other	Total
2	1	3		4
	1.8462	2.1538		
	0.3878	0.3324		
	1.54	4.62		6.15
	25.00	75.00		
	3.33	8.57		
3	15	18		33
	15.231	17.769		
	0.0035	0.003		
	23.08	27.69		50.77
	45.45	54.55		
	50.00	51.43		
4	14	14		28
	12.923	15.077		
	0.0897	0.0769		
	21.54	21.54		43.08
	50.00	50.00		
	46.67	40.00		
Total	30	35		65
	46.15	53.85		100.00

Frequency Missing = 1

Statistics for Table of V43 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.8934	0.6397
Likelihood Ratio Chi-Square	2	0.9346	0.6267
Mantel-Haenszel Chi-Square	1	0.6332	0.4262
Phi Coefficient		0.1172	
Contingency Coefficient		0.1164	
Cramer's V		0.1172	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V43 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0553
 Pr <= P 0.7282

Effective Sample Size = 65
 Frequency Missing = 1

Table of V44 by VV3

V44 (Res-ic-ans : V44) VV3

Frequency Expected Cell Chi-Square Percent Row Pct Col Pct	English	Other	Total
2	0	2	2
	0.9091	1.0909	
	0.9091	0.7576	
	0.00	3.03	3.03
	0.00	100.00	
	0.00	5.56	
3	13	19	32
	14.545	17.455	
	0.1642	0.1368	
	19.70	28.79	48.48
	40.63	59.38	
	43.33	52.78	
4	17	15	32
	14.545	17.455	
	0.4142	0.3452	
	25.76	22.73	48.48
	53.13	46.88	
	56.67	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V44 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7271	0.2558
Likelihood Ratio Chi-Square	2	3.4831	0.1752
Mantel-Haenszel Chi-Square	1	2.2070	0.1374
Phi Coefficient		0.2033	
Contingency Coefficient		0.1992	
Cramer's V		0.2033	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0356
Pr <= P	0.3616

Sample Size = 66

The FREQ Procedure

Table of V45 by VV3

V45(Use-alt : V45)		VV3		
Frequency	Expected	English	Other	Total
2	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
3	12	17		29
	13.182	15.818		
	0.106	0.0883		
	18.18	25.76		43.94
	41.38	58.62		
	40.00	47.22		
4	18	15		33
	15	18		
	0.6	0.5		
	27.27	22.73		50.00
	54.55	45.45		
	60.00	41.67		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V45 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6276	0.0989
Likelihood Ratio Chi-Square	2	6.1385	0.0465
Mantel-Haenszel Chi-Square	1	3.8015	0.0512
Phi Coefficient		0.2648	
Contingency Coefficient		0.2560	
Cramer's V		0.2648	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V45 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0098
 Pr <= P 0.1183

Sample Size = 66

Table of V46 by VV3

V46(Form : V46)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55	6.06	
	25.00	75.00		
	3.33	8.33		
3	7	12	19	
	8.6364	10.364		
	0.31	0.2584		
	10.61	18.18	28.79	
	36.84	63.16		
	23.33	33.33		
4	22	21	43	
	19.545	23.455		
	0.3082	0.2569		
	33.33	31.82	65.15	
	51.16	48.84		
	73.33	58.33		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V46 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.8085	0.4048
Likelihood Ratio Chi-Square	2	1.8550	0.3955
Mantel-Haenszel Chi-Square	1	1.7761	0.1826
Phi Coefficient		0.1655	
Contingency Coefficient		0.1633	
Cramer's V		0.1655	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0384
Pr <= P	0.4616

Sample Size = 66

The FREQ Procedure

Table of V47 by VV3

V47(Firm : V47)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	2	3	5	
	2.2727	2.7273		
	0.0327	0.0273		
	3.03	4.55	7.58	
	40.00	60.00		
	6.67	8.33		
3	12	16	28	
	12.727	15.273		
	0.0416	0.0346		
	18.18	24.24	42.42	
	42.86	57.14		
	40.00	44.44		
4	16	17	33	
	15	18		
	0.0667	0.0556		
	24.24	25.76	50.00	
	48.48	51.52		
	53.33	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V47 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.2584	0.8788
Likelihood Ratio Chi-Square	2	0.2588	0.8786
Mantel-Haenszel Chi-Square	1	0.2463	0.6197
Phi Coefficient		0.0626	
Contingency Coefficient		0.0625	
Cramer's V		0.0626	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V47 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0643
 Pr <= P 0.9296

Sample Size = 66

Table of V48 by VV3

V48(Instr : V48)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	3	3	
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55	4.55	
	0.00	100.00		
	0.00	8.33		
3	11	11	22	
	10	12		
	0.1	0.0833		
	16.67	16.67	33.33	
	50.00	50.00		
	36.67	30.56		
4	19	22	41	
	18.636	22.364		
	0.0071	0.0059		
	28.79	33.33	62.12	
	46.34	53.66		
	63.33	61.11		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V48 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6963	0.2597
Likelihood Ratio Chi-Square	2	3.8324	0.1472
Mantel-Haenszel Chi-Square	1	0.5357	0.4642
Phi Coefficient		0.2021	
Contingency Coefficient		0.1981	
Cramer's V		0.2021	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0313
Pr <= P	0.3535

Sample Size = 66

The FREQ Procedure

Table of V49 by VV3

V49(Cont-cls : V49)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	3	3	6	
	2.7692	3.2308		
	0.0192	0.0165		
	4.62	4.62	9.23	
	50.00	50.00		
	10.00	8.57		
3	12	17	29	
	13.385	15.615		
	0.1432	0.1228		
	18.46	26.15	44.62	
	41.38	58.62		
	40.00	48.57		
4	15	15	30	
	13.846	16.154		
	0.0962	0.0824		
	23.08	23.08	46.15	
	50.00	50.00		
	50.00	42.86		
Total	30	35	65	
	46.15	53.85	100.00	

Frequency Missing = 1

Statistics for Table of V49 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.4803	0.7865
Likelihood Ratio Chi-Square	2	0.4814	0.7861
Mantel-Haenszel Chi-Square	1	0.1244	0.7243
Phi Coefficient		0.0860	
Contingency Coefficient		0.0856	
Cramer's V		0.0860	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V49 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0535
 Pr <= P 0.8164

Effective Sample Size = 65
 Frequency Missing = 1

Table of V50 by VV3

V50 (Teach-aids : V50) VV3

Frequency Expected Cell Chi-Square Percent Row Pct Col Pct	English	Other	Total
2	0	2	2
	0.9091	1.0909	
	0.9091	0.7576	
	0.00	3.03	3.03
	0.00	100.00	
	0.00	5.56	
3	10	16	26
	11.818	14.182	
	0.2797	0.2331	
	15.15	24.24	39.39
	38.46	61.54	
	33.33	44.44	
4	20	18	38
	17.273	20.727	
	0.4306	0.3589	
	30.30	27.27	57.58
	52.63	47.37	
	66.67	50.00	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V50 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.9690	0.2266
Likelihood Ratio Chi-Square	2	3.7289	0.1550
Mantel-Haenszel Chi-Square	1	2.5794	0.1083
Phi Coefficient		0.2121	
Contingency Coefficient		0.2075	
Cramer's V		0.2121	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0323
Pr <= P	0.2803

Sample Size = 66

The FREQ Procedure

Table of V22 by VV3

V22(Expr-id : V22)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9231	1.0769	
Cell Chi-Square	0.9231	0.7912	
Percent	0.00	3.08	3.08
Row Pct	0.00	100.00	
Col Pct	0.00	5.71	
Acceptable	11	19	30
Expected	13.846	16.154	
Cell Chi-Square	0.585	0.5015	
Percent	16.92	29.23	46.15
Row Pct	36.67	63.33	
Col Pct	36.67	54.29	
H-satisfact	19	14	33
Expected	15.231	17.769	
Cell Chi-Square	0.9328	0.7995	
Percent	29.23	21.54	50.77
Row Pct	57.58	42.42	
Col Pct	63.33	40.00	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V22 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.5331	0.1037
Likelihood Ratio Chi-Square	2	5.3075	0.0704
Mantel-Haenszel Chi-Square	1	4.3151	0.0378
Phi Coefficient		0.2641	
Contingency Coefficient		0.2553	
Cramer's V		0.2641	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V22 by VV3

Fisher's Exact Test

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Table Probability (P)      0.0149
Pr <= P                    0.0870
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Effective Sample Size = 65
Frequency Missing = 1
```

Table of V30 by VV3

V30(Seek-clar : V30) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	2	2
	0.9091	1.0909	
	0.9091	0.7576	
	0.00	3.03	3.03
	0.00	100.00	
	0.00	5.56	
Acceptable	6	14	20
	9.0909	10.909	
	1.0509	0.8758	
	9.09	21.21	30.30
	30.00	70.00	
	20.00	38.89	
H-satisfact	24	20	44
	20	24	
	0.8	0.6667	
	36.36	30.30	66.67
	54.55	45.45	
	80.00	55.56	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V30 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.0600	0.0797
Likelihood Ratio Chi-Square	2	5.8818	0.0528
Mantel-Haenszel Chi-Square	1	4.9670	0.0258
Phi Coefficient		0.2769	
Contingency Coefficient		0.2668	
Cramer's V		0.2769	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0124
Pr <= P	0.0805

Sample Size = 66

The FREQ Procedure

Table of V38 by VV3

V38 (Adres : V38)	VV3		
Frequency	English	Other	Total
2	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
3	3	10	13
	5.9091	7.0909	
	1.4322	1.1935	
	4.55	15.15	19.70
	23.08	76.92	
	10.00	27.78	
4	27	23	50
	22.727	27.273	
	0.8033	0.6694	
	40.91	34.85	75.76
	54.00	46.00	
	90.00	63.89	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V38 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.5983	0.0369
Likelihood Ratio Chi-Square	2	7.9095	0.0192
Mantel-Haenszel Chi-Square	1	6.4613	0.0110
Phi Coefficient		0.3162	
Contingency Coefficient		0.3015	
Cramer's V		0.3162	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V38 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0056
 Pr <= P 0.0350

Sample Size = 66

Table of V43 by VV3

V43(Res-I-q : V43) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	1	3	4
	1.8462	2.1538	
	0.3878	0.3324	
	1.54	4.62	6.15
	25.00	75.00	
	3.33	8.57	
3	15	18	33
	15.231	17.769	
	0.0035	0.003	
	23.08	27.69	50.77
	45.45	54.55	
	50.00	51.43	
4	14	14	28
	12.923	15.077	
	0.0897	0.0769	
	21.54	21.54	43.08
	50.00	50.00	
	46.67	40.00	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V43 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.8934	0.6397
Likelihood Ratio Chi-Square	2	0.9346	0.6267
Mantel-Haenszel Chi-Square	1	0.6332	0.4262
Phi Coefficient		0.1172	
Contingency Coefficient		0.1164	
Cramer's V		0.1172	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0553
Pr <= P	0.7282

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V44 by VV3

V44 (Res-ic-ans : V44)		VV3		
Frequency	Expected	English	Other	Total
2	0	2	2	2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	13	19	32	
	14.545	17.455		
	0.1642	0.1368		
	19.70	28.79	48.48	
	40.63	59.38		
	43.33	52.78		
4	17	15	32	
	14.545	17.455		
	0.4142	0.3452		
	25.76	22.73	48.48	
	53.13	46.88		
	56.67	41.67		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V44 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7271	0.2558
Likelihood Ratio Chi-Square	2	3.4831	0.1752
Mantel-Haenszel Chi-Square	1	2.2070	0.1374
Phi Coefficient		0.2033	
Contingency Coefficient		0.1992	
Cramer's V		0.2033	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V44 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0356
 Pr <= P 0.3616

Sample Size = 66

Table of V45 by VV3

V45(Use-alt : V45) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	4	4
	1.8182	2.1818	
	1.8182	1.5152	
	0.00	6.06	6.06
	0.00	100.00	
	0.00	11.11	
3	12	17	29
	13.182	15.818	
	0.106	0.0883	
	18.18	25.76	43.94
	41.38	58.62	
	40.00	47.22	
4	18	15	33
	15	18	
	0.6	0.5	
	27.27	22.73	50.00
	54.55	45.45	
	60.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V45 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6276	0.0989
Likelihood Ratio Chi-Square	2	6.1385	0.0465
Mantel-Haenszel Chi-Square	1	3.8015	0.0512
Phi Coefficient		0.2648	
Contingency Coefficient		0.2560	
Cramer's V		0.2648	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0098
Pr <= P	0.1183

Sample Size = 66

The FREQ Procedure

Table of V46 by VV3

V46 (Form : V46)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55	6.06	
	25.00	75.00		
	3.33	8.33		
3	7	12	19	
	8.6364	10.364		
	0.31	0.2584		
	10.61	18.18	28.79	
	36.84	63.16		
	23.33	33.33		
4	22	21	43	
	19.545	23.455		
	0.3082	0.2569		
	33.33	31.82	65.15	
	51.16	48.84		
	73.33	58.33		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V46 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.8085	0.4048
Likelihood Ratio Chi-Square	2	1.8550	0.3955
Mantel-Haenszel Chi-Square	1	1.7761	0.1826
Phi Coefficient		0.1655	
Contingency Coefficient		0.1633	
Cramer's V		0.1655	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V46 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0384
 Pr <= P 0.4616

Sample Size = 66

Table of V47 by VV3

V47(Firm : V47)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	2	3	5	
	2.2727	2.7273		
	0.0327	0.0273		
	3.03	4.55	7.58	
	40.00	60.00		
	6.67	8.33		
3	12	16	28	
	12.727	15.273		
	0.0416	0.0346		
	18.18	24.24	42.42	
	42.86	57.14		
	40.00	44.44		
4	16	17	33	
	15	18		
	0.0667	0.0556		
	24.24	25.76	50.00	
	48.48	51.52		
	53.33	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V47 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.2584	0.8788
Likelihood Ratio Chi-Square	2	0.2588	0.8786
Mantel-Haenszel Chi-Square	1	0.2463	0.6197
Phi Coefficient		0.0626	
Contingency Coefficient		0.0625	
Cramer's V		0.0626	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0643
Pr <= P	0.9296

Sample Size = 66

The FREQ Procedure

Table of V48 by VV3

V48 (Instr : V48)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	3	3	
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55	4.55	
	0.00	100.00		
	0.00	8.33		
3	11	11	22	
	10	12		
	0.1	0.0833		
	16.67	16.67	33.33	
	50.00	50.00		
	36.67	30.56		
4	19	22	41	
	18.636	22.364		
	0.0071	0.0059		
	28.79	33.33	62.12	
	46.34	53.66		
	63.33	61.11		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V48 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6963	0.2597
Likelihood Ratio Chi-Square	2	3.8324	0.1472
Mantel-Haenszel Chi-Square	1	0.5357	0.4642
Phi Coefficient		0.2021	
Contingency Coefficient		0.1981	
Cramer's V		0.2021	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V48 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0313
 Pr <= P 0.3535

Sample Size = 66

Table of V49 by VV3

V49(Cont-cls : V49) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	3	3	6
	2.7692	3.2308	
	0.0192	0.0165	
	4.62	4.62	9.23
	50.00	50.00	
	10.00	8.57	
3	12	17	29
	13.385	15.615	
	0.1432	0.1228	
	18.46	26.15	44.62
	41.38	58.62	
	40.00	48.57	
4	15	15	30
	13.846	16.154	
	0.0962	0.0824	
	23.08	23.08	46.15
	50.00	50.00	
	50.00	42.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V49 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.4803	0.7865
Likelihood Ratio Chi-Square	2	0.4814	0.7861
Mantel-Haenszel Chi-Square	1	0.1244	0.7243
Phi Coefficient		0.0860	
Contingency Coefficient		0.0856	
Cramer's V		0.0860	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0535
Pr <= P	0.8164

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V50 by VV3

V50 (Teach-aids : V50)		VV3		
Frequency	Expected	English	Other	Total
2	0	2	2	2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	10	16		26
	11.818	14.182		
	0.2797	0.2331		
	15.15	24.24		39.39
	38.46	61.54		
	33.33	44.44		
4	20	18		38
	17.273	20.727		
	0.4306	0.3589		
	30.30	27.27		57.58
	52.63	47.37		
	66.67	50.00		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V50 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.9690	0.2266
Likelihood Ratio Chi-Square	2	3.7289	0.1550
Mantel-Haenszel Chi-Square	1	2.5794	0.1083
Phi Coefficient		0.2121	
Contingency Coefficient		0.2075	
Cramer's V		0.2121	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V50 by VV3

Fisher's Exact Test

Table Probability (P) 0.0323
Pr <= P 0.2803

Sample Size = 66

The FREQ Procedure

Table of V31 by VV3

V31 (Ss-cor : V31)		VV3		
Frequency	Expected	English	Other	Total
2	0	2	2	2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	11	11	11	22
	10	12		
	0.1	0.0833		
	16.67	16.67		33.33
	50.00	50.00		
	36.67	30.56		
4	19	23	23	42
	19.091	22.909		
	0.0004	0.0004		
	28.79	34.85		63.64
	45.24	54.76		
	63.33	63.89		
Total	30	36	36	66
	45.45	54.55	54.55	100.00

Statistics for Table of V31 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.8508	0.3964
Likelihood Ratio Chi-Square	2	2.6079	0.2715
Mantel-Haenszel Chi-Square	1	0.1346	0.7137
Phi Coefficient		0.1675	
Contingency Coefficient		0.1652	
Cramer's V		0.1675	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V31 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0571
 Pr <= P 0.5298

Sample Size = 66

Table of V32 by VV3

V32 (Pron-Ss : V32) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	2	1	3
	1.3636	1.6364	
	0.297	0.2475	
	3.03	1.52	4.55
	66.67	33.33	
	6.67	2.78	
3	8	22	30
	13.636	16.364	
	2.3297	1.9414	
	12.12	33.33	45.45
	26.67	73.33	
	26.67	61.11	
4	20	13	33
	15	18	
	1.6667	1.3889	
	30.30	19.70	50.00
	60.61	39.39	
	66.67	36.11	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V32 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	7.8711	0.0195
Likelihood Ratio Chi-Square	2	8.0837	0.0176
Mantel-Haenszel Chi-Square	1	3.3821	0.0659
Phi Coefficient		0.3453	
Contingency Coefficient		0.3264	
Cramer's V		0.3453	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0018
Pr <= P	0.0095

Sample Size = 66

The FREQ Procedure

Table of V33 by VV3

V33(Ss-cotxt : V33)		VV3		
Frequency	Expected	English	Other	Total
2	0	3		3
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55		4.55
	0.00	100.00		
	0.00	8.33		
3	8	19		27
	12.273	14.727		
	1.4875	1.2396		
	12.12	28.79		40.91
	29.63	70.37		
	26.67	52.78		
4	22	14		36
	16.364	19.636		
	1.9414	1.6178		
	33.33	21.21		54.55
	61.11	38.89		
	73.33	38.89		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V33 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.7864	0.0124
Likelihood Ratio Chi-Square	2	10.0199	0.0067
Mantel-Haenszel Chi-Square	1	8.6506	0.0033
Phi Coefficient		0.3649	
Contingency Coefficient		0.3428	
Cramer's V		0.3649	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V33 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0015
 Pr <= P 0.0091

Sample Size = 66

Table of V34 by VV3

V34 (Exp-Ss : V34)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	2	2	
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03	3.03	
	0.00	100.00		
	0.00	5.56		
3	10	22	32	
	14.545	17.455		
	1.4205	1.1837		
	15.15	33.33	48.48	
	31.25	68.75		
	33.33	61.11		
4	20	12	32	
	14.545	17.455		
	2.0455	1.7045		
	30.30	18.18	48.48	
	62.50	37.50		
	66.67	33.33		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V34 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.0208	0.0181
Likelihood Ratio Chi-Square	2	8.8596	0.0119
Mantel-Haenszel Chi-Square	1	7.8993	0.0049
Phi Coefficient		0.3486	
Contingency Coefficient		0.3292	
Cramer's V		0.3486	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0026
Pr <= P	0.0172

Sample Size = 66

The FREQ Procedure

Table of V35 by VV3

V35 (Ex-mod : V35)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	4	4	
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06	6.06	
	0.00	100.00		
	0.00	11.11		
3	10	17	27	
	12.273	14.727		
	0.4209	0.3507		
	15.15	25.76	40.91	
	37.04	62.96		
	33.33	47.22		
4	20	15	35	
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73	53.03	
	57.14	42.86		
	66.67	41.67		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V35 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.0335	0.0490
Likelihood Ratio Chi-Square	2	7.5514	0.0229
Mantel-Haenszel Chi-Square	1	5.6752	0.0172
Phi Coefficient		0.3024	
Contingency Coefficient		0.2894	
Cramer's V		0.3024	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V35 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0050
 Pr <= P 0.0448

Sample Size = 66

Table of V36 by VV3

V36(Ss-task-dev : V36) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	4	4
	1.8182	2.1818	
	1.8182	1.5152	
	0.00	6.06	6.06
	0.00	100.00	
	0.00	11.11	
3	11	17	28
	12.727	15.273	
	0.2344	0.1953	
	16.67	25.76	42.42
	39.29	60.71	
	36.67	47.22	
4	19	15	34
	15.455	18.545	
	0.8134	0.6778	
	28.79	22.73	51.52
	55.88	44.12	
	63.33	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V36 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.2543	0.0723
Likelihood Ratio Chi-Square	2	6.7664	0.0339
Mantel-Haenszel Chi-Square	1	4.6904	0.0303
Phi Coefficient		0.2822	
Contingency Coefficient		0.2716	
Cramer's V		0.2822	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0072
Pr <= P	0.0907

Sample Size = 66

The FREQ Procedure

Table of V37 by VV3

V37 (Sum : V37)	VV3		
Frequency	English	Other	Total
2	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
3	6	18	24
	10.909	13.091	
	2.2091	1.8409	
	9.09	27.27	36.36
	25.00	75.00	
	20.00	50.00	
4	24	15	39
	17.727	21.273	
	2.2196	1.8497	
	36.36	22.73	59.09
	61.54	38.46	
	80.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V37 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	10.6192	0.0049
Likelihood Ratio Chi-Square	2	11.9874	0.0025
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4011	
Contingency Coefficient		0.3723	
Cramer's V		0.4011	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V37 by VV3

Fisher's Exact Test

Table Probability (P) 6.134E-04
Pr <= P 0.0035

Sample Size = 66

The FREQ Procedure

Table of V17 by VV3

V17(Trans : V17)	VV3		
Frequency	English	Other	Total
Needs-atten	0	5	5
Expected	2.2727	2.7273	
Cell Chi-Square	2.2727	1.8939	
Percent	0.00	7.58	7.58
Row Pct	0.00	100.00	
Col Pct	0.00	13.89	
Acceptable	5	16	21
Expected	9.5455	11.455	
Cell Chi-Square	2.1645	1.8038	
Percent	7.58	24.24	31.82
Row Pct	23.81	76.19	
Col Pct	16.67	44.44	
H-satisfact	25	15	40
Expected	18.182	21.818	
Cell Chi-Square	2.5568	2.1307	
Percent	37.88	22.73	60.61
Row Pct	62.50	37.50	
Col Pct	83.33	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V17 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	12.8224	0.0016
Likelihood Ratio Chi-Square	2	14.9714	0.0006
Mantel-Haenszel Chi-Square	1	12.4164	0.0004
Phi Coefficient		0.4408	
Contingency Coefficient		0.4033	
Cramer's V		0.4408	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V17 by VV3

Fisher's Exact Test

 Table Probability (P) 1.484E-04
 Pr <= P 0.0011

Sample Size = 66

Table of V26 by VV3

V26(Frm-q : V26)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	1	3		4
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55		6.06
	25.00	75.00		
	3.33	8.33		
Acceptable	10	15		25
	11.364	13.636		
	0.1636	0.1364		
	15.15	22.73		37.88
	40.00	60.00		
	33.33	41.67		
H-satisfact	19	18		37
	16.818	20.182		
	0.283	0.2359		
	28.79	27.27		56.06
	51.35	48.65		
	63.33	50.00		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V26 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4939	0.4738
Likelihood Ratio Chi-Square	2	1.5341	0.4644
Mantel-Haenszel Chi-Square	1	1.4592	0.2271
Phi Coefficient		0.1504	
Contingency Coefficient		0.1488	
Cramer's V		0.1504	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0419
Pr <= P	0.5686

Sample Size = 66

The FREQ Procedure

Table of V31 by VV3

V31 (Ss-cor : V31)		VV3		
Frequency	Expected	English	Other	Total
2	0	2	2	2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	11	11	11	22
	10	12		
	0.1	0.0833		
	16.67	16.67		33.33
	50.00	50.00		
	36.67	30.56		
4	19	23	23	42
	19.091	22.909		
	0.0004	0.0004		
	28.79	34.85		63.64
	45.24	54.76		
	63.33	63.89		
Total	30	36	36	66
	45.45	54.55	54.55	100.00

Statistics for Table of V31 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.8508	0.3964
Likelihood Ratio Chi-Square	2	2.6079	0.2715
Mantel-Haenszel Chi-Square	1	0.1346	0.7137
Phi Coefficient		0.1675	
Contingency Coefficient		0.1652	
Cramer's V		0.1675	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V31 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0571
 Pr <= P 0.5298

Sample Size = 66

Table of V32 by VV3

V32 (Pron-Ss : V32) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	2	1	3
	1.3636	1.6364	
	0.297	0.2475	
	3.03	1.52	4.55
	66.67	33.33	
	6.67	2.78	
3	8	22	30
	13.636	16.364	
	2.3297	1.9414	
	12.12	33.33	45.45
	26.67	73.33	
	26.67	61.11	
4	20	13	33
	15	18	
	1.6667	1.3889	
	30.30	19.70	50.00
	60.61	39.39	
	66.67	36.11	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V32 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	7.8711	0.0195
Likelihood Ratio Chi-Square	2	8.0837	0.0176
Mantel-Haenszel Chi-Square	1	3.3821	0.0659
Phi Coefficient		0.3453	
Contingency Coefficient		0.3264	
Cramer's V		0.3453	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0018
Pr <= P	0.0095

Sample Size = 66

The FREQ Procedure

Table of V33 by VV3

V33(Ss-cotxt : V33)		VV3		
Frequency	Expected	English	Other	Total
2	0	3		3
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55		4.55
	0.00	100.00		
	0.00	8.33		
3	8	19		27
	12.273	14.727		
	1.4875	1.2396		
	12.12	28.79		40.91
	29.63	70.37		
	26.67	52.78		
4	22	14		36
	16.364	19.636		
	1.9414	1.6178		
	33.33	21.21		54.55
	61.11	38.89		
	73.33	38.89		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V33 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.7864	0.0124
Likelihood Ratio Chi-Square	2	10.0199	0.0067
Mantel-Haenszel Chi-Square	1	8.6506	0.0033
Phi Coefficient		0.3649	
Contingency Coefficient		0.3428	
Cramer's V		0.3649	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V33 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0015
 Pr <= P 0.0091

Sample Size = 66

Table of V34 by VV3

V34 (Exp-Ss : V34)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
2	0	2		2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	10	22		32
	14.545	17.455		
	1.4205	1.1837		
	15.15	33.33		48.48
	31.25	68.75		
	33.33	61.11		
4	20	12		32
	14.545	17.455		
	2.0455	1.7045		
	30.30	18.18		48.48
	62.50	37.50		
	66.67	33.33		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V34 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.0208	0.0181
Likelihood Ratio Chi-Square	2	8.8596	0.0119
Mantel-Haenszel Chi-Square	1	7.8993	0.0049
Phi Coefficient		0.3486	
Contingency Coefficient		0.3292	
Cramer's V		0.3486	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0026
Pr <= P	0.0172

Sample Size = 66

The FREQ Procedure

Table of V35 by VV3

V35 (Ex-mod : V35)		VV3		
Frequency	Expected	English	Other	Total
2	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
3	10	17		27
	12.273	14.727		
	0.4209	0.3507		
	15.15	25.76		40.91
	37.04	62.96		
	33.33	47.22		
4	20	15		35
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73		53.03
	57.14	42.86		
	66.67	41.67		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V35 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.0335	0.0490
Likelihood Ratio Chi-Square	2	7.5514	0.0229
Mantel-Haenszel Chi-Square	1	5.6752	0.0172
Phi Coefficient		0.3024	
Contingency Coefficient		0.2894	
Cramer's V		0.3024	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V35 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0050
 Pr <= P 0.0448

Sample Size = 66

Table of V36 by VV3

V36(Ss-task-dev : V36) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	4	4
	1.8182	2.1818	
	1.8182	1.5152	
	0.00	6.06	6.06
	0.00	100.00	
	0.00	11.11	
3	11	17	28
	12.727	15.273	
	0.2344	0.1953	
	16.67	25.76	42.42
	39.29	60.71	
	36.67	47.22	
4	19	15	34
	15.455	18.545	
	0.8134	0.6778	
	28.79	22.73	51.52
	55.88	44.12	
	63.33	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V36 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.2543	0.0723
Likelihood Ratio Chi-Square	2	6.7664	0.0339
Mantel-Haenszel Chi-Square	1	4.6904	0.0303
Phi Coefficient		0.2822	
Contingency Coefficient		0.2716	
Cramer's V		0.2822	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0072
Pr <= P	0.0907

Sample Size = 66

The FREQ Procedure

Table of V37 by VV3

V37 (Sum : V37)	VV3		
Frequency	English	Other	Total
2	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
3	6	18	24
	10.909	13.091	
	2.2091	1.8409	
	9.09	27.27	36.36
	25.00	75.00	
	20.00	50.00	
4	24	15	39
	17.727	21.273	
	2.2196	1.8497	
	36.36	22.73	59.09
	61.54	38.46	
	80.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V37 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	10.6192	0.0049
Likelihood Ratio Chi-Square	2	11.9874	0.0025
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4011	
Contingency Coefficient		0.3723	
Cramer's V		0.4011	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V37 by VV3

Fisher's Exact Test

 Table Probability (P) 6.134E-04
 Pr <= P 0.0035

Sample Size = 66

Table of V39 by VV3

V39(Pre-know : V39) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	1	1
	0.4545	0.5455	
	0.4545	0.3788	
	0.00	1.52	1.52
	0.00	100.00	
	0.00	2.78	
3	7	11	18
	8.1818	9.8182	
	0.1707	0.1423	
	10.61	16.67	27.27
	38.89	61.11	
	23.33	30.56	
4	23	24	47
	21.364	25.636	
	0.1253	0.1044	
	34.85	36.36	71.21
	48.94	51.06	
	76.67	66.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V39 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.3761	0.5026
Likelihood Ratio Chi-Square	2	1.7577	0.4153
Mantel-Haenszel Chi-Square	1	1.0895	0.2966
Phi Coefficient		0.1444	
Contingency Coefficient		0.1429	
Cramer's V		0.1444	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0930
Pr <= P	0.6722

Sample Size = 66

The FREQ Procedure

Table of V41 by VV3

V41(Q-ind : V41)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	4	5	
	2.2727	2.7273		
	0.7127	0.5939		
	1.52	6.06	7.58	
	20.00	80.00		
	3.33	11.11		
3	13	15	28	
	12.727	15.273		
	0.0058	0.0049		
	19.70	22.73	42.42	
	46.43	53.57		
	43.33	41.67		
4	16	17	33	
	15	18		
	0.0667	0.0556		
	24.24	25.76	50.00	
	48.48	51.52		
	53.33	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V41 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4396	0.4868
Likelihood Ratio Chi-Square	2	1.5545	0.4597
Mantel-Haenszel Chi-Square	1	0.7855	0.3755
Phi Coefficient		0.1477	
Contingency Coefficient		0.1461	
Cramer's V		0.1477	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V41 by VV3

Fisher's Exact Test

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Table Probability (P)      0.0396
Pr <= P                    0.5604
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Sample Size = 66

Table of V42 by VV3

V42(Q-clas : V42)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
3	12	17	29	
	13.182	15.818		
	0.106	0.0883		
	18.18	25.76	43.94	
	41.38	58.62		
	40.00	47.22		
4	18	19	37	
	16.818	20.182		
	0.083	0.0692		
	27.27	28.79	56.06	
	48.65	51.35		
	60.00	52.78		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V42 by VV3

Statistic	DF	Value	Prob
Chi-Square	1	0.3465	0.5561
Likelihood Ratio Chi-Square	1	0.3472	0.5557
Continuity Adj. Chi-Square	1	0.1153	0.7342
Mantel-Haenszel Chi-Square	1	0.3413	0.5591
Phi Coefficient		-0.0725	
Contingency Coefficient		0.0723	
Cramer's V		-0.0725	

Fisher's Exact Test

Cell (1,1) Frequency (F)	12
Left-sided Pr <= F	0.3676
Right-sided Pr >= F	0.7987
Table Probability (P)	0.1662
Two-sided Pr <= P	0.6233

Sample Size = 66

The FREQ Procedure

Table of V43 by VV3

V43 (Res-I-q : V43)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8462	2.1538		
	0.3878	0.3324		
	1.54	4.62	6.15	
	25.00	75.00		
	3.33	8.57		
3	15	18	33	
	15.231	17.769		
	0.0035	0.003		
	23.08	27.69	50.77	
	45.45	54.55		
	50.00	51.43		
4	14	14	28	
	12.923	15.077		
	0.0897	0.0769		
	21.54	21.54	43.08	
	50.00	50.00		
	46.67	40.00		
Total	30	35	65	
	46.15	53.85	100.00	

Frequency Missing = 1

Statistics for Table of V43 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.8934	0.6397
Likelihood Ratio Chi-Square	2	0.9346	0.6267
Mantel-Haenszel Chi-Square	1	0.6332	0.4262
Phi Coefficient		0.1172	
Contingency Coefficient		0.1164	
Cramer's V		0.1172	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V43 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0553
 Pr <= P 0.7282

 Effective Sample Size = 65
 Frequency Missing = 1

Table of V44 by VV3

V44 (Res-ic-ans : V44) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	2	2
	0.9091	1.0909	
	0.9091	0.7576	
	0.00	3.03	3.03
	0.00	100.00	
	0.00	5.56	
3	13	19	32
	14.545	17.455	
	0.1642	0.1368	
	19.70	28.79	48.48
	40.63	59.38	
	43.33	52.78	
4	17	15	32
	14.545	17.455	
	0.4142	0.3452	
	25.76	22.73	48.48
	53.13	46.88	
	56.67	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V44 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7271	0.2558
Likelihood Ratio Chi-Square	2	3.4831	0.1752
Mantel-Haenszel Chi-Square	1	2.2070	0.1374
Phi Coefficient		0.2033	
Contingency Coefficient		0.1992	
Cramer's V		0.2033	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0356
Pr <= P	0.3616

Sample Size = 66

The FREQ Procedure

Table of V45 by VV3

V45(Use-alt : V45)		VV3		
Frequency	Expected	English	Other	Total
2	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
3	12	17		29
	13.182	15.818		
	0.106	0.0883		
	18.18	25.76		43.94
	41.38	58.62		
	40.00	47.22		
4	18	15		33
	15	18		
	0.6	0.5		
	27.27	22.73		50.00
	54.55	45.45		
	60.00	41.67		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V45 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6276	0.0989
Likelihood Ratio Chi-Square	2	6.1385	0.0465
Mantel-Haenszel Chi-Square	1	3.8015	0.0512
Phi Coefficient		0.2648	
Contingency Coefficient		0.2560	
Cramer's V		0.2648	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V45 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0098
 Pr <= P 0.1183

Sample Size = 66

Table of V48 by VV3

V48(Instr : V48)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	3	3	
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55	4.55	
	0.00	100.00		
	0.00	8.33		
3	11	11	22	
	10	12		
	0.1	0.0833		
	16.67	16.67	33.33	
	50.00	50.00		
	36.67	30.56		
4	19	22	41	
	18.636	22.364		
	0.0071	0.0059		
	28.79	33.33	62.12	
	46.34	53.66		
	63.33	61.11		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V48 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6963	0.2597
Likelihood Ratio Chi-Square	2	3.8324	0.1472
Mantel-Haenszel Chi-Square	1	0.5357	0.4642
Phi Coefficient		0.2021	
Contingency Coefficient		0.1981	
Cramer's V		0.2021	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0313
Pr <= P	0.3535

Sample Size = 66

The FREQ Procedure

Table of V11 by VV3

V11 (V-proj : V11)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	7	17	24
Expected	10.909	13.091	
Cell Chi-Square	1.4008	1.1673	
Percent	10.61	25.76	36.36
Row Pct	29.17	70.83	
Col Pct	23.33	47.22	
H-satisfact	23	17	40
Expected	18.182	21.818	
Cell Chi-Square	1.2768	1.064	
Percent	34.85	25.76	60.61
Row Pct	57.50	42.50	
Col Pct	76.67	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V11 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.5756	0.0373
Likelihood Ratio Chi-Square	2	7.4263	0.0244
Mantel-Haenszel Chi-Square	1	6.4755	0.0109
Phi Coefficient		0.3156	
Contingency Coefficient		0.3010	
Cramer's V		0.3156	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V11 by VV3

Fisher's Exact Test

Table Probability (P) 0.0056
Pr <= P 0.0283

Sample Size = 66

Table of V12 by VV3

V12(V-pitc : V12)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	0	1		1
	0.4545	0.5455		
	0.4545	0.3788		
	0.00	1.52		1.52
	0.00	100.00		
	0.00	2.78		
Acceptable	12	20		32
	14.545	17.455		
	0.4455	0.3712		
	18.18	30.30		48.48
	37.50	62.50		
	40.00	55.56		
H-satisfact	18	15		33
	15	18		
	0.6	0.5		
	27.27	22.73		50.00
	54.55	45.45		
	60.00	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V12 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7500	0.2528
Likelihood Ratio Chi-Square	2	3.1346	0.2086
Mantel-Haenszel Chi-Square	1	2.5645	0.1093
Phi Coefficient		0.2041	
Contingency Coefficient		0.2000	
Cramer's V		0.2041	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0424
Pr <= P	0.2162

Sample Size = 66

The FREQ Procedure

Table of V13 by VV3

V13 (Pron : V13)	VV3		
Frequency	English	Other	Total
Needs-atten	2	5	7
Expected	3.1818	3.8182	
Cell Chi-Square	0.439	0.3658	
Percent	3.03	7.58	10.61
Row Pct	28.57	71.43	
Col Pct	6.67	13.89	
Acceptable	12	23	35
Expected	15.909	19.091	
Cell Chi-Square	0.9605	0.8004	
Percent	18.18	34.85	53.03
Row Pct	34.29	65.71	
Col Pct	40.00	63.89	
H-satisfact	16	8	24
Expected	10.909	13.091	
Cell Chi-Square	2.3758	1.9798	
Percent	24.24	12.12	36.36
Row Pct	66.67	33.33	
Col Pct	53.33	22.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V13 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.9213	0.0314
Likelihood Ratio Chi-Square	2	7.0169	0.0299
Mantel-Haenszel Chi-Square	1	5.8711	0.0154
Phi Coefficient		0.3238	
Contingency Coefficient		0.3081	
Cramer's V		0.3238	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V13 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0023
 Pr <= P 0.0375

Sample Size = 66

Table of V15 by VV3

V15(Dist-q-s-i : V15) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	1	2
	0.9091	1.0909	
	0.0091	0.0076	
	1.52	1.52	3.03
	50.00	50.00	
	3.33	2.78	
Acceptable	6	17	23
	10.455	12.545	
	1.898	1.5817	
	9.09	25.76	34.85
	26.09	73.91	
	20.00	47.22	
H-satisfact	23	18	41
	18.636	22.364	
	1.0217	0.8514	
	34.85	27.27	62.12
	56.10	43.90	
	76.67	50.00	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V15 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.3695	0.0682
Likelihood Ratio Chi-Square	2	5.5475	0.0624
Mantel-Haenszel Chi-Square	1	3.6341	0.0566
Phi Coefficient		0.2852	
Contingency Coefficient		0.2743	
Cramer's V		0.2852	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0074
Pr <= P	0.0421

Sample Size = 66

The FREQ Procedure

Table of V16 by VV3

V16(NB-wds : V16)	VV3		
Frequency	English	Other	Total
Needs-atten	1	5	6
Expected	2.7273	3.2727	
Cell Chi-Square	1.0939	0.9116	
Percent	1.52	7.58	9.09
Row Pct	16.67	83.33	
Col Pct	3.33	13.89	
Acceptable	7	14	21
Expected	9.5455	11.455	
Cell Chi-Square	0.6788	0.5657	
Percent	10.61	21.21	31.82
Row Pct	33.33	66.67	
Col Pct	23.33	38.89	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V16 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.1380	0.0766
Likelihood Ratio Chi-Square	2	5.3862	0.0677
Mantel-Haenszel Chi-Square	1	5.0175	0.0251
Phi Coefficient		0.2790	
Contingency Coefficient		0.2687	
Cramer's V		0.2790	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V16 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0065
 Pr <= P 0.0854

Sample Size = 66

Table of V17 by VV3

V17(Trans : V17)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	0	5		5
	2.2727	2.7273		
	2.2727	1.8939		
	0.00	7.58		7.58
	0.00	100.00		
	0.00	13.89		
Acceptable	5	16		21
	9.5455	11.455		
	2.1645	1.8038		
	7.58	24.24		31.82
	23.81	76.19		
	16.67	44.44		
H-satisfact	25	15		40
	18.182	21.818		
	2.5568	2.1307		
	37.88	22.73		60.61
	62.50	37.50		
	83.33	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V17 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	12.8224	0.0016
Likelihood Ratio Chi-Square	2	14.9714	0.0006
Mantel-Haenszel Chi-Square	1	12.4164	0.0004
Phi Coefficient		0.4408	
Contingency Coefficient		0.4033	
Cramer's V		0.4408	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	1.484E-04
Pr <= P	0.0011

Sample Size = 66

The FREQ Procedure

Table of V18 by VV3

V18 (Fac-exp : V18)		VV3		
Frequency		English	Other	Total
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct				
-----+-----+-----+-----+-----				
Unsatisfact	0	1		1
	0.4545	0.5455		
	0.4545	0.3788		
	0.00	1.52		1.52
	0.00	100.00		
	0.00	2.78		
-----+-----+-----+-----+-----				
Needs-atten	1	3		4
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55		6.06
	25.00	75.00		
	3.33	8.33		
-----+-----+-----+-----+-----				
Acceptable	14	13		27
	12.273	14.727		
	0.2431	0.2026		
	21.21	19.70		40.91
	51.85	48.15		
	46.67	36.11		
-----+-----+-----+-----+-----				
H-satisfact	15	19		34
	15.455	18.545		
	0.0134	0.0111		
	22.73	28.79		51.52
	44.12	55.88		
	50.00	52.78		
-----+-----+-----+-----+-----				
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V18 by VV3

Statistic	DF	Value	Prob
Chi-Square	3	1.9785	0.5769
Likelihood Ratio Chi-Square	3	2.3953	0.4945
Mantel-Haenszel Chi-Square	1	0.2136	0.6439
Phi Coefficient		0.1731	
Contingency Coefficient		0.1706	
Cramer's V		0.1731	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0270
Pr <= P	0.6684

Sample Size = 66

The FREQ Procedure

Table of V19 by VV3

V19 (Gest : V19)	VV3		
Frequency	English	Other	Total
Needs-atten	4	5	9
Expected	4.1538	4.8462	
Cell Chi-Square	0.0057	0.0049	
Percent	6.15	7.69	13.85
Row Pct	44.44	55.56	
Col Pct	13.33	14.29	
Acceptable	9	15	24
Expected	11.077	12.923	
Cell Chi-Square	0.3894	0.3338	
Percent	13.85	23.08	36.92
Row Pct	37.50	62.50	
Col Pct	30.00	42.86	
H-satisfact	17	15	32
Expected	14.769	17.231	
Cell Chi-Square	0.3369	0.2888	
Percent	26.15	23.08	49.23
Row Pct	53.13	46.88	
Col Pct	56.67	42.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V19 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.3595	0.5067
Likelihood Ratio Chi-Square	2	1.3675	0.5047
Mantel-Haenszel Chi-Square	1	0.6856	0.4077
Phi Coefficient		0.1446	
Contingency Coefficient		0.1431	
Cramer's V		0.1446	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V19 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0310
 Pr <= P 0.5164

Effective Sample Size = 65
 Frequency Missing = 1

Table of V20 by VV3

V20 (S-speed : V20) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	8	11
	5	6	
	0.8	0.6667	
	4.55	12.12	16.67
	27.27	72.73	
	10.00	22.22	
Acceptable	13	23	36
	16.364	19.636	
	0.6914	0.5762	
	19.70	34.85	54.55
	36.11	63.89	
	43.33	63.89	
H-satisfact	14	5	19
	8.6364	10.364	
	3.3311	2.7759	
	21.21	7.58	28.79
	73.68	26.32	
	46.67	13.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V20 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.8413	0.0120
Likelihood Ratio Chi-Square	2	9.0656	0.0108
Mantel-Haenszel Chi-Square	1	7.4194	0.0065
Phi Coefficient		0.3660	
Contingency Coefficient		0.3437	
Cramer's V		0.3660	

Fisher's Exact Test

Table Probability (P)	8.037E-04
Pr <= P	0.0099

Sample Size = 66

The FREQ Procedure

Table of V21 by VV3

V21(S-fluen : V21)	VV3		
Frequency	English	Other	Total
Needs-atten	2	7	9
Expected	4.1538	4.8462	
Cell Chi-Square	1.1168	0.9573	
Percent	3.08	10.77	13.85
Row Pct	22.22	77.78	
Col Pct	6.67	20.00	
Acceptable	10	20	30
Expected	13.846	16.154	
Cell Chi-Square	1.0684	0.9158	
Percent	15.38	30.77	46.15
Row Pct	33.33	66.67	
Col Pct	33.33	57.14	
H-satisfact	18	8	26
Expected	12	14	
Cell Chi-Square	3	2.5714	
Percent	27.69	12.31	40.00
Row Pct	69.23	30.77	
Col Pct	60.00	22.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V21 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	9.6296	0.0081
Likelihood Ratio Chi-Square	2	9.9020	0.0071
Mantel-Haenszel Chi-Square	1	8.6211	0.0033
Phi Coefficient		0.3849	
Contingency Coefficient		0.3592	
Cramer's V		0.3849	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V21 by VV3

Fisher's Exact Test

 Table Probability (P) 5.616E-04
 Pr <= P 0.0101

 Effective Sample Size = 65
 Frequency Missing = 1

Table of V22 by VV3

V22(Expr-id : V22) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	2	2
	0.9231	1.0769	
	0.9231	0.7912	
	0.00	3.08	3.08
	0.00	100.00	
	0.00	5.71	
Acceptable	11	19	30
	13.846	16.154	
	0.585	0.5015	
	16.92	29.23	46.15
	36.67	63.33	
	36.67	54.29	
H-satisfact	19	14	33
	15.231	17.769	
	0.9328	0.7995	
	29.23	21.54	50.77
	57.58	42.42	
	63.33	40.00	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V22 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.5331	0.1037
Likelihood Ratio Chi-Square	2	5.3075	0.0704
Mantel-Haenszel Chi-Square	1	4.3151	0.0378
Phi Coefficient		0.2641	
Contingency Coefficient		0.2553	
Cramer's V		0.2641	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0149
Pr <= P	0.0870

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V24 by VV3

V24 (Ver-gram : V24)	VV3		
Frequency	English	Other	Total
Needs-atten	0	3	3
Expected	1.3636	1.6364	
Cell Chi-Square	1.3636	1.1364	
Percent	0.00	4.55	4.55
Row Pct	0.00	100.00	
Col Pct	0.00	8.33	
Acceptable	15	25	40
Expected	18.182	21.818	
Cell Chi-Square	0.5568	0.464	
Percent	22.73	37.88	60.61
Row Pct	37.50	62.50	
Col Pct	50.00	69.44	
H-satisfact	15	8	23
Expected	10.455	12.545	
Cell Chi-Square	1.9763	1.6469	
Percent	22.73	12.12	34.85
Row Pct	65.22	34.78	
Col Pct	50.00	22.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V24 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	7.1440	0.0281
Likelihood Ratio Chi-Square	2	8.3040	0.0157
Mantel-Haenszel Chi-Square	1	6.9561	0.0084
Phi Coefficient		0.3290	
Contingency Coefficient		0.3125	
Cramer's V		0.3290	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V24 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0036
 Pr <= P 0.0213

Sample Size = 66

Table of V29 by VV3

V29(Learn-say : V29) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	5	6
	2.7273	3.2727	
	1.0939	0.9116	
	1.52	7.58	9.09
	16.67	83.33	
	3.33	13.89	
Acceptable	11	15	26
	11.818	14.182	
	0.0566	0.0472	
	16.67	22.73	39.39
	42.31	57.69	
	36.67	41.67	
H-satisfact	18	16	34
	15.455	18.545	
	0.4193	0.3494	
	27.27	24.24	51.52
	52.94	47.06	
	60.00	44.44	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V29 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.8780	0.2372
Likelihood Ratio Chi-Square	2	3.1004	0.2122
Mantel-Haenszel Chi-Square	1	2.5788	0.1083
Phi Coefficient		0.2088	
Contingency Coefficient		0.2044	
Cramer's V		0.2088	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0185
Pr <= P	0.2488

Sample Size = 66

The FREQ Procedure

Table of V30 by VV3

V30 (Seek-clar : V30)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	6	14	20
Expected	9.0909	10.909	
Cell Chi-Square	1.0509	0.8758	
Percent	9.09	21.21	30.30
Row Pct	30.00	70.00	
Col Pct	20.00	38.89	
H-satisfact	24	20	44
Expected	20	24	
Cell Chi-Square	0.8	0.6667	
Percent	36.36	30.30	66.67
Row Pct	54.55	45.45	
Col Pct	80.00	55.56	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V30 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.0600	0.0797
Likelihood Ratio Chi-Square	2	5.8818	0.0528
Mantel-Haenszel Chi-Square	1	4.9670	0.0258
Phi Coefficient		0.2769	
Contingency Coefficient		0.2668	
Cramer's V		0.2769	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Mrs T Peyper - Research Project - T11018 21:29 Thursday, October 4, 2012 123
(P02-R8.14.6) : n-Way PROC FREQ of component varbs for ITEM = VRSKILL data set TEACHER

The FREQ Procedure

Statistics for Table of V30 by VV3

Fisher's Exact Test

Table Probability (P) 0.0124
Pr <= P 0.0805

Sample Size = 66

The FREQ Procedure

Table of V3 by TVV3

V3(V-proj : V3)		TVV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
Needs-atten	2	4	6	
	2.7273	3.2727		
	0.1939	0.1616		
	3.03	6.06	9.09	
	33.33	66.67		
	6.67	11.11		
Acceptable	8	16	24	
	10.909	13.091		
	0.7758	0.6465		
	12.12	24.24	36.36	
	33.33	66.67		
	26.67	44.44		
H-satisfact	20	16	36	
	16.364	19.636		
	0.8081	0.6734		
	30.30	24.24	54.55	
	55.56	44.44		
	66.67	44.44		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V3 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.2593	0.1960
Likelihood Ratio Chi-Square	2	3.2971	0.1923
Mantel-Haenszel Chi-Square	1	2.6667	0.1025
Phi Coefficient		0.2222	
Contingency Coefficient		0.2169	
Cramer's V		0.2222	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V3 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0146
 Pr <= P 0.1952

Sample Size = 66

Table of V4 by TVV3

V4(V-pitc : V4)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	4	4
Expected	1.8182	2.1818	
Cell Chi-Square	1.8182	1.5152	
Percent	0.00	6.06	6.06
Row Pct	0.00	100.00	
Col Pct	0.00	11.11	
Acceptable	9	22	31
Expected	14.091	16.909	
Cell Chi-Square	1.8393	1.5327	
Percent	13.64	33.33	46.97
Row Pct	29.03	70.97	
Col Pct	30.00	61.11	
H-satisfact	21	10	31
Expected	14.091	16.909	
Cell Chi-Square	3.3877	2.8231	
Percent	31.82	15.15	46.97
Row Pct	67.74	32.26	
Col Pct	70.00	27.78	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V4 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	12.9161	0.0016
Likelihood Ratio Chi-Square	2	14.6124	0.0007
Mantel-Haenszel Chi-Square	1	12.6300	0.0004
Phi Coefficient		0.4424	
Contingency Coefficient		0.4046	
Cramer's V		0.4424	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	1.621E-04
Pr <= P	0.0013

Sample Size = 66

The FREQ Procedure

Table of V5 by TVV3

V5 (Pron : V5)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	6	7
Expected	3.1818	3.8182	
Cell Chi-Square	1.4961	1.2468	
Percent	1.52	9.09	10.61
Row Pct	14.29	85.71	
Col Pct	3.33	16.67	
Acceptable	8	21	29
Expected	13.182	15.818	
Cell Chi-Square	2.037	1.6975	
Percent	12.12	31.82	43.94
Row Pct	27.59	72.41	
Col Pct	26.67	58.33	
H-satisfact	21	9	30
Expected	13.636	16.364	
Cell Chi-Square	3.9764	3.3136	
Percent	31.82	13.64	45.45
Row Pct	70.00	30.00	
Col Pct	70.00	25.00	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V5 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.7673	0.0010
Likelihood Ratio Chi-Square	2	14.3936	0.0007
Mantel-Haenszel Chi-Square	1	12.4869	0.0004
Phi Coefficient		0.4567	
Contingency Coefficient		0.4154	
Cramer's V		0.4567	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V5 by TVV3

Fisher's Exact Test

 Table Probability (P) 7.792E-05
 Pr <= P 6.363E-04

Sample Size = 66

Table of V6 by TVV3

V6(Sen-struc : V6) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	4	4
	1.8182	2.1818	
	1.8182	1.5152	
	0.00	6.06	6.06
	0.00	100.00	
	0.00	11.11	
Acceptable	8	19	27
	12.273	14.727	
	1.4875	1.2396	
	12.12	28.79	40.91
	29.63	70.37	
	26.67	52.78	
H-satisfact	22	13	35
	15.909	19.091	
	2.3319	1.9433	
	33.33	19.70	53.03
	62.86	37.14	
	73.33	36.11	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V6 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	10.3357	0.0057
Likelihood Ratio Chi-Square	2	11.9540	0.0025
Mantel-Haenszel Chi-Square	1	10.1671	0.0014
Phi Coefficient		0.3957	
Contingency Coefficient		0.3680	
Cramer's V		0.3957	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	5.941E-04
Pr <= P	0.0039

Sample Size = 66

The FREQ Procedure

Table of V7 by TVV3

V7 (Dist-q-s-i : V7)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	1	3	4	
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55	6.06	
	25.00	75.00		
	3.33	8.33		
Acceptable	7	16	23	
	10.455	12.545		
	1.1415	0.9513		
	10.61	24.24	34.85	
	30.43	69.57		
	23.33	44.44		
H-satisfact	22	17	39	
	17.727	21.273		
	1.0298	0.8582		
	33.33	25.76	59.09	
	56.41	43.59		
	73.33	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V7 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6558	0.0975
Likelihood Ratio Chi-Square	2	4.7607	0.0925
Mantel-Haenszel Chi-Square	1	4.2124	0.0401
Phi Coefficient		0.2656	
Contingency Coefficient		0.2567	
Cramer's V		0.2656	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V7 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0091
 Pr <= P 0.0986

Sample Size = 66

Table of V8 by TVV3

V8(NB-wds : V8) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	4	5
	2.2727	2.7273	
	0.7127	0.5939	
	1.52	6.06	7.58
	20.00	80.00	
	3.33	11.11	
Acceptable	6	22	28
	12.727	15.273	
	3.5558	2.9632	
	9.09	33.33	42.42
	21.43	78.57	
	20.00	61.11	
H-satisfact	23	10	33
	15	18	
	4.2667	3.5556	
	34.85	15.15	50.00
	69.70	30.30	
	76.67	27.78	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V8 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	15.6479	0.0004
Likelihood Ratio Chi-Square	2	16.3637	0.0003
Mantel-Haenszel Chi-Square	1	13.0754	0.0003
Phi Coefficient		0.4869	
Contingency Coefficient		0.4378	
Cramer's V		0.4869	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	3.161E-05
Pr <= P	2.311E-04

Sample Size = 66

The FREQ Procedure

Table of V9 by TVV3

V9(Trans : V9)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	7	17	24
Expected	10.909	13.091	
Cell Chi-Square	1.4008	1.1673	
Percent	10.61	25.76	36.36
Row Pct	29.17	70.83	
Col Pct	23.33	47.22	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V9 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6339	0.0986
Likelihood Ratio Chi-Square	2	4.7329	0.0938
Mantel-Haenszel Chi-Square	1	3.8181	0.0507
Phi Coefficient		0.2650	
Contingency Coefficient		0.2561	
Cramer's V		0.2650	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V9 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0096
Pr <= P                    0.0746
```

Sample Size = 66

Table of V10 by TVV3

V10(Fac-exp : V10)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	1	3		4
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55		6.06
	25.00	75.00		
	3.33	8.33		
Acceptable	12	16		28
	12.727	15.273		
	0.0416	0.0346		
	18.18	24.24		42.42
	42.86	57.14		
	40.00	44.44		
H-satisfact	17	17		34
	15.455	18.545		
	0.1545	0.1288		
	25.76	25.76		51.52
	50.00	50.00		
	56.67	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V10 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0345	0.5962
Likelihood Ratio Chi-Square	2	1.0737	0.5846
Mantel-Haenszel Chi-Square	1	0.9109	0.3399
Phi Coefficient		0.1252	
Contingency Coefficient		0.1242	
Cramer's V		0.1252	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0515
Pr <= P	0.6224

Sample Size = 66

The FREQ Procedure

Table of V11 by TVV3

V11 (Gest : V11)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	3	4
Expected	1.8182	2.1818	
Cell Chi-Square	0.3682	0.3068	
Percent	1.52	4.55	6.06
Row Pct	25.00	75.00	
Col Pct	3.33	8.33	
Acceptable	11	22	33
Expected	15	18	
Cell Chi-Square	1.0667	0.8889	
Percent	16.67	33.33	50.00
Row Pct	33.33	66.67	
Col Pct	36.67	61.11	
H-satisfact	18	11	29
Expected	13.182	15.818	
Cell Chi-Square	1.7611	1.4676	
Percent	27.27	16.67	43.94
Row Pct	62.07	37.93	
Col Pct	60.00	30.56	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V11 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	5.8593	0.0534
Likelihood Ratio Chi-Square	2	5.9445	0.0512
Mantel-Haenszel Chi-Square	1	5.3630	0.0206
Phi Coefficient		0.2980	
Contingency Coefficient		0.2855	
Cramer's V		0.2980	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V11 by TVV3

Fisher's Exact Test

Table Probability (P) 0.0049
Pr <= P 0.0458

Sample Size = 66

Table of V12 by TVV3

V12(S-speed : V12)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	2	2		4
	1.8182	2.1818		
	0.0182	0.0152		
	3.03	3.03		6.06
	50.00	50.00		
	6.67	5.56		
Acceptable	9	25		34
	15.455	18.545		
	2.6957	2.2464		
	13.64	37.88		51.52
	26.47	73.53		
	30.00	69.44		
H-satisfact	19	9		28
	12.727	15.273		
	3.0916	2.5763		
	28.79	13.64		42.42
	67.86	32.14		
	63.33	25.00		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V12 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	10.6433	0.0049
Likelihood Ratio Chi-Square	2	10.9406	0.0042
Mantel-Haenszel Chi-Square	1	6.3321	0.0119
Phi Coefficient		0.4016	
Contingency Coefficient		0.3727	
Cramer's V		0.4016	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	3.940E-04
Pr <= P	0.0025

Sample Size = 66

The FREQ Procedure

Table of V13 by TVV3

V13(S-fluen : V13)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	0	6		6
	2.7273	3.2727		
	2.7273	2.2727		
	0.00	9.09		9.09
	0.00	100.00		
	0.00	16.67		
Acceptable	7	18		25
	11.364	13.636		
	1.6756	1.3964		
	10.61	27.27		37.88
	28.00	72.00		
	23.33	50.00		
H-satisfact	23	12		35
	15.909	19.091		
	3.1605	2.6338		
	34.85	18.18		53.03
	65.71	34.29		
	76.67	33.33		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V13 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.8663	0.0010
Likelihood Ratio Chi-Square	2	16.2977	0.0003
Mantel-Haenszel Chi-Square	1	13.5507	0.0002
Phi Coefficient		0.4584	
Contingency Coefficient		0.4167	
Cramer's V		0.4584	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V13 by TVV3

Fisher's Exact Test

 Table Probability (P) 7.271E-05
 Pr <= P 6.120E-04

Sample Size = 66

Table of V14 by TVV3

V14(Expr-id : V14)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	2	7		9
	4.0909	4.9091		
	1.0687	0.8906		
	3.03	10.61		13.64
	22.22	77.78		
	6.67	19.44		
Acceptable	8	12		20
	9.0909	10.909		
	0.1309	0.1091		
	12.12	18.18		30.30
	40.00	60.00		
	26.67	33.33		
H-satisfact	20	17		37
	16.818	20.182		
	0.602	0.5016		
	30.30	25.76		56.06
	54.05	45.95		
	66.67	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V14 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.3029	0.1918
Likelihood Ratio Chi-Square	2	3.4447	0.1786
Mantel-Haenszel Chi-Square	1	3.2365	0.0720
Phi Coefficient		0.2237	
Contingency Coefficient		0.2183	
Cramer's V		0.2237	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0131
Pr <= P	0.1937

Sample Size = 66

The FREQ Procedure

Table of V15 by TVV3

V15 (Synon : V15)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	5	6
Expected	2.7273	3.2727	
Cell Chi-Square	1.0939	0.9116	
Percent	1.52	7.58	9.09
Row Pct	16.67	83.33	
Col Pct	3.33	13.89	
Acceptable	11	20	31
Expected	14.091	16.909	
Cell Chi-Square	0.678	0.565	
Percent	16.67	30.30	46.97
Row Pct	35.48	64.52	
Col Pct	36.67	55.56	
H-satisfact	18	11	29
Expected	13.182	15.818	
Cell Chi-Square	1.7611	1.4676	
Percent	27.27	16.67	43.94
Row Pct	62.07	37.93	
Col Pct	60.00	30.56	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V15 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.4773	0.0392
Likelihood Ratio Chi-Square	2	6.7222	0.0347
Mantel-Haenszel Chi-Square	1	6.3066	0.0120
Phi Coefficient		0.3133	
Contingency Coefficient		0.2989	
Cramer's V		0.3133	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V15 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0032
Pr <= P                    0.0408
  
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Sample Size = 66

Table of V16 by TVV3

V16(Ver-gram : V16)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
Acceptable	7	17		24
	10.909	13.091		
	1.4008	1.1673		
	10.61	25.76		36.36
	29.17	70.83		
	23.33	47.22		
H-satisfact	23	15		38
	17.273	20.727		
	1.899	1.5825		
	34.85	22.73		57.58
	60.53	39.47		
	76.67	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V16 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	9.3830	0.0092
Likelihood Ratio Chi-Square	2	10.9923	0.0041
Mantel-Haenszel Chi-Square	1	9.2365	0.0024
Phi Coefficient		0.3770	
Contingency Coefficient		0.3528	
Cramer's V		0.3770	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	9.706E-04
Pr <= P	0.0082

Sample Size = 66

The FREQ Procedure

Table of V17 by TVV3

V17(Writ-gram : V17)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	1	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.0091	0.0076	
Percent	1.52	1.52	3.03
Row Pct	50.00	50.00	
Col Pct	3.33	2.78	
Acceptable	6	20	26
Expected	11.818	14.182	
Cell Chi-Square	2.8643	2.3869	
Percent	9.09	30.30	39.39
Row Pct	23.08	76.92	
Col Pct	20.00	55.56	
H-satisfact	23	15	38
Expected	17.273	20.727	
Cell Chi-Square	1.899	1.5825	
Percent	34.85	22.73	57.58
Row Pct	60.53	39.47	
Col Pct	76.67	41.67	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V17 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	8.7495	0.0126
Likelihood Ratio Chi-Square	2	9.1037	0.0105
Mantel-Haenszel Chi-Square	1	6.1969	0.0128
Phi Coefficient		0.3641	
Contingency Coefficient		0.3421	
Cramer's V		0.3641	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V17 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0013
 Pr <= P 0.0057

Sample Size = 66

Table of V18 by TVV3

V18 (Frm-q : V18)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	0	6		6
	2.7273	3.2727		
	2.7273	2.2727		
	0.00	9.09		9.09
	0.00	100.00		
	0.00	16.67		
Acceptable	8	15		23
	10.455	12.545		
	0.5763	0.4802		
	12.12	22.73		34.85
	34.78	65.22		
	26.67	41.67		
H-satisfact	22	15		37
	16.818	20.182		
	1.5966	1.3305		
	33.33	22.73		56.06
	59.46	40.54		
	73.33	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V18 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	8.9835	0.0112
Likelihood Ratio Chi-Square	2	11.2685	0.0036
Mantel-Haenszel Chi-Square	1	8.7371	0.0031
Phi Coefficient		0.3689	
Contingency Coefficient		0.3461	
Cramer's V		0.3689	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.323E-04
Pr <= P	0.0096

Sample Size = 66

The FREQ Procedure

Table of V19 by TVV3

V19(Spell : V19)	TVV3		
Frequency	English	Other	Total
Needs-atten	2	1	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.297	0.2475	
Percent	3.03	1.52	4.55
Row Pct	66.67	33.33	
Col Pct	6.67	2.78	
Acceptable	6	18	24
Expected	10.909	13.091	
Cell Chi-Square	2.2091	1.8409	
Percent	9.09	27.27	36.36
Row Pct	25.00	75.00	
Col Pct	20.00	50.00	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V19 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.4825	0.0391
Likelihood Ratio Chi-Square	2	6.7154	0.0348
Mantel-Haenszel Chi-Square	1	2.3487	0.1254
Phi Coefficient		0.3134	
Contingency Coefficient		0.2991	
Cramer's V		0.3134	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V19 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0037
Pr <= P                   0.0261
  
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Sample Size = 66

Table of V20 by TVV3

V20(Punct : V20)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	0	2		2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
Acceptable	8	19		27
	12.273	14.727		
	1.4875	1.2396		
	12.12	28.79		40.91
	29.63	70.37		
	26.67	52.78		
H-satisfact	22	15		37
	16.818	20.182		
	1.5966	1.3305		
	33.33	22.73		56.06
	59.46	40.54		
	73.33	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V20 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.3209	0.0257
Likelihood Ratio Chi-Square	2	8.1732	0.0168
Mantel-Haenszel Chi-Square	1	7.2099	0.0073
Phi Coefficient		0.3330	
Contingency Coefficient		0.3160	
Cramer's V		0.3330	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0038
Pr <= P	0.0169

Sample Size = 66

The FREQ Procedure

Table of V21 by TVV3

V21(Learn-say : V21)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	5	17	22
Expected	10	12	
Cell Chi-Square	2.5	2.0833	
Percent	7.58	25.76	33.33
Row Pct	22.73	77.27	
Col Pct	16.67	47.22	
H-satisfact	24	17	41
Expected	18.636	22.364	
Cell Chi-Square	1.5437	1.2864	
Percent	36.36	25.76	62.12
Row Pct	58.54	41.46	
Col Pct	80.00	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V21 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.5912	0.0225
Likelihood Ratio Chi-Square	2	7.9108	0.0192
Mantel-Haenszel Chi-Square	1	5.8901	0.0152
Phi Coefficient		0.3391	
Contingency Coefficient		0.3212	
Cramer's V		0.3391	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V21 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0022
Pr <= P	0.0141

Sample Size = 66

Table of V22 by TVV3

V22(Seek-clar : V22) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	2	3
	1.3636	1.6364	
	0.097	0.0808	
	1.52	3.03	4.55
	33.33	66.67	
	3.33	5.56	
Acceptable	4	20	24
	10.909	13.091	
	4.3758	3.6465	
	6.06	30.30	36.36
	16.67	83.33	
	13.33	55.56	
H-satisfact	25	14	39
	17.727	21.273	
	2.9837	2.4864	
	37.88	21.21	59.09
	64.10	35.90	
	83.33	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V22 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.6701	0.0011
Likelihood Ratio Chi-Square	2	14.5828	0.0007
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4551	
Contingency Coefficient		0.4142	
Cramer's V		0.4551	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.717E-05
Pr <= P	3.420E-04

Sample Size = 66

The FREQ Procedure

Table of V30 by TVV3

V30 (Adres : V30)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	2	10	12
Expected	5.4545	6.5455	
Cell Chi-Square	2.1879	1.8232	
Percent	3.03	15.15	18.18
Row Pct	16.67	83.33	
Col Pct	6.67	27.78	
H-satisfact	28	24	52
Expected	23.636	28.364	
Cell Chi-Square	0.8056	0.6713	
Percent	42.42	36.36	78.79
Row Pct	53.85	46.15	
Col Pct	93.33	66.67	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V30 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.1547	0.0279
Likelihood Ratio Chi-Square	2	8.3564	0.0153
Mantel-Haenszel Chi-Square	1	6.8503	0.0089
Phi Coefficient		0.3292	
Contingency Coefficient		0.3127	
Cramer's V		0.3292	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V30 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0051
Pr <= P	0.0163

Sample Size = 66

Table of V31 by TVV3

V31(Pre-know : V31) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	4	5
	2.2727	2.7273	
	0.7127	0.5939	
	1.52	6.06	7.58
	20.00	80.00	
	3.33	11.11	
Acceptable	9	11	20
	9.0909	10.909	
	0.0009	0.0008	
	13.64	16.67	30.30
	45.00	55.00	
	30.00	30.56	
H-satisfact	20	21	41
	18.636	22.364	
	0.0998	0.0831	
	30.30	31.82	62.12
	48.78	51.22	
	66.67	58.33	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V31 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4913	0.4744
Likelihood Ratio Chi-Square	2	1.6060	0.4480
Mantel-Haenszel Chi-Square	1	1.0472	0.3061
Phi Coefficient		0.1503	
Contingency Coefficient		0.1486	
Cramer's V		0.1503	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0410
Pr <= P	0.5820

Sample Size = 66

The FREQ Procedure

Table of V32 by TVV3

V32 (Lev-Q : V32)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	10	21	31
Expected	14.091	16.909	
Cell Chi-Square	1.1877	0.9897	
Percent	15.15	31.82	46.97
Row Pct	32.26	67.74	
Col Pct	33.33	58.33	
H-satisfact	19	13	32
Expected	14.545	17.455	
Cell Chi-Square	1.3642	1.1368	
Percent	28.79	19.70	48.48
Row Pct	59.38	40.63	
Col Pct	63.33	36.11	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V32 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.8562	0.0882
Likelihood Ratio Chi-Square	2	4.9148	0.0857
Mantel-Haenszel Chi-Square	1	4.1431	0.0418
Phi Coefficient		0.2713	
Contingency Coefficient		0.2618	
Cramer's V		0.2713	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V32 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0084
Pr <= P	0.0637

Sample Size = 66

Table of V33 by TVV3

V33(Q-ind : V33)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
Acceptable	8	15		23
	10.455	12.545		
	0.5763	0.4802		
	12.12	22.73		34.85
	34.78	65.22		
	26.67	41.67		
H-satisfact	22	17		39
	17.727	21.273		
	1.0298	0.8582		
	33.33	25.76		59.09
	56.41	43.59		
	73.33	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V33 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.2779	0.0433
Likelihood Ratio Chi-Square	2	7.8064	0.0202
Mantel-Haenszel Chi-Square	1	6.0299	0.0141
Phi Coefficient		0.3084	
Contingency Coefficient		0.2947	
Cramer's V		0.3084	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0045
Pr <= P	0.0366

Sample Size = 66

The FREQ Procedure

Table of V34 by TVV3

V34(Q-clas : V34)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	3	3
Expected	1.3636	1.6364	
Cell Chi-Square	1.3636	1.1364	
Percent	0.00	4.55	4.55
Row Pct	0.00	100.00	
Col Pct	0.00	8.33	
Acceptable	9	10	19
Expected	8.6364	10.364	
Cell Chi-Square	0.0153	0.0128	
Percent	13.64	15.15	28.79
Row Pct	47.37	52.63	
Col Pct	30.00	27.78	
H-satisfact	21	23	44
Expected	20	24	
Cell Chi-Square	0.05	0.0417	
Percent	31.82	34.85	66.67
Row Pct	47.73	52.27	
Col Pct	70.00	63.89	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V34 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6197	0.2699
Likelihood Ratio Chi-Square	2	3.7563	0.1529
Mantel-Haenszel Chi-Square	1	1.0307	0.3100
Phi Coefficient		0.1992	
Contingency Coefficient		0.1954	
Cramer's V		0.1992	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V34 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0337
 Pr <= P 0.4080

Sample Size = 66

Table of V35 by TVV3

V35(Resp-1 : V35) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	1	2
	0.9091	1.0909	
	0.0091	0.0076	
	1.52	1.52	3.03
	50.00	50.00	
	3.33	2.78	
Acceptable	7	15	22
	10	12	
	0.9	0.75	
	10.61	22.73	33.33
	31.82	68.18	
	23.33	41.67	
H-satisfact	22	20	42
	19.091	22.909	
	0.4433	0.3694	
	33.33	30.30	63.64
	52.38	47.62	
	73.33	55.56	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V35 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.4794	0.2895
Likelihood Ratio Chi-Square	2	2.5259	0.2828
Mantel-Haenszel Chi-Square	1	1.5968	0.2064
Phi Coefficient		0.1938	
Contingency Coefficient		0.1903	
Cramer's V		0.1938	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0318
Pr <= P	0.2684

Sample Size = 66

The FREQ Procedure

Table of V36 by TVV3

V36(Hand-ina : V36)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	3	2		5
	2.2727	2.7273		
	0.2327	0.1939		
	4.55	3.03		7.58
	60.00	40.00		
	10.00	5.56		
Acceptable	8	16		24
	10.909	13.091		
	0.7758	0.6465		
	12.12	24.24		36.36
	33.33	66.67		
	26.67	44.44		
H-satisfact	19	18		37
	16.818	20.182		
	0.283	0.2359		
	28.79	27.27		56.06
	51.35	48.65		
	63.33	50.00		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V36 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.3678	0.3061
Likelihood Ratio Chi-Square	2	2.4006	0.3011
Mantel-Haenszel Chi-Square	1	0.3173	0.5732
Phi Coefficient		0.1894	
Contingency Coefficient		0.1861	
Cramer's V		0.1894	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V36 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0236
 Pr <= P 0.3481

Sample Size = 66

Table of V37 by TVV3

V37(Use-alt : V37) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	4	7
	3.1818	3.8182	
	0.0104	0.0087	
	4.55	6.06	10.61
	42.86	57.14	
	10.00	11.11	
Acceptable	10	16	26
	11.818	14.182	
	0.2797	0.2331	
	15.15	24.24	39.39
	38.46	61.54	
	33.33	44.44	
H-satisfact	17	16	33
	15	18	
	0.2667	0.2222	
	25.76	24.24	50.00
	51.52	48.48	
	56.67	44.44	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V37 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0208	0.6003
Likelihood Ratio Chi-Square	2	1.0246	0.5991
Mantel-Haenszel Chi-Square	1	0.6354	0.4254
Phi Coefficient		0.1244	
Contingency Coefficient		0.1234	
Cramer's V		0.1244	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0393
Pr <= P	0.6403

Sample Size = 66

The FREQ Procedure

Table of V38 by TVV3

V38 (Form : V38)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	1	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.0091	0.0076	
Percent	1.52	1.52	3.03
Row Pct	50.00	50.00	
Col Pct	3.33	2.78	
Acceptable	7	16	23
Expected	10.455	12.545	
Cell Chi-Square	1.1415	0.9513	
Percent	10.61	24.24	34.85
Row Pct	30.43	69.57	
Col Pct	23.33	44.44	
H-satisfact	22	19	41
Expected	18.636	22.364	
Cell Chi-Square	0.6071	0.5059	
Percent	33.33	28.79	62.12
Row Pct	53.66	46.34	
Col Pct	73.33	52.78	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V38 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.2224	0.1996
Likelihood Ratio Chi-Square	2	3.2911	0.1929
Mantel-Haenszel Chi-Square	1	2.1321	0.1442
Phi Coefficient		0.2210	
Contingency Coefficient		0.2158	
Cramer's V		0.2210	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V38 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0217
Pr <= P                    0.1537
```

Sample Size = 66

Table of V39 by TVV3

V39(Firm : V39)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	2	5		7
	3.1818	3.8182		
	0.439	0.3658		
	3.03	7.58		10.61
	28.57	71.43		
	6.67	13.89		
Acceptable	13	20		33
	15	18		
	0.2667	0.2222		
	19.70	30.30		50.00
	39.39	60.61		
	43.33	55.56		
H-satisfact	15	11		26
	11.818	14.182		
	0.8566	0.7139		
	22.73	16.67		39.39
	57.69	42.31		
	50.00	30.56		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V39 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.8642	0.2388
Likelihood Ratio Chi-Square	2	2.8961	0.2350
Mantel-Haenszel Chi-Square	1	2.7474	0.0974
Phi Coefficient		0.2083	
Contingency Coefficient		0.2039	
Cramer's V		0.2083	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0169
Pr <= P	0.2543

Sample Size = 66

The FREQ Procedure

Table of V40 by TVV3

V40 (Instr : V40)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	1	2		3
	1.3636	1.6364		
	0.097	0.0808		
	1.52	3.03		4.55
	33.33	66.67		
	3.33	5.56		
Acceptable	9	19		28
	12.727	15.273		
	1.0916	0.9096		
	13.64	28.79		42.42
	32.14	67.86		
	30.00	52.78		
H-satisfact	20	15		35
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73		53.03
	57.14	42.86		
	66.67	41.67		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V40 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.1075	0.1283
Likelihood Ratio Chi-Square	2	4.1618	0.1248
Mantel-Haenszel Chi-Square	1	3.5055	0.0612
Phi Coefficient		0.2495	
Contingency Coefficient		0.2421	
Cramer's V		0.2495	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V40 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0122
Pr <= P	0.1040

Sample Size = 66

Table of V41 by TVV3

V41(Cont-cls : V41) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Unsatisfact	1	0	1
	0.4545	0.5455	
	0.6545	0.5455	
	1.52	0.00	1.52
	100.00	0.00	
	3.33	0.00	
Needs-atten	1	5	6
	2.7273	3.2727	
	1.0939	0.9116	
	1.52	7.58	9.09
	16.67	83.33	
	3.33	13.89	
Acceptable	13	13	26
	11.818	14.182	
	0.1182	0.0985	
	19.70	19.70	39.39
	50.00	50.00	
	43.33	36.11	
H-satisfact	15	18	33
	15	18	
	0	0	
	22.73	27.27	50.00
	45.45	54.55	
	50.00	50.00	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V41 by TVV3

Statistic	DF	Value	Prob
Chi-Square	3	3.4222	0.3310
Likelihood Ratio Chi-Square	3	4.0242	0.2589
Mantel-Haenszel Chi-Square	1	0.0480	0.8266
Phi Coefficient		0.2277	
Contingency Coefficient		0.2220	
Cramer's V		0.2277	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0117
Pr <= P	0.3173

Sample Size = 66

The FREQ Procedure

Table of V42 by TVV3

V42 (Teach-aids : V42)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	1	5	6	
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58	9.09	
	16.67	83.33		
	3.33	13.89		
Acceptable	12	14	26	
	11.818	14.182		
	0.0028	0.0023		
	18.18	21.21	39.39	
	46.15	53.85		
	40.00	38.89		
H-satisfact	17	17	34	
	15.455	18.545		
	0.1545	0.1288		
	25.76	25.76	51.52	
	50.00	50.00		
	56.67	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V42 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.2940	0.3176
Likelihood Ratio Chi-Square	2	2.5188	0.2838
Mantel-Haenszel Chi-Square	1	1.5129	0.2187
Phi Coefficient		0.1864	
Contingency Coefficient		0.1833	
Cramer's V		0.1864	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V42 by TVV3

Fisher's Exact Test

Table Probability (P) 0.0245
Pr <= P 0.3321

Sample Size = 66

The FREQ Procedure

Table of V14 by TVV3

V14 (Expr-id : V14)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	2	7	9	
	4.0909	4.9091		
	1.0687	0.8906		
	3.03	10.61	13.64	
	22.22	77.78		
	6.67	19.44		
Acceptable	8	12	20	
	9.0909	10.909		
	0.1309	0.1091		
	12.12	18.18	30.30	
	40.00	60.00		
	26.67	33.33		
H-satisfact	20	17	37	
	16.818	20.182		
	0.602	0.5016		
	30.30	25.76	56.06	
	54.05	45.95		
	66.67	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V14 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.3029	0.1918
Likelihood Ratio Chi-Square	2	3.4447	0.1786
Mantel-Haenszel Chi-Square	1	3.2365	0.0720
Phi Coefficient		0.2237	
Contingency Coefficient		0.2183	
Cramer's V		0.2237	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V14 by TVV3

Fisher's Exact Test

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-----
Table Probability (P)      0.0131
Pr <= P                   0.1937
  
```

Sample Size = 66

Table of V22 by TVV3

V22(Seek-clar : V22) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	2	3
	1.3636	1.6364	
	0.097	0.0808	
	1.52	3.03	4.55
	33.33	66.67	
	3.33	5.56	
Acceptable	4	20	24
	10.909	13.091	
	4.3758	3.6465	
	6.06	30.30	36.36
	16.67	83.33	
	13.33	55.56	
H-satisfact	25	14	39
	17.727	21.273	
	2.9837	2.4864	
	37.88	21.21	59.09
	64.10	35.90	
	83.33	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V22 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.6701	0.0011
Likelihood Ratio Chi-Square	2	14.5828	0.0007
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4551	
Contingency Coefficient		0.4142	
Cramer's V		0.4551	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.717E-05
Pr <= P	3.420E-04

Sample Size = 66

The FREQ Procedure

Table of V30 by TVV3

V30 (Adres : V30)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	2	10	12
Expected	5.4545	6.5455	
Cell Chi-Square	2.1879	1.8232	
Percent	3.03	15.15	18.18
Row Pct	16.67	83.33	
Col Pct	6.67	27.78	
H-satisfact	28	24	52
Expected	23.636	28.364	
Cell Chi-Square	0.8056	0.6713	
Percent	42.42	36.36	78.79
Row Pct	53.85	46.15	
Col Pct	93.33	66.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V30 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.1547	0.0279
Likelihood Ratio Chi-Square	2	8.3564	0.0153
Mantel-Haenszel Chi-Square	1	6.8503	0.0089
Phi Coefficient		0.3292	
Contingency Coefficient		0.3127	
Cramer's V		0.3292	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V30 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0051
Pr <= P	0.0163

Sample Size = 66

Table of V35 by TVV3

V35(Resp-1 : V35) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	1	2
	0.9091	1.0909	
	0.0091	0.0076	
	1.52	1.52	3.03
	50.00	50.00	
	3.33	2.78	
Acceptable	7	15	22
	10	12	
	0.9	0.75	
	10.61	22.73	33.33
	31.82	68.18	
	23.33	41.67	
H-satisfact	22	20	42
	19.091	22.909	
	0.4433	0.3694	
	33.33	30.30	63.64
	52.38	47.62	
	73.33	55.56	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V35 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.4794	0.2895
Likelihood Ratio Chi-Square	2	2.5259	0.2828
Mantel-Haenszel Chi-Square	1	1.5968	0.2064
Phi Coefficient		0.1938	
Contingency Coefficient		0.1903	
Cramer's V		0.1938	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0318
Pr <= P	0.2684

Sample Size = 66

The FREQ Procedure

Table of V36 by TVV3

V36(Hand-ina : V36)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	3	2	5	
	2.2727	2.7273		
	0.2327	0.1939		
	4.55	3.03	7.58	
	60.00	40.00		
	10.00	5.56		
Acceptable	8	16	24	
	10.909	13.091		
	0.7758	0.6465		
	12.12	24.24	36.36	
	33.33	66.67		
	26.67	44.44		
H-satisfact	19	18	37	
	16.818	20.182		
	0.283	0.2359		
	28.79	27.27	56.06	
	51.35	48.65		
	63.33	50.00		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V36 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.3678	0.3061
Likelihood Ratio Chi-Square	2	2.4006	0.3011
Mantel-Haenszel Chi-Square	1	0.3173	0.5732
Phi Coefficient		0.1894	
Contingency Coefficient		0.1861	
Cramer's V		0.1894	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V36 by TVV3

Fisher's Exact Test

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-----
Table Probability (P)      0.0236
Pr <= P                    0.3481
  
```

Sample Size = 66

Table of V37 by TVV3

V37(Use-alt : V37) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	4	7
	3.1818	3.8182	
	0.0104	0.0087	
	4.55	6.06	10.61
	42.86	57.14	
	10.00	11.11	
Acceptable	10	16	26
	11.818	14.182	
	0.2797	0.2331	
	15.15	24.24	39.39
	38.46	61.54	
	33.33	44.44	
H-satisfact	17	16	33
	15	18	
	0.2667	0.2222	
	25.76	24.24	50.00
	51.52	48.48	
	56.67	44.44	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V37 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0208	0.6003
Likelihood Ratio Chi-Square	2	1.0246	0.5991
Mantel-Haenszel Chi-Square	1	0.6354	0.4254
Phi Coefficient		0.1244	
Contingency Coefficient		0.1234	
Cramer's V		0.1244	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0393
Pr <= P	0.6403

Sample Size = 66

The FREQ Procedure

Table of V38 by TVV3

V38 (Form : V38)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	1	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.0091	0.0076	
Percent	1.52	1.52	3.03
Row Pct	50.00	50.00	
Col Pct	3.33	2.78	
Acceptable	7	16	23
Expected	10.455	12.545	
Cell Chi-Square	1.1415	0.9513	
Percent	10.61	24.24	34.85
Row Pct	30.43	69.57	
Col Pct	23.33	44.44	
H-satisfact	22	19	41
Expected	18.636	22.364	
Cell Chi-Square	0.6071	0.5059	
Percent	33.33	28.79	62.12
Row Pct	53.66	46.34	
Col Pct	73.33	52.78	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V38 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.2224	0.1996
Likelihood Ratio Chi-Square	2	3.2911	0.1929
Mantel-Haenszel Chi-Square	1	2.1321	0.1442
Phi Coefficient		0.2210	
Contingency Coefficient		0.2158	
Cramer's V		0.2210	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V38 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0217
 Pr <= P 0.1537

Sample Size = 66

Table of V39 by TVV3

V39(Firm : V39)		TVV3		
Frequency		English	Other	Total
Needs-atten	7	2	5	
		3.1818	3.8182	
		0.439	0.3658	
	10.61	3.03	7.58	
		28.57	71.43	
		6.67	13.89	
Acceptable	33	13	20	
		15	18	
		0.2667	0.2222	
	50.00	19.70	30.30	
		39.39	60.61	
		43.33	55.56	
H-satisfact	26	15	11	
		11.818	14.182	
		0.8566	0.7139	
	39.39	22.73	16.67	
		57.69	42.31	
		50.00	30.56	
Total	66	30	36	
		45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V39 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.8642	0.2388
Likelihood Ratio Chi-Square	2	2.8961	0.2350
Mantel-Haenszel Chi-Square	1	2.7474	0.0974
Phi Coefficient		0.2083	
Contingency Coefficient		0.2039	
Cramer's V		0.2083	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0169
Pr <= P	0.2543

Sample Size = 66

The FREQ Procedure

Table of V40 by TVV3

V40 (Instr : V40)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	1	2		3
	1.3636	1.6364		
	0.097	0.0808		
	1.52	3.03		4.55
	33.33	66.67		
	3.33	5.56		
Acceptable	9	19		28
	12.727	15.273		
	1.0916	0.9096		
	13.64	28.79		42.42
	32.14	67.86		
	30.00	52.78		
H-satisfact	20	15		35
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73		53.03
	57.14	42.86		
	66.67	41.67		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V40 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.1075	0.1283
Likelihood Ratio Chi-Square	2	4.1618	0.1248
Mantel-Haenszel Chi-Square	1	3.5055	0.0612
Phi Coefficient		0.2495	
Contingency Coefficient		0.2421	
Cramer's V		0.2495	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V40 by TVV3

Fisher's Exact Test

```

-----
Table Probability (P)      0.0122
Pr <= P                    0.1040
  
```

Sample Size = 66

Table of V41 by TVV3

V41(Cont-cls : V41)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Unsatisfact	1	0		1
	0.4545	0.5455		
	0.6545	0.5455		
	1.52	0.00		1.52
	100.00	0.00		
	3.33	0.00		
Needs-atten	1	5		6
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58		9.09
	16.67	83.33		
	3.33	13.89		
Acceptable	13	13		26
	11.818	14.182		
	0.1182	0.0985		
	19.70	19.70		39.39
	50.00	50.00		
	43.33	36.11		
H-satisfact	15	18		33
	15	18		
	0	0		
	22.73	27.27		50.00
	45.45	54.55		
	50.00	50.00		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V41 by TVV3

Statistic	DF	Value	Prob
Chi-Square	3	3.4222	0.3310
Likelihood Ratio Chi-Square	3	4.0242	0.2589
Mantel-Haenszel Chi-Square	1	0.0480	0.8266
Phi Coefficient		0.2277	
Contingency Coefficient		0.2220	
Cramer's V		0.2277	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0117
Pr <= P	0.3173

Sample Size = 66

The FREQ Procedure

Table of V42 by TVV3

V42 (Teach-aids : V42)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	1	5		6
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58		9.09
	16.67	83.33		
	3.33	13.89		
Acceptable	12	14		26
	11.818	14.182		
	0.0028	0.0023		
	18.18	21.21		39.39
	46.15	53.85		
	40.00	38.89		
H-satisfact	17	17		34
	15.455	18.545		
	0.1545	0.1288		
	25.76	25.76		51.52
	50.00	50.00		
	56.67	47.22		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V42 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.2940	0.3176
Likelihood Ratio Chi-Square	2	2.5188	0.2838
Mantel-Haenszel Chi-Square	1	1.5129	0.2187
Phi Coefficient		0.1864	
Contingency Coefficient		0.1833	
Cramer's V		0.1864	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V42 by TVV3

Fisher's Exact Test

Table Probability (P) 0.0245
Pr <= P 0.3321

Sample Size = 66

The FREQ Procedure

Table of V9 by TVV3

V9(Trans : V9)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	7	17	24
Expected	10.909	13.091	
Cell Chi-Square	1.4008	1.1673	
Percent	10.61	25.76	36.36
Row Pct	29.17	70.83	
Col Pct	23.33	47.22	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V9 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6339	0.0986
Likelihood Ratio Chi-Square	2	4.7329	0.0938
Mantel-Haenszel Chi-Square	1	3.8181	0.0507
Phi Coefficient		0.2650	
Contingency Coefficient		0.2561	
Cramer's V		0.2650	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V9 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0096
 Pr <= P 0.0746

Sample Size = 66

Table of V18 by TVV3

V18 (Frm-q : V18)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	0	6		6
	2.7273	3.2727		
	2.7273	2.2727		
	0.00	9.09		9.09
	0.00	100.00		
	0.00	16.67		
Acceptable	8	15		23
	10.455	12.545		
	0.5763	0.4802		
	12.12	22.73		34.85
	34.78	65.22		
	26.67	41.67		
H-satisfact	22	15		37
	16.818	20.182		
	1.5966	1.3305		
	33.33	22.73		56.06
	59.46	40.54		
	73.33	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V18 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	8.9835	0.0112
Likelihood Ratio Chi-Square	2	11.2685	0.0036
Mantel-Haenszel Chi-Square	1	8.7371	0.0031
Phi Coefficient		0.3689	
Contingency Coefficient		0.3461	
Cramer's V		0.3689	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.323E-04
Pr <= P	0.0096

Sample Size = 66

The FREQ Procedure

Table of V23 by TVV3

V23 (Ss-cor : V23)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	8	14	22
Expected	10	12	
Cell Chi-Square	0.4	0.3333	
Percent	12.12	21.21	33.33
Row Pct	36.36	63.64	
Col Pct	26.67	38.89	
H-satisfact	21	20	41
Expected	18.636	22.364	
Cell Chi-Square	0.2998	0.2498	
Percent	31.82	30.30	62.12
Row Pct	51.22	48.78	
Col Pct	70.00	55.56	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V23 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4607	0.4817
Likelihood Ratio Chi-Square	2	1.4753	0.4782
Mantel-Haenszel Chi-Square	1	1.3356	0.2478
Phi Coefficient		0.1488	
Contingency Coefficient		0.1471	
Cramer's V		0.1488	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V23 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0468
Pr <= P	0.5149

Sample Size = 66

Table of V24 by TVV3

V24 (Pron-Ss : V24) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
Acceptable	7	19	26
	11.818	14.182	
	1.9643	1.6369	
	10.61	28.79	39.39
	26.92	73.08	
	23.33	52.78	
H-satisfact	23	14	37
	16.818	20.182	
	2.2722	1.8935	
	34.85	21.21	56.06
	62.16	37.84	
	76.67	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V24 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	10.2670	0.0059
Likelihood Ratio Chi-Square	2	11.5780	0.0031
Mantel-Haenszel Chi-Square	1	10.0581	0.0015
Phi Coefficient		0.3944	
Contingency Coefficient		0.3669	
Cramer's V		0.3944	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	7.282E-04
Pr <= P	0.0041

Sample Size = 66

The FREQ Procedure

Table of V25 by TVV3

V25 (Ss-cotxt : V25)	TVV3		
Frequency	English	Other	Total
Needs-atten	2	2	4
Expected	1.8182	2.1818	
Cell Chi-Square	0.0182	0.0152	
Percent	3.03	3.03	6.06
Row Pct	50.00	50.00	
Col Pct	6.67	5.56	
Acceptable	5	17	22
Expected	10	12	
Cell Chi-Square	2.5	2.0833	
Percent	7.58	25.76	33.33
Row Pct	22.73	77.27	
Col Pct	16.67	47.22	
H-satisfact	23	17	40
Expected	18.182	21.818	
Cell Chi-Square	1.2768	1.064	
Percent	34.85	25.76	60.61
Row Pct	57.50	42.50	
Col Pct	76.67	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V25 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.9575	0.0308
Likelihood Ratio Chi-Square	2	7.2734	0.0263
Mantel-Haenszel Chi-Square	1	3.5047	0.0612
Phi Coefficient		0.3247	
Contingency Coefficient		0.3088	
Cramer's V		0.3247	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V25 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0025
Pr <= P	0.0185

Sample Size = 66

Table of V26 by TVV3

V26(Exp-Ss : V26) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	4	5
	2.2727	2.7273	
	0.7127	0.5939	
	1.52	6.06	7.58
	20.00	80.00	
	3.33	11.11	
Acceptable	6	18	24
	10.909	13.091	
	2.2091	1.8409	
	9.09	27.27	36.36
	25.00	75.00	
	20.00	50.00	
H-satisfact	23	14	37
	16.818	20.182	
	2.2722	1.8935	
	34.85	21.21	56.06
	62.16	37.84	
	76.67	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V26 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	9.5224	0.0086
Likelihood Ratio Chi-Square	2	9.8715	0.0072
Mantel-Haenszel Chi-Square	1	8.3345	0.0039
Phi Coefficient		0.3798	
Contingency Coefficient		0.3551	
Cramer's V		0.3798	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	7.450E-04
Pr <= P	0.0065

Sample Size = 66

The FREQ Procedure

Table of V27 by TVV3

V27 (Ex-mod : V27)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	9	19	28
Expected	12.727	15.273	
Cell Chi-Square	1.0916	0.9096	
Percent	13.64	28.79	42.42
Row Pct	32.14	67.86	
Col Pct	30.00	52.78	
H-satisfact	21	15	36
Expected	16.364	19.636	
Cell Chi-Square	1.3136	1.0947	
Percent	31.82	22.73	54.55
Row Pct	58.33	41.67	
Col Pct	70.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V27 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.0762	0.0479
Likelihood Ratio Chi-Square	2	6.8826	0.0320
Mantel-Haenszel Chi-Square	1	5.9631	0.0146
Phi Coefficient		0.3034	
Contingency Coefficient		0.2903	
Cramer's V		0.3034	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V27 by TVV3

Fisher's Exact Test

```
-----
Table Probability (P)      0.0070
Pr <= P                   0.0411
```

Sample Size = 66

Table of V28 by TVV3

V28 (Ss-task-dev : V28) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	1	1
	0.4545	0.5455	
	0.4545	0.3788	
	0.00	1.52	1.52
	0.00	100.00	
	0.00	2.78	
Acceptable	9	22	31
	14.091	16.909	
	1.8393	1.5327	
	13.64	33.33	46.97
	29.03	70.97	
	30.00	61.11	
H-satisfact	21	13	34
	15.455	18.545	
	1.9898	1.6582	
	31.82	19.70	51.52
	61.76	38.24	
	70.00	36.11	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V28 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.8534	0.0197
Likelihood Ratio Chi-Square	2	8.3640	0.0153
Mantel-Haenszel Chi-Square	1	7.7297	0.0054
Phi Coefficient		0.3450	
Contingency Coefficient		0.3261	
Cramer's V		0.3450	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0034
Pr <= P	0.0128

Sample Size = 66

The FREQ Procedure

Table of V29 by TVV3

V29 (Sum : V29)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	4	5
Expected	2.2727	2.7273	
Cell Chi-Square	0.7127	0.5939	
Percent	1.52	6.06	7.58
Row Pct	20.00	80.00	
Col Pct	3.33	11.11	
Acceptable	9	13	22
Expected	10	12	
Cell Chi-Square	0.1	0.0833	
Percent	13.64	19.70	33.33
Row Pct	40.91	59.09	
Col Pct	30.00	36.11	
H-satisfact	20	19	39
Expected	17.727	21.273	
Cell Chi-Square	0.2914	0.2428	
Percent	30.30	28.79	59.09
Row Pct	51.28	48.72	
Col Pct	66.67	52.78	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V29 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.0242	0.3635
Likelihood Ratio Chi-Square	2	2.1382	0.3433
Mantel-Haenszel Chi-Square	1	1.8853	0.1697
Phi Coefficient		0.1751	
Contingency Coefficient		0.1725	
Cramer's V		0.1751	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V29 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0311
Pr <= P                   0.4309
```

Sample Size = 66

Table of V31 by TVV3

V31 (Pre-know : V31) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	4	5
	2.2727	2.7273	
	0.7127	0.5939	
	1.52	6.06	7.58
	20.00	80.00	
	3.33	11.11	
Acceptable	9	11	20
	9.0909	10.909	
	0.0009	0.0008	
	13.64	16.67	30.30
	45.00	55.00	
	30.00	30.56	
H-satisfact	20	21	41
	18.636	22.364	
	0.0998	0.0831	
	30.30	31.82	62.12
	48.78	51.22	
	66.67	58.33	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V31 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4913	0.4744
Likelihood Ratio Chi-Square	2	1.6060	0.4480
Mantel-Haenszel Chi-Square	1	1.0472	0.3061
Phi Coefficient		0.1503	
Contingency Coefficient		0.1486	
Cramer's V		0.1503	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0410
Pr <= P	0.5820

Sample Size = 66

The FREQ Procedure

Table of V33 by TVV3

V33(Q-ind : V33)	TVV3		
Frequency	English	Other	Total
Needs-atten	0	4	4
Expected	1.8182	2.1818	
Cell Chi-Square	1.8182	1.5152	
Percent	0.00	6.06	6.06
Row Pct	0.00	100.00	
Col Pct	0.00	11.11	
Acceptable	8	15	23
Expected	10.455	12.545	
Cell Chi-Square	0.5763	0.4802	
Percent	12.12	22.73	34.85
Row Pct	34.78	65.22	
Col Pct	26.67	41.67	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V33 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	6.2779	0.0433
Likelihood Ratio Chi-Square	2	7.8064	0.0202
Mantel-Haenszel Chi-Square	1	6.0299	0.0141
Phi Coefficient		0.3084	
Contingency Coefficient		0.2947	
Cramer's V		0.3084	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V33 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0045
Pr <= P	0.0366

Sample Size = 66

Table of V34 by TVV3

V34(Q-clas : V34) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
Acceptable	9	10	19
	8.6364	10.364	
	0.0153	0.0128	
	13.64	15.15	28.79
	47.37	52.63	
	30.00	27.78	
H-satisfact	21	23	44
	20	24	
	0.05	0.0417	
	31.82	34.85	66.67
	47.73	52.27	
	70.00	63.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V34 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6197	0.2699
Likelihood Ratio Chi-Square	2	3.7563	0.1529
Mantel-Haenszel Chi-Square	1	1.0307	0.3100
Phi Coefficient		0.1992	
Contingency Coefficient		0.1954	
Cramer's V		0.1992	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0337
Pr <= P	0.4080

Sample Size = 66

The FREQ Procedure

Table of V35 by TVV3

V35 (Resp-1 : V35)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	1	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.0091	0.0076	
Percent	1.52	1.52	3.03
Row Pct	50.00	50.00	
Col Pct	3.33	2.78	
Acceptable	7	15	22
Expected	10	12	
Cell Chi-Square	0.9	0.75	
Percent	10.61	22.73	33.33
Row Pct	31.82	68.18	
Col Pct	23.33	41.67	
H-satisfact	22	20	42
Expected	19.091	22.909	
Cell Chi-Square	0.4433	0.3694	
Percent	33.33	30.30	63.64
Row Pct	52.38	47.62	
Col Pct	73.33	55.56	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V35 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.4794	0.2895
Likelihood Ratio Chi-Square	2	2.5259	0.2828
Mantel-Haenszel Chi-Square	1	1.5968	0.2064
Phi Coefficient		0.1938	
Contingency Coefficient		0.1903	
Cramer's V		0.1938	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V35 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0318
Pr <= P	0.2684

Sample Size = 66

Table of V36 by TVV3

V36(Hand-ina : V36) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	2	5
	2.2727	2.7273	
	0.2327	0.1939	
	4.55	3.03	7.58
	60.00	40.00	
	10.00	5.56	
Acceptable	8	16	24
	10.909	13.091	
	0.7758	0.6465	
	12.12	24.24	36.36
	33.33	66.67	
	26.67	44.44	
H-satisfact	19	18	37
	16.818	20.182	
	0.283	0.2359	
	28.79	27.27	56.06
	51.35	48.65	
	63.33	50.00	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V36 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	2.3678	0.3061
Likelihood Ratio Chi-Square	2	2.4006	0.3011
Mantel-Haenszel Chi-Square	1	0.3173	0.5732
Phi Coefficient		0.1894	
Contingency Coefficient		0.1861	
Cramer's V		0.1894	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0236
Pr <= P	0.3481

Sample Size = 66

The FREQ Procedure

Table of V37 by TVV3

V37(Use-alt : V37)	TVV3		
Frequency	English	Other	Total
Needs-atten	3	4	7
Expected	3.1818	3.8182	
Cell Chi-Square	0.0104	0.0087	
Percent	4.55	6.06	10.61
Row Pct	42.86	57.14	
Col Pct	10.00	11.11	
Acceptable	10	16	26
Expected	11.818	14.182	
Cell Chi-Square	0.2797	0.2331	
Percent	15.15	24.24	39.39
Row Pct	38.46	61.54	
Col Pct	33.33	44.44	
H-satisfact	17	16	33
Expected	15	18	
Cell Chi-Square	0.2667	0.2222	
Percent	25.76	24.24	50.00
Row Pct	51.52	48.48	
Col Pct	56.67	44.44	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V37 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0208	0.6003
Likelihood Ratio Chi-Square	2	1.0246	0.5991
Mantel-Haenszel Chi-Square	1	0.6354	0.4254
Phi Coefficient		0.1244	
Contingency Coefficient		0.1234	
Cramer's V		0.1244	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V37 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0393
Pr <= P	0.6403

Sample Size = 66

Table of V40 by TVV3

V40(Instr : V40)		TVV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
Needs-atten	1	2	3	
	1.3636	1.6364		
	0.097	0.0808		
	1.52	3.03	4.55	
	33.33	66.67		
	3.33	5.56		
Acceptable	9	19	28	
	12.727	15.273		
	1.0916	0.9096		
	13.64	28.79	42.42	
	32.14	67.86		
	30.00	52.78		
H-satisfact	20	15	35	
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73	53.03	
	57.14	42.86		
	66.67	41.67		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V40 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.1075	0.1283
Likelihood Ratio Chi-Square	2	4.1618	0.1248
Mantel-Haenszel Chi-Square	1	3.5055	0.0612
Phi Coefficient		0.2495	
Contingency Coefficient		0.2421	
Cramer's V		0.2495	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0122
Pr <= P	0.1040

Sample Size = 66

The FREQ Procedure

Table of V3 by TVV3

V3 (V-proj : V3)	TVV3		
Frequency	English	Other	Total
Needs-atten	2	4	6
Expected	2.7273	3.2727	
Cell Chi-Square	0.1939	0.1616	
Percent	3.03	6.06	9.09
Row Pct	33.33	66.67	
Col Pct	6.67	11.11	
Acceptable	8	16	24
Expected	10.909	13.091	
Cell Chi-Square	0.7758	0.6465	
Percent	12.12	24.24	36.36
Row Pct	33.33	66.67	
Col Pct	26.67	44.44	
H-satisfact	20	16	36
Expected	16.364	19.636	
Cell Chi-Square	0.8081	0.6734	
Percent	30.30	24.24	54.55
Row Pct	55.56	44.44	
Col Pct	66.67	44.44	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V3 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.2593	0.1960
Likelihood Ratio Chi-Square	2	3.2971	0.1923
Mantel-Haenszel Chi-Square	1	2.6667	0.1025
Phi Coefficient		0.2222	
Contingency Coefficient		0.2169	
Cramer's V		0.2222	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V3 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0146
Pr <= P                   0.1952
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Sample Size = 66

Table of V4 by TVV3

V4(V-pitc : V4)	TVV3		Total
Frequency	English	Other	
Needs-atten	0	4	4
Expected	1.8182	2.1818	
Cell Chi-Square	1.8182	1.5152	
Percent	0.00	6.06	6.06
Row Pct	0.00	100.00	
Col Pct	0.00	11.11	
Acceptable	9	22	31
Expected	14.091	16.909	
Cell Chi-Square	1.8393	1.5327	
Percent	13.64	33.33	46.97
Row Pct	29.03	70.97	
Col Pct	30.00	61.11	
H-satisfact	21	10	31
Expected	14.091	16.909	
Cell Chi-Square	3.3877	2.8231	
Percent	31.82	15.15	46.97
Row Pct	67.74	32.26	
Col Pct	70.00	27.78	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V4 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	12.9161	0.0016
Likelihood Ratio Chi-Square	2	14.6124	0.0007
Mantel-Haenszel Chi-Square	1	12.6300	0.0004
Phi Coefficient		0.4424	
Contingency Coefficient		0.4046	
Cramer's V		0.4424	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	1.621E-04
Pr <= P	0.0013

Sample Size = 66

The FREQ Procedure

Table of V5 by TVV3

V5 (Pron : V5)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	6	7
Expected	3.1818	3.8182	
Cell Chi-Square	1.4961	1.2468	
Percent	1.52	9.09	10.61
Row Pct	14.29	85.71	
Col Pct	3.33	16.67	
Acceptable	8	21	29
Expected	13.182	15.818	
Cell Chi-Square	2.037	1.6975	
Percent	12.12	31.82	43.94
Row Pct	27.59	72.41	
Col Pct	26.67	58.33	
H-satisfact	21	9	30
Expected	13.636	16.364	
Cell Chi-Square	3.9764	3.3136	
Percent	31.82	13.64	45.45
Row Pct	70.00	30.00	
Col Pct	70.00	25.00	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V5 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.7673	0.0010
Likelihood Ratio Chi-Square	2	14.3936	0.0007
Mantel-Haenszel Chi-Square	1	12.4869	0.0004
Phi Coefficient		0.4567	
Contingency Coefficient		0.4154	
Cramer's V		0.4567	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V5 by TVV3

Fisher's Exact Test

 Table Probability (P) 7.792E-05
 Pr <= P 6.363E-04

Sample Size = 66

Table of V7 by TVV3

V7(Dist-q-s-i : V7) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	3	4
	1.8182	2.1818	
	0.3682	0.3068	
	1.52	4.55	6.06
	25.00	75.00	
	3.33	8.33	
Acceptable	7	16	23
	10.455	12.545	
	1.1415	0.9513	
	10.61	24.24	34.85
	30.43	69.57	
	23.33	44.44	
H-satisfact	22	17	39
	17.727	21.273	
	1.0298	0.8582	
	33.33	25.76	59.09
	56.41	43.59	
	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V7 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6558	0.0975
Likelihood Ratio Chi-Square	2	4.7607	0.0925
Mantel-Haenszel Chi-Square	1	4.2124	0.0401
Phi Coefficient		0.2656	
Contingency Coefficient		0.2567	
Cramer's V		0.2656	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0091
Pr <= P	0.0986

Sample Size = 66

The FREQ Procedure

Table of V8 by TVV3

V8 (NB-wds : V8)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	4	5
Expected	2.2727	2.7273	
Cell Chi-Square	0.7127	0.5939	
Percent	1.52	6.06	7.58
Row Pct	20.00	80.00	
Col Pct	3.33	11.11	
Acceptable	6	22	28
Expected	12.727	15.273	
Cell Chi-Square	3.5558	2.9632	
Percent	9.09	33.33	42.42
Row Pct	21.43	78.57	
Col Pct	20.00	61.11	
H-satisfact	23	10	33
Expected	15	18	
Cell Chi-Square	4.2667	3.5556	
Percent	34.85	15.15	50.00
Row Pct	69.70	30.30	
Col Pct	76.67	27.78	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V8 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	15.6479	0.0004
Likelihood Ratio Chi-Square	2	16.3637	0.0003
Mantel-Haenszel Chi-Square	1	13.0754	0.0003
Phi Coefficient		0.4869	
Contingency Coefficient		0.4378	
Cramer's V		0.4869	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V8 by TVV3

Fisher's Exact Test

 Table Probability (P) 3.161E-05
 Pr <= P 2.311E-04

Sample Size = 66

Table of V9 by TVV3

V9(Trans : V9)		TVV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	1	2		3
	1.3636	1.6364		
	0.097	0.0808		
	1.52	3.03		4.55
	33.33	66.67		
	3.33	5.56		
Acceptable	7	17		24
	10.909	13.091		
	1.4008	1.1673		
	10.61	25.76		36.36
	29.17	70.83		
	23.33	47.22		
H-satisfact	22	17		39
	17.727	21.273		
	1.0298	0.8582		
	33.33	25.76		59.09
	56.41	43.59		
	73.33	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V9 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6339	0.0986
Likelihood Ratio Chi-Square	2	4.7329	0.0938
Mantel-Haenszel Chi-Square	1	3.8181	0.0507
Phi Coefficient		0.2650	
Contingency Coefficient		0.2561	
Cramer's V		0.2650	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0096
Pr <= P	0.0746

Sample Size = 66

The FREQ Procedure

Table of V10 by TVV3

V10 (Fac-exp : V10)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	1	3		4
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55		6.06
	25.00	75.00		
	3.33	8.33		
Acceptable	12	16		28
	12.727	15.273		
	0.0416	0.0346		
	18.18	24.24		42.42
	42.86	57.14		
	40.00	44.44		
H-satisfact	17	17		34
	15.455	18.545		
	0.1545	0.1288		
	25.76	25.76		51.52
	50.00	50.00		
	56.67	47.22		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V10 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	1.0345	0.5962
Likelihood Ratio Chi-Square	2	1.0737	0.5846
Mantel-Haenszel Chi-Square	1	0.9109	0.3399
Phi Coefficient		0.1252	
Contingency Coefficient		0.1242	
Cramer's V		0.1252	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V10 by TVV3

Fisher's Exact Test

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Table Probability (P)      0.0515
Pr <= P                   0.6224
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Sample Size = 66

Table of V11 by TVV3

V11 (Gest : V11)	TVV3		
	English	Other	Total
Needs-atten	1	3	4
	1.8182	2.1818	
	0.3682	0.3068	
	1.52	4.55	6.06
	25.00	75.00	
	3.33	8.33	
Acceptable	11	22	33
	15	18	
	1.0667	0.8889	
	16.67	33.33	50.00
	33.33	66.67	
	36.67	61.11	
H-satisfact	18	11	29
	13.182	15.818	
	1.7611	1.4676	
	27.27	16.67	43.94
	62.07	37.93	
	60.00	30.56	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V11 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	5.8593	0.0534
Likelihood Ratio Chi-Square	2	5.9445	0.0512
Mantel-Haenszel Chi-Square	1	5.3630	0.0206
Phi Coefficient		0.2980	
Contingency Coefficient		0.2855	
Cramer's V		0.2980	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0049
Pr <= P	0.0458

Sample Size = 66

The FREQ Procedure

Table of V12 by TVV3

V12(S-speed : V12)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	2	2		4
	1.8182	2.1818		
	0.0182	0.0152		
	3.03	3.03		6.06
	50.00	50.00		
	6.67	5.56		
Acceptable	9	25		34
	15.455	18.545		
	2.6957	2.2464		
	13.64	37.88		51.52
	26.47	73.53		
	30.00	69.44		
H-satisfact	19	9		28
	12.727	15.273		
	3.0916	2.5763		
	28.79	13.64		42.42
	67.86	32.14		
	63.33	25.00		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V12 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	10.6433	0.0049
Likelihood Ratio Chi-Square	2	10.9406	0.0042
Mantel-Haenszel Chi-Square	1	6.3321	0.0119
Phi Coefficient		0.4016	
Contingency Coefficient		0.3727	
Cramer's V		0.4016	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V12 by TVV3

Fisher's Exact Test

 Table Probability (P) 3.940E-04
 Pr <= P 0.0025

Sample Size = 66

Table of V13 by TVV3

V13(S-fluen : V13)		TVV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other		Total
Needs-atten	0	6		6
	2.7273	3.2727		
	2.7273	2.2727		
	0.00	9.09		9.09
	0.00	100.00		
	0.00	16.67		
Acceptable	7	18		25
	11.364	13.636		
	1.6756	1.3964		
	10.61	27.27		37.88
	28.00	72.00		
	23.33	50.00		
H-satisfact	23	12		35
	15.909	19.091		
	3.1605	2.6338		
	34.85	18.18		53.03
	65.71	34.29		
	76.67	33.33		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V13 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.8663	0.0010
Likelihood Ratio Chi-Square	2	16.2977	0.0003
Mantel-Haenszel Chi-Square	1	13.5507	0.0002
Phi Coefficient		0.4584	
Contingency Coefficient		0.4167	
Cramer's V		0.4584	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	7.271E-05
Pr <= P	6.120E-04

Sample Size = 66

The FREQ Procedure

Table of V14 by TVV3

V14 (Expr-id : V14)	TVV3		Total
Frequency	English	Other	
Needs-atten	2	7	9
Expected	4.0909	4.9091	
Cell Chi-Square	1.0687	0.8906	
Percent	3.03	10.61	13.64
Row Pct	22.22	77.78	
Col Pct	6.67	19.44	
Acceptable	8	12	20
Expected	9.0909	10.909	
Cell Chi-Square	0.1309	0.1091	
Percent	12.12	18.18	30.30
Row Pct	40.00	60.00	
Col Pct	26.67	33.33	
H-satisfact	20	17	37
Expected	16.818	20.182	
Cell Chi-Square	0.602	0.5016	
Percent	30.30	25.76	56.06
Row Pct	54.05	45.95	
Col Pct	66.67	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V14 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	3.3029	0.1918
Likelihood Ratio Chi-Square	2	3.4447	0.1786
Mantel-Haenszel Chi-Square	1	3.2365	0.0720
Phi Coefficient		0.2237	
Contingency Coefficient		0.2183	
Cramer's V		0.2237	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V14 by TVV3

Fisher's Exact Test

Table Probability (P)	0.0131
Pr <= P	0.1937

Sample Size = 66

Table of V16 by TVV3

V16(Ver-gram : V16) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	4	4
	1.8182	2.1818	
	1.8182	1.5152	
	0.00	6.06	6.06
	0.00	100.00	
	0.00	11.11	
Acceptable	7	17	24
	10.909	13.091	
	1.4008	1.1673	
	10.61	25.76	36.36
	29.17	70.83	
	23.33	47.22	
H-satisfact	23	15	38
	17.273	20.727	
	1.899	1.5825	
	34.85	22.73	57.58
	60.53	39.47	
	76.67	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V16 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	9.3830	0.0092
Likelihood Ratio Chi-Square	2	10.9923	0.0041
Mantel-Haenszel Chi-Square	1	9.2365	0.0024
Phi Coefficient		0.3770	
Contingency Coefficient		0.3528	
Cramer's V		0.3770	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	9.706E-04
Pr <= P	0.0082

Sample Size = 66

The FREQ Procedure

Table of V21 by TVV3

V21(Learn-say : V21)	TVV3		
Frequency	English	Other	Total
Needs-atten	1	2	3
Expected	1.3636	1.6364	
Cell Chi-Square	0.097	0.0808	
Percent	1.52	3.03	4.55
Row Pct	33.33	66.67	
Col Pct	3.33	5.56	
Acceptable	5	17	22
Expected	10	12	
Cell Chi-Square	2.5	2.0833	
Percent	7.58	25.76	33.33
Row Pct	22.73	77.27	
Col Pct	16.67	47.22	
H-satisfact	24	17	41
Expected	18.636	22.364	
Cell Chi-Square	1.5437	1.2864	
Percent	36.36	25.76	62.12
Row Pct	58.54	41.46	
Col Pct	80.00	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V21 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	7.5912	0.0225
Likelihood Ratio Chi-Square	2	7.9108	0.0192
Mantel-Haenszel Chi-Square	1	5.8901	0.0152
Phi Coefficient		0.3391	
Contingency Coefficient		0.3212	
Cramer's V		0.3391	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V21 by TVV3

Fisher's Exact Test

 Table Probability (P) 0.0022
 Pr <= P 0.0141

Sample Size = 66

Table of V22 by TVV3

V22(Seek-clar : V22) TVV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	2	3
	1.3636	1.6364	
	0.097	0.0808	
	1.52	3.03	4.55
	33.33	66.67	
	3.33	5.56	
Acceptable	4	20	24
	10.909	13.091	
	4.3758	3.6465	
	6.06	30.30	36.36
	16.67	83.33	
	13.33	55.56	
H-satisfact	25	14	39
	17.727	21.273	
	2.9837	2.4864	
	37.88	21.21	59.09
	64.10	35.90	
	83.33	38.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V22 by TVV3

Statistic	DF	Value	Prob
Chi-Square	2	13.6701	0.0011
Likelihood Ratio Chi-Square	2	14.5828	0.0007
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4551	
Contingency Coefficient		0.4142	
Cramer's V		0.4551	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	8.717E-05
Pr <= P	3.420E-04

Sample Size = 66

The FREQ Procedure

Table of V11 by VV3

V11(V-proj : V11)		VV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	0	2	2	
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03	3.03	
	0.00	100.00		
	0.00	5.56		
Acceptable	7	17	24	
	10.909	13.091		
	1.4008	1.1673		
	10.61	25.76	36.36	
	29.17	70.83		
	23.33	47.22		
H-satisfact	23	17	40	
	18.182	21.818		
	1.2768	1.064		
	34.85	25.76	60.61	
	57.50	42.50		
	76.67	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V11 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.5756	0.0373
Likelihood Ratio Chi-Square	2	7.4263	0.0244
Mantel-Haenszel Chi-Square	1	6.4755	0.0109
Phi Coefficient		0.3156	
Contingency Coefficient		0.3010	
Cramer's V		0.3156	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V11 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0056
 Pr <= P 0.0283

Sample Size = 66

Table of V12 by VV3

V12(V-pitc : V12)	VV3		
Frequency	English	Other	Total
Needs-atten	0	1	1
Expected	0.4545	0.5455	
Cell Chi-Square	0.4545	0.3788	1.52
Percent	0.00	1.52	
Row Pct	0.00	100.00	
Col Pct	0.00	2.78	
Acceptable	12	20	32
Expected	14.545	17.455	
Cell Chi-Square	0.4455	0.3712	48.48
Percent	18.18	30.30	
Row Pct	37.50	62.50	
Col Pct	40.00	55.56	
H-satisfact	18	15	33
Expected	15	18	
Cell Chi-Square	0.6	0.5	50.00
Percent	27.27	22.73	
Row Pct	54.55	45.45	
Col Pct	60.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V12 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7500	0.2528
Likelihood Ratio Chi-Square	2	3.1346	0.2086
Mantel-Haenszel Chi-Square	1	2.5645	0.1093
Phi Coefficient		0.2041	
Contingency Coefficient		0.2000	
Cramer's V		0.2041	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0424
Pr <= P	0.2162

Sample Size = 66

The FREQ Procedure

Table of V13 by VV3

V13 (Pron : V13)	VV3		Total
Frequency	English	Other	
Needs-atten	2	5	7
Expected	3.1818	3.8182	
Cell Chi-Square	0.439	0.3658	
Percent	3.03	7.58	10.61
Row Pct	28.57	71.43	
Col Pct	6.67	13.89	
Acceptable	12	23	35
Expected	15.909	19.091	
Cell Chi-Square	0.9605	0.8004	
Percent	18.18	34.85	53.03
Row Pct	34.29	65.71	
Col Pct	40.00	63.89	
H-satisfact	16	8	24
Expected	10.909	13.091	
Cell Chi-Square	2.3758	1.9798	
Percent	24.24	12.12	36.36
Row Pct	66.67	33.33	
Col Pct	53.33	22.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V13 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.9213	0.0314
Likelihood Ratio Chi-Square	2	7.0169	0.0299
Mantel-Haenszel Chi-Square	1	5.8711	0.0154
Phi Coefficient		0.3238	
Contingency Coefficient		0.3081	
Cramer's V		0.3238	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V13 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0023
 Pr <= P 0.0375

Sample Size = 66

Table of V14 by VV3

V14(Sen-struct : V14)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
Needs-atten	0	4	4	
	1.8462	2.1538		
	1.8462	1.5824		
	0.00	6.15	6.15	
	0.00	100.00		
	0.00	11.43		
Acceptable	13	20	33	
	15.231	17.769		
	0.3267	0.2801		
	20.00	30.77	50.77	
	39.39	60.61		
	43.33	57.14		
H-satisfact	17	11	28	
	12.923	15.077		
	1.2862	1.1024		
	26.15	16.92	43.08	
	60.71	39.29		
	56.67	31.43		
Total	30	35	65	
	46.15	53.85	100.00	

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V14 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.4240	0.0403
Likelihood Ratio Chi-Square	2	7.9521	0.0188
Mantel-Haenszel Chi-Square	1	6.0071	0.0142
Phi Coefficient		0.3144	
Contingency Coefficient		0.2999	
Cramer's V		0.3144	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0041
Pr <= P	0.0394

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V15 by VV3

V15 (Dist-q-s-i : V15)		VV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	1	1	2	
	0.9091	1.0909		
	0.0091	0.0076		
	1.52	1.52	3.03	
	50.00	50.00		
	3.33	2.78		
Acceptable	6	17	23	
	10.455	12.545		
	1.898	1.5817		
	9.09	25.76	34.85	
	26.09	73.91		
	20.00	47.22		
H-satisfact	23	18	41	
	18.636	22.364		
	1.0217	0.8514		
	34.85	27.27	62.12	
	56.10	43.90		
	76.67	50.00		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V15 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.3695	0.0682
Likelihood Ratio Chi-Square	2	5.5475	0.0624
Mantel-Haenszel Chi-Square	1	3.6341	0.0566
Phi Coefficient		0.2852	
Contingency Coefficient		0.2743	
Cramer's V		0.2852	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V15 by VV3

Fisher's Exact Test

Table Probability (P)	0.0074
Pr <= P	0.0421

Sample Size = 66

Table of V16 by VV3

V16(NB-wds : V16)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	1	5		6
	2.7273	3.2727		
	1.0939	0.9116		
	1.52	7.58		9.09
	16.67	83.33		
	3.33	13.89		
Acceptable	7	14		21
	9.5455	11.455		
	0.6788	0.5657		
	10.61	21.21		31.82
	33.33	66.67		
	23.33	38.89		
H-satisfact	22	17		39
	17.727	21.273		
	1.0298	0.8582		
	33.33	25.76		59.09
	56.41	43.59		
	73.33	47.22		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V16 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.1380	0.0766
Likelihood Ratio Chi-Square	2	5.3862	0.0677
Mantel-Haenszel Chi-Square	1	5.0175	0.0251
Phi Coefficient		0.2790	
Contingency Coefficient		0.2687	
Cramer's V		0.2790	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0065
Pr <= P	0.0854

Sample Size = 66

The FREQ Procedure

Table of V17 by VV3

V17(Trans : V17)	VV3		
Frequency	English	Other	Total
Needs-atten	0	5	5
Expected	2.2727	2.7273	
Cell Chi-Square	2.2727	1.8939	
Percent	0.00	7.58	7.58
Row Pct	0.00	100.00	
Col Pct	0.00	13.89	
Acceptable	5	16	21
Expected	9.5455	11.455	
Cell Chi-Square	2.1645	1.8038	
Percent	7.58	24.24	31.82
Row Pct	23.81	76.19	
Col Pct	16.67	44.44	
H-satisfact	25	15	40
Expected	18.182	21.818	
Cell Chi-Square	2.5568	2.1307	
Percent	37.88	22.73	60.61
Row Pct	62.50	37.50	
Col Pct	83.33	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V17 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	12.8224	0.0016
Likelihood Ratio Chi-Square	2	14.9714	0.0006
Mantel-Haenszel Chi-Square	1	12.4164	0.0004
Phi Coefficient		0.4408	
Contingency Coefficient		0.4033	
Cramer's V		0.4408	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V17 by VV3

Fisher's Exact Test

 Table Probability (P) 1.484E-04
 Pr <= P 0.0011

Sample Size = 66

Table of V18 by VV3

V18 (Fac-exp : V18) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Unsatisfact	0	1	1
	0.4545	0.5455	
	0.4545	0.3788	
	0.00	1.52	1.52
	0.00	100.00	
	0.00	2.78	
Needs-atten	1	3	4
	1.8182	2.1818	
	0.3682	0.3068	
	1.52	4.55	6.06
	25.00	75.00	
	3.33	8.33	
Acceptable	14	13	27
	12.273	14.727	
	0.2431	0.2026	
	21.21	19.70	40.91
	51.85	48.15	
	46.67	36.11	
H-satisfact	15	19	34
	15.455	18.545	
	0.0134	0.0111	
	22.73	28.79	51.52
	44.12	55.88	
	50.00	52.78	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V18 by VV3

Statistic	DF	Value	Prob
Chi-Square	3	1.9785	0.5769
Likelihood Ratio Chi-Square	3	2.3953	0.4945
Mantel-Haenszel Chi-Square	1	0.2136	0.6439
Phi Coefficient		0.1731	
Contingency Coefficient		0.1706	
Cramer's V		0.1731	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0270
Pr <= P	0.6684

Sample Size = 66

The FREQ Procedure

Table of V19 by VV3

V19 (Gest : V19)	VV3		
Frequency	English	Other	Total
Needs-atten	4	5	9
Expected	4.1538	4.8462	
Cell Chi-Square	0.0057	0.0049	
Percent	6.15	7.69	13.85
Row Pct	44.44	55.56	
Col Pct	13.33	14.29	
Acceptable	9	15	24
Expected	11.077	12.923	
Cell Chi-Square	0.3894	0.3338	
Percent	13.85	23.08	36.92
Row Pct	37.50	62.50	
Col Pct	30.00	42.86	
H-satisfact	17	15	32
Expected	14.769	17.231	
Cell Chi-Square	0.3369	0.2888	
Percent	26.15	23.08	49.23
Row Pct	53.13	46.88	
Col Pct	56.67	42.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V19 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.3595	0.5067
Likelihood Ratio Chi-Square	2	1.3675	0.5047
Mantel-Haenszel Chi-Square	1	0.6856	0.4077
Phi Coefficient		0.1446	
Contingency Coefficient		0.1431	
Cramer's V		0.1446	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V19 by VV3

Fisher's Exact Test

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Table Probability (P)          0.0310
Pr <= P                        0.5164
  
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Effective Sample Size = 65
Frequency Missing = 1
  
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Table of V20 by VV3

V20(S-speed : V20) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	8	11
	5	6	
	0.8	0.6667	
	4.55	12.12	16.67
	27.27	72.73	
	10.00	22.22	
Acceptable	13	23	36
	16.364	19.636	
	0.6914	0.5762	
	19.70	34.85	54.55
	36.11	63.89	
	43.33	63.89	
H-satisfact	14	5	19
	8.6364	10.364	
	3.3311	2.7759	
	21.21	7.58	28.79
	73.68	26.32	
	46.67	13.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V20 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.8413	0.0120
Likelihood Ratio Chi-Square	2	9.0656	0.0108
Mantel-Haenszel Chi-Square	1	7.4194	0.0065
Phi Coefficient		0.3660	
Contingency Coefficient		0.3437	
Cramer's V		0.3660	

Fisher's Exact Test

Table Probability (P)	8.037E-04
Pr <= P	0.0099

Sample Size = 66

The FREQ Procedure

Table of V21 by VV3

V21(S-fluen : V21)	VV3		Total
Frequency	English	Other	
Needs-atten	2	7	9
Expected	4.1538	4.8462	
Cell Chi-Square	1.1168	0.9573	
Percent	3.08	10.77	13.85
Row Pct	22.22	77.78	
Col Pct	6.67	20.00	
Acceptable	10	20	30
Expected	13.846	16.154	
Cell Chi-Square	1.0684	0.9158	
Percent	15.38	30.77	46.15
Row Pct	33.33	66.67	
Col Pct	33.33	57.14	
H-satisfact	18	8	26
Expected	12	14	
Cell Chi-Square	3	2.5714	
Percent	27.69	12.31	40.00
Row Pct	69.23	30.77	
Col Pct	60.00	22.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V21 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	9.6296	0.0081
Likelihood Ratio Chi-Square	2	9.9020	0.0071
Mantel-Haenszel Chi-Square	1	8.6211	0.0033
Phi Coefficient		0.3849	
Contingency Coefficient		0.3592	
Cramer's V		0.3849	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V21 by VV3

Fisher's Exact Test

 Table Probability (P) 5.616E-04
 Pr <= P 0.0101

 Effective Sample Size = 65
 Frequency Missing = 1

Table of V22 by VV3

V22(Expr-id : V22) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	2	2
	0.9231	1.0769	
	0.9231	0.7912	
	0.00	3.08	3.08
	0.00	100.00	
	0.00	5.71	
Acceptable	11	19	30
	13.846	16.154	
	0.585	0.5015	
	16.92	29.23	46.15
	36.67	63.33	
	36.67	54.29	
H-satisfact	19	14	33
	15.231	17.769	
	0.9328	0.7995	
	29.23	21.54	50.77
	57.58	42.42	
	63.33	40.00	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V22 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.5331	0.1037
Likelihood Ratio Chi-Square	2	5.3075	0.0704
Mantel-Haenszel Chi-Square	1	4.3151	0.0378
Phi Coefficient		0.2641	
Contingency Coefficient		0.2553	
Cramer's V		0.2641	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0149
Pr <= P	0.0870

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V23 by VV3

V23 (Synon : V23)	VV3		
Frequency	English	Other	Total
Needs-atten	1	7	8
Expected	3.6364	4.3636	
Cell Chi-Square	1.9114	1.5928	
Percent	1.52	10.61	12.12
Row Pct	12.50	87.50	
Col Pct	3.33	19.44	
Acceptable	15	19	34
Expected	15.455	18.545	
Cell Chi-Square	0.0134	0.0111	
Percent	22.73	28.79	51.52
Row Pct	44.12	55.88	
Col Pct	50.00	52.78	
H-satisfact	14	10	24
Expected	10.909	13.091	
Cell Chi-Square	0.8758	0.7298	
Percent	21.21	15.15	36.36
Row Pct	58.33	41.67	
Col Pct	46.67	27.78	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V23 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.1342	0.0768
Likelihood Ratio Chi-Square	2	5.6573	0.0591
Mantel-Haenszel Chi-Square	1	4.6334	0.0314
Phi Coefficient		0.2789	
Contingency Coefficient		0.2687	
Cramer's V		0.2789	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V23 by VV3

Fisher's Exact Test

Table Probability (P) 0.0053
Pr <= P 0.0827

Sample Size = 66

Table of V24 by VV3

V24 (Ver-gram : V24) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
Acceptable	15	25	40
	18.182	21.818	
	0.5568	0.464	
	22.73	37.88	60.61
	37.50	62.50	
	50.00	69.44	
H-satisfact	15	8	23
	10.455	12.545	
	1.9763	1.6469	
	22.73	12.12	34.85
	65.22	34.78	
	50.00	22.22	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V24 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	7.1440	0.0281
Likelihood Ratio Chi-Square	2	8.3040	0.0157
Mantel-Haenszel Chi-Square	1	6.9561	0.0084
Phi Coefficient		0.3290	
Contingency Coefficient		0.3125	
Cramer's V		0.3290	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0036
Pr <= P	0.0213

Sample Size = 66

Table of V25 by VV3

V25 (Writ-gram : V25) VV3

Frequency	Expected	Cell Chi-Square	Percent	Row Pct	Col Pct	English	Other	Total
Acceptable	19	16	35	15.909	19.091	0.6005	0.5004	53.03
	28.79	24.24		54.29	45.71	63.33	44.44	
H-satisfact	11	20	31	14.091	16.909	0.678	0.565	46.97
	16.67	30.30		35.48	64.52	36.67	55.56	
Total	30	36	66	45.45	54.55			100.00

The FREQ Procedure

Statistics for Table of V25 by VV3

Statistic	DF	Value	Prob
Chi-Square	1	2.3440	0.1258
Likelihood Ratio Chi-Square	1	2.3622	0.1243
Continuity Adj. Chi-Square	1	1.6470	0.1994
Mantel-Haenszel Chi-Square	1	2.3084	0.1287
Phi Coefficient		0.1885	
Contingency Coefficient		0.1852	
Cramer's V		0.1885	

Fisher's Exact Test

Cell (1,1) Frequency (F)	19
Left-sided Pr <= F	0.9628
Right-sided Pr >= F	0.0995
Table Probability (P)	0.0623
Two-sided Pr <= P	0.1448

Sample Size = 66

The FREQ Procedure

Table of V26 by VV3

V26(Frm-q : V26)	VV3		
Frequency	English	Other	Total
Needs-atten	1	3	4
Expected	1.8182	2.1818	
Cell Chi-Square	0.3682	0.3068	
Percent	1.52	4.55	6.06
Row Pct	25.00	75.00	
Col Pct	3.33	8.33	
Acceptable	10	15	25
Expected	11.364	13.636	
Cell Chi-Square	0.1636	0.1364	
Percent	15.15	22.73	37.88
Row Pct	40.00	60.00	
Col Pct	33.33	41.67	
H-satisfact	19	18	37
Expected	16.818	20.182	
Cell Chi-Square	0.283	0.2359	
Percent	28.79	27.27	56.06
Row Pct	51.35	48.65	
Col Pct	63.33	50.00	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V26 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4939	0.4738
Likelihood Ratio Chi-Square	2	1.5341	0.4644
Mantel-Haenszel Chi-Square	1	1.4592	0.2271
Phi Coefficient		0.1504	
Contingency Coefficient		0.1488	
Cramer's V		0.1504	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V26 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0419
 Pr <= P 0.5686

Sample Size = 66

Table of V27 by VV3

V27(Spell : V27) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	1	4
	1.8182	2.1818	
	0.7682	0.6402	
	4.55	1.52	6.06
	75.00	25.00	
	10.00	2.78	
Acceptable	11	15	26
	11.818	14.182	
	0.0566	0.0472	
	16.67	22.73	39.39
	42.31	57.69	
	36.67	41.67	
H-satisfact	16	20	36
	16.364	19.636	
	0.0081	0.0067	
	24.24	30.30	54.55
	44.44	55.56	
	53.33	55.56	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V27 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.5270	0.4660
Likelihood Ratio Chi-Square	2	1.5635	0.4576
Mantel-Haenszel Chi-Square	1	0.3875	0.5336
Phi Coefficient		0.1521	
Contingency Coefficient		0.1504	
Cramer's V		0.1521	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0409
Pr <= P	0.5694

Sample Size = 66

The FREQ Procedure

Table of V28 by VV3

V28 (Punct : V28)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	12	18	30
Expected	13.636	16.364	
Cell Chi-Square	0.1964	0.1636	
Percent	18.18	27.27	45.45
Row Pct	40.00	60.00	
Col Pct	40.00	50.00	
H-satisfact	18	16	34
Expected	15.455	18.545	
Cell Chi-Square	0.4193	0.3494	
Percent	27.27	24.24	51.52
Row Pct	52.94	47.06	
Col Pct	60.00	44.44	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V28 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7953	0.2472
Likelihood Ratio Chi-Square	2	3.5522	0.1693
Mantel-Haenszel Chi-Square	1	2.3141	0.1282
Phi Coefficient		0.2058	
Contingency Coefficient		0.2016	
Cramer's V		0.2058	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V28 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0346
 Pr <= P 0.2878

Sample Size = 66

Table of V29 by VV3

V29(Learn-say : V29) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	5	6
	2.7273	3.2727	
	1.0939	0.9116	
	1.52	7.58	9.09
	16.67	83.33	
	3.33	13.89	
Acceptable	11	15	26
	11.818	14.182	
	0.0566	0.0472	
	16.67	22.73	39.39
	42.31	57.69	
	36.67	41.67	
H-satisfact	18	16	34
	15.455	18.545	
	0.4193	0.3494	
	27.27	24.24	51.52
	52.94	47.06	
	60.00	44.44	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V29 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.8780	0.2372
Likelihood Ratio Chi-Square	2	3.1004	0.2122
Mantel-Haenszel Chi-Square	1	2.5788	0.1083
Phi Coefficient		0.2088	
Contingency Coefficient		0.2044	
Cramer's V		0.2088	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0185
Pr <= P	0.2488

Sample Size = 66

The FREQ Procedure

Table of V30 by VV3

V30 (Seek-clar : V30)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	6	14	20
Expected	9.0909	10.909	
Cell Chi-Square	1.0509	0.8758	
Percent	9.09	21.21	30.30
Row Pct	30.00	70.00	
Col Pct	20.00	38.89	
H-satisfact	24	20	44
Expected	20	24	
Cell Chi-Square	0.8	0.6667	
Percent	36.36	30.30	66.67
Row Pct	54.55	45.45	
Col Pct	80.00	55.56	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V30 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.0600	0.0797
Likelihood Ratio Chi-Square	2	5.8818	0.0528
Mantel-Haenszel Chi-Square	1	4.9670	0.0258
Phi Coefficient		0.2769	
Contingency Coefficient		0.2668	
Cramer's V		0.2769	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V30 by VV3

Fisher's Exact Test

Table Probability (P) 0.0124
Pr <= P 0.0805

Sample Size = 66

The FREQ Procedure

Table of V38 by VV3

V38 (Adres : V38)		VV3		
Frequency	Expected	English	Other	Total
2	0	3		3
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55		4.55
	0.00	100.00		
	0.00	8.33		
3	3	10		13
	5.9091	7.0909		
	1.4322	1.1935		
	4.55	15.15		19.70
	23.08	76.92		
	10.00	27.78		
4	27	23		50
	22.727	27.273		
	0.8033	0.6694		
	40.91	34.85		75.76
	54.00	46.00		
	90.00	63.89		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V38 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.5983	0.0369
Likelihood Ratio Chi-Square	2	7.9095	0.0192
Mantel-Haenszel Chi-Square	1	6.4613	0.0110
Phi Coefficient		0.3162	
Contingency Coefficient		0.3015	
Cramer's V		0.3162	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V38 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0056
 Pr <= P 0.0350

Sample Size = 66

Table of V39 by VV3

V39(Pre-know : V39) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	1	1
	0.4545	0.5455	
	0.4545	0.3788	
	0.00	1.52	1.52
	0.00	100.00	
	0.00	2.78	
3	7	11	18
	8.1818	9.8182	
	0.1707	0.1423	
	10.61	16.67	27.27
	38.89	61.11	
	23.33	30.56	
4	23	24	47
	21.364	25.636	
	0.1253	0.1044	
	34.85	36.36	71.21
	48.94	51.06	
	76.67	66.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V39 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.3761	0.5026
Likelihood Ratio Chi-Square	2	1.7577	0.4153
Mantel-Haenszel Chi-Square	1	1.0895	0.2966
Phi Coefficient		0.1444	
Contingency Coefficient		0.1429	
Cramer's V		0.1444	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0930
Pr <= P	0.6722

Sample Size = 66

The FREQ Procedure

Table of V40 by VV3

V40 (Lev-Q : V40)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55	6.06	
	25.00	75.00		
	3.33	8.33		
3	15	17	32	
	14.545	17.455		
	0.0142	0.0118		
	22.73	25.76	48.48	
	46.88	53.13		
	50.00	47.22		
4	14	16	30	
	13.636	16.364		
	0.0097	0.0081		
	21.21	24.24	45.45	
	46.67	53.33		
	46.67	44.44		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V40 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.7188	0.6981
Likelihood Ratio Chi-Square	2	0.7588	0.6843
Mantel-Haenszel Chi-Square	1	0.2335	0.6289
Phi Coefficient		0.1044	
Contingency Coefficient		0.1038	
Cramer's V		0.1044	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V40 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0597
 Pr <= P 0.8518

Sample Size = 66

Table of V41 by VV3

V41(Q-ind : V41)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	4	5	
	2.2727	2.7273		
	0.7127	0.5939		
	1.52	6.06	7.58	
	20.00	80.00		
	3.33	11.11		
3	13	15	28	
	12.727	15.273		
	0.0058	0.0049		
	19.70	22.73	42.42	
	46.43	53.57		
	43.33	41.67		
4	16	17	33	
	15	18		
	0.0667	0.0556		
	24.24	25.76	50.00	
	48.48	51.52		
	53.33	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V41 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4396	0.4868
Likelihood Ratio Chi-Square	2	1.5545	0.4597
Mantel-Haenszel Chi-Square	1	0.7855	0.3755
Phi Coefficient		0.1477	
Contingency Coefficient		0.1461	
Cramer's V		0.1477	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0396
Pr <= P	0.5604

Sample Size = 66

Table of V42 by VV3

V42(Q-clas : V42)		VV3		
Frequency	Expected	English	Other	Total
3	12	17	29	
	13.182	15.818		
	0.106	0.0883		
	18.18	25.76	43.94	
	41.38	58.62		
	40.00	47.22		
4	18	19	37	
	16.818	20.182		
	0.083	0.0692		
	27.27	28.79	56.06	
	48.65	51.35		
	60.00	52.78		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V42 by VV3

Statistic	DF	Value	Prob
Chi-Square	1	0.3465	0.5561
Likelihood Ratio Chi-Square	1	0.3472	0.5557
Continuity Adj. Chi-Square	1	0.1153	0.7342
Mantel-Haenszel Chi-Square	1	0.3413	0.5591
Phi Coefficient		-0.0725	
Contingency Coefficient		0.0723	
Cramer's V		-0.0725	

Fisher's Exact Test

Cell (1,1) Frequency (F)	12
Left-sided Pr <= F	0.3676
Right-sided Pr >= F	0.7987
Table Probability (P)	0.1662
Two-sided Pr <= P	0.6233

Sample Size = 66

The FREQ Procedure

Table of V43 by VV3

V43 (Res-I-q : V43)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8462	2.1538		
	0.3878	0.3324		
	1.54	4.62	6.15	
	25.00	75.00		
	3.33	8.57		
3	15	18	33	
	15.231	17.769		
	0.0035	0.003		
	23.08	27.69	50.77	
	45.45	54.55		
	50.00	51.43		
4	14	14	28	
	12.923	15.077		
	0.0897	0.0769		
	21.54	21.54	43.08	
	50.00	50.00		
	46.67	40.00		
Total	30	35	65	
	46.15	53.85	100.00	

Frequency Missing = 1

Statistics for Table of V43 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.8934	0.6397
Likelihood Ratio Chi-Square	2	0.9346	0.6267
Mantel-Haenszel Chi-Square	1	0.6332	0.4262
Phi Coefficient		0.1172	
Contingency Coefficient		0.1164	
Cramer's V		0.1172	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V43 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0553
 Pr <= P 0.7282

 Effective Sample Size = 65
 Frequency Missing = 1

Table of V44 by VV3

V44 (Res-ic-ans : V44) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	2	2
	0.9091	1.0909	
	0.9091	0.7576	
	0.00	3.03	3.03
	0.00	100.00	
	0.00	5.56	
3	13	19	32
	14.545	17.455	
	0.1642	0.1368	
	19.70	28.79	48.48
	40.63	59.38	
	43.33	52.78	
4	17	15	32
	14.545	17.455	
	0.4142	0.3452	
	25.76	22.73	48.48
	53.13	46.88	
	56.67	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V44 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7271	0.2558
Likelihood Ratio Chi-Square	2	3.4831	0.1752
Mantel-Haenszel Chi-Square	1	2.2070	0.1374
Phi Coefficient		0.2033	
Contingency Coefficient		0.1992	
Cramer's V		0.2033	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0356
Pr <= P	0.3616

Sample Size = 66

The FREQ Procedure

Table of V45 by VV3

V45(Use-alt : V45)		VV3		
Frequency	Expected	English	Other	Total
2	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
3	12	17		29
	13.182	15.818		
	0.106	0.0883		
	18.18	25.76		43.94
	41.38	58.62		
	40.00	47.22		
4	18	15		33
	15	18		
	0.6	0.5		
	27.27	22.73		50.00
	54.55	45.45		
	60.00	41.67		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V45 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6276	0.0989
Likelihood Ratio Chi-Square	2	6.1385	0.0465
Mantel-Haenszel Chi-Square	1	3.8015	0.0512
Phi Coefficient		0.2648	
Contingency Coefficient		0.2560	
Cramer's V		0.2648	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V45 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0098
 Pr <= P 0.1183

Sample Size = 66

Table of V46 by VV3

V46(Form : V46)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55	6.06	
	25.00	75.00		
	3.33	8.33		
3	7	12	19	
	8.6364	10.364		
	0.31	0.2584		
	10.61	18.18	28.79	
	36.84	63.16		
	23.33	33.33		
4	22	21	43	
	19.545	23.455		
	0.3082	0.2569		
	33.33	31.82	65.15	
	51.16	48.84		
	73.33	58.33		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V46 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.8085	0.4048
Likelihood Ratio Chi-Square	2	1.8550	0.3955
Mantel-Haenszel Chi-Square	1	1.7761	0.1826
Phi Coefficient		0.1655	
Contingency Coefficient		0.1633	
Cramer's V		0.1655	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0384
Pr <= P	0.4616

Sample Size = 66

The FREQ Procedure

Table of V47 by VV3

V47(Firm : V47)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	2	3	5	
	2.2727	2.7273		
	0.0327	0.0273		
	3.03	4.55	7.58	
	40.00	60.00		
	6.67	8.33		
3	12	16	28	
	12.727	15.273		
	0.0416	0.0346		
	18.18	24.24	42.42	
	42.86	57.14		
	40.00	44.44		
4	16	17	33	
	15	18		
	0.0667	0.0556		
	24.24	25.76	50.00	
	48.48	51.52		
	53.33	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V47 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.2584	0.8788
Likelihood Ratio Chi-Square	2	0.2588	0.8786
Mantel-Haenszel Chi-Square	1	0.2463	0.6197
Phi Coefficient		0.0626	
Contingency Coefficient		0.0625	
Cramer's V		0.0626	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V47 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0643
 Pr <= P 0.9296

Sample Size = 66

Table of V48 by VV3

V48(Instr : V48)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	3	3	
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55	4.55	
	0.00	100.00		
	0.00	8.33		
3	11	11	22	
	10	12		
	0.1	0.0833		
	16.67	16.67	33.33	
	50.00	50.00		
	36.67	30.56		
4	19	22	41	
	18.636	22.364		
	0.0071	0.0059		
	28.79	33.33	62.12	
	46.34	53.66		
	63.33	61.11		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V48 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6963	0.2597
Likelihood Ratio Chi-Square	2	3.8324	0.1472
Mantel-Haenszel Chi-Square	1	0.5357	0.4642
Phi Coefficient		0.2021	
Contingency Coefficient		0.1981	
Cramer's V		0.2021	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0313
Pr <= P	0.3535

Sample Size = 66

The FREQ Procedure

Table of V49 by VV3

V49(Cont-cls : V49)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	3	3	6	
	2.7692	3.2308		
	0.0192	0.0165		
	4.62	4.62	9.23	
	50.00	50.00		
	10.00	8.57		
3	12	17	29	
	13.385	15.615		
	0.1432	0.1228		
	18.46	26.15	44.62	
	41.38	58.62		
	40.00	48.57		
4	15	15	30	
	13.846	16.154		
	0.0962	0.0824		
	23.08	23.08	46.15	
	50.00	50.00		
	50.00	42.86		
Total	30	35	65	
	46.15	53.85	100.00	

Frequency Missing = 1

Statistics for Table of V49 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.4803	0.7865
Likelihood Ratio Chi-Square	2	0.4814	0.7861
Mantel-Haenszel Chi-Square	1	0.1244	0.7243
Phi Coefficient		0.0860	
Contingency Coefficient		0.0856	
Cramer's V		0.0860	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V49 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0535
 Pr <= P 0.8164

Effective Sample Size = 65
 Frequency Missing = 1

Table of V50 by VV3

V50 (Teach-aids : V50) VV3

Frequency Expected Cell Chi-Square Percent Row Pct Col Pct	English	Other	Total
2	0	2	2
	0.9091	1.0909	
	0.9091	0.7576	
	0.00	3.03	3.03
	0.00	100.00	
	0.00	5.56	
3	10	16	26
	11.818	14.182	
	0.2797	0.2331	
	15.15	24.24	39.39
	38.46	61.54	
	33.33	44.44	
4	20	18	38
	17.273	20.727	
	0.4306	0.3589	
	30.30	27.27	57.58
	52.63	47.37	
	66.67	50.00	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V50 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.9690	0.2266
Likelihood Ratio Chi-Square	2	3.7289	0.1550
Mantel-Haenszel Chi-Square	1	2.5794	0.1083
Phi Coefficient		0.2121	
Contingency Coefficient		0.2075	
Cramer's V		0.2121	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0323
Pr <= P	0.2803

Sample Size = 66

The FREQ Procedure

Table of V22 by VV3

V22(Expr-id : V22)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9231	1.0769	
Cell Chi-Square	0.9231	0.7912	
Percent	0.00	3.08	3.08
Row Pct	0.00	100.00	
Col Pct	0.00	5.71	
Acceptable	11	19	30
Expected	13.846	16.154	
Cell Chi-Square	0.585	0.5015	
Percent	16.92	29.23	46.15
Row Pct	36.67	63.33	
Col Pct	36.67	54.29	
H-satisfact	19	14	33
Expected	15.231	17.769	
Cell Chi-Square	0.9328	0.7995	
Percent	29.23	21.54	50.77
Row Pct	57.58	42.42	
Col Pct	63.33	40.00	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V22 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.5331	0.1037
Likelihood Ratio Chi-Square	2	5.3075	0.0704
Mantel-Haenszel Chi-Square	1	4.3151	0.0378
Phi Coefficient		0.2641	
Contingency Coefficient		0.2553	
Cramer's V		0.2641	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V22 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0149
 Pr <= P 0.0870

 Effective Sample Size = 65
 Frequency Missing = 1

Table of V30 by VV3

V30(Seek-clar : V30) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	0	2	2
	0.9091	1.0909	
	0.9091	0.7576	
	0.00	3.03	3.03
	0.00	100.00	
	0.00	5.56	
Acceptable	6	14	20
	9.0909	10.909	
	1.0509	0.8758	
	9.09	21.21	30.30
	30.00	70.00	
	20.00	38.89	
H-satisfact	24	20	44
	20	24	
	0.8	0.6667	
	36.36	30.30	66.67
	54.55	45.45	
	80.00	55.56	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V30 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.0600	0.0797
Likelihood Ratio Chi-Square	2	5.8818	0.0528
Mantel-Haenszel Chi-Square	1	4.9670	0.0258
Phi Coefficient		0.2769	
Contingency Coefficient		0.2668	
Cramer's V		0.2769	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0124
Pr <= P	0.0805

Sample Size = 66

The FREQ Procedure

Table of V38 by VV3

V38 (Adres : V38)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	3	3	
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55	4.55	
	0.00	100.00		
	0.00	8.33		
3	3	10	13	
	5.9091	7.0909		
	1.4322	1.1935		
	4.55	15.15	19.70	
	23.08	76.92		
	10.00	27.78		
4	27	23	50	
	22.727	27.273		
	0.8033	0.6694		
	40.91	34.85	75.76	
	54.00	46.00		
	90.00	63.89		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V38 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.5983	0.0369
Likelihood Ratio Chi-Square	2	7.9095	0.0192
Mantel-Haenszel Chi-Square	1	6.4613	0.0110
Phi Coefficient		0.3162	
Contingency Coefficient		0.3015	
Cramer's V		0.3162	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V38 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0056
 Pr <= P 0.0350

Sample Size = 66

Table of V43 by VV3

V43(Res-I-q : V43) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	1	3	4
	1.8462	2.1538	
	0.3878	0.3324	
	1.54	4.62	6.15
	25.00	75.00	
	3.33	8.57	
3	15	18	33
	15.231	17.769	
	0.0035	0.003	
	23.08	27.69	50.77
	45.45	54.55	
	50.00	51.43	
4	14	14	28
	12.923	15.077	
	0.0897	0.0769	
	21.54	21.54	43.08
	50.00	50.00	
	46.67	40.00	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V43 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.8934	0.6397
Likelihood Ratio Chi-Square	2	0.9346	0.6267
Mantel-Haenszel Chi-Square	1	0.6332	0.4262
Phi Coefficient		0.1172	
Contingency Coefficient		0.1164	
Cramer's V		0.1172	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0553
Pr <= P	0.7282

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V44 by VV3

V44 (Res-ic-ans : V44)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	2	2	
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03	3.03	
	0.00	100.00		
	0.00	5.56		
3	13	19	32	
	14.545	17.455		
	0.1642	0.1368		
	19.70	28.79	48.48	
	40.63	59.38		
	43.33	52.78		
4	17	15	32	
	14.545	17.455		
	0.4142	0.3452		
	25.76	22.73	48.48	
	53.13	46.88		
	56.67	41.67		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V44 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7271	0.2558
Likelihood Ratio Chi-Square	2	3.4831	0.1752
Mantel-Haenszel Chi-Square	1	2.2070	0.1374
Phi Coefficient		0.2033	
Contingency Coefficient		0.1992	
Cramer's V		0.2033	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V44 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0356
 Pr <= P 0.3616

Sample Size = 66

Table of V45 by VV3

V45(Use-alt : V45) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	4	4
	1.8182	2.1818	
	1.8182	1.5152	
	0.00	6.06	6.06
	0.00	100.00	
	0.00	11.11	
3	12	17	29
	13.182	15.818	
	0.106	0.0883	
	18.18	25.76	43.94
	41.38	58.62	
	40.00	47.22	
4	18	15	33
	15	18	
	0.6	0.5	
	27.27	22.73	50.00
	54.55	45.45	
	60.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V45 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6276	0.0989
Likelihood Ratio Chi-Square	2	6.1385	0.0465
Mantel-Haenszel Chi-Square	1	3.8015	0.0512
Phi Coefficient		0.2648	
Contingency Coefficient		0.2560	
Cramer's V		0.2648	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0098
Pr <= P	0.1183

Sample Size = 66

The FREQ Procedure

Table of V46 by VV3

V46 (Form : V46)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55	6.06	
	25.00	75.00		
	3.33	8.33		
3	7	12	19	
	8.6364	10.364		
	0.31	0.2584		
	10.61	18.18	28.79	
	36.84	63.16		
	23.33	33.33		
4	22	21	43	
	19.545	23.455		
	0.3082	0.2569		
	33.33	31.82	65.15	
	51.16	48.84		
	73.33	58.33		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V46 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.8085	0.4048
Likelihood Ratio Chi-Square	2	1.8550	0.3955
Mantel-Haenszel Chi-Square	1	1.7761	0.1826
Phi Coefficient		0.1655	
Contingency Coefficient		0.1633	
Cramer's V		0.1655	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V46 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0384
 Pr <= P 0.4616

Sample Size = 66

Table of V47 by VV3

V47(Firm : V47)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	2	3	5	
	2.2727	2.7273		
	0.0327	0.0273		
	3.03	4.55	7.58	
	40.00	60.00		
	6.67	8.33		
3	12	16	28	
	12.727	15.273		
	0.0416	0.0346		
	18.18	24.24	42.42	
	42.86	57.14		
	40.00	44.44		
4	16	17	33	
	15	18		
	0.0667	0.0556		
	24.24	25.76	50.00	
	48.48	51.52		
	53.33	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V47 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.2584	0.8788
Likelihood Ratio Chi-Square	2	0.2588	0.8786
Mantel-Haenszel Chi-Square	1	0.2463	0.6197
Phi Coefficient		0.0626	
Contingency Coefficient		0.0625	
Cramer's V		0.0626	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0643
Pr <= P	0.9296

Sample Size = 66

The FREQ Procedure

Table of V48 by VV3

V48 (Instr : V48)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	3	3	
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55	4.55	
	0.00	100.00		
	0.00	8.33		
3	11	11	22	
	10	12		
	0.1	0.0833		
	16.67	16.67	33.33	
	50.00	50.00		
	36.67	30.56		
4	19	22	41	
	18.636	22.364		
	0.0071	0.0059		
	28.79	33.33	62.12	
	46.34	53.66		
	63.33	61.11		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V48 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6963	0.2597
Likelihood Ratio Chi-Square	2	3.8324	0.1472
Mantel-Haenszel Chi-Square	1	0.5357	0.4642
Phi Coefficient		0.2021	
Contingency Coefficient		0.1981	
Cramer's V		0.2021	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V48 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0313
 Pr <= P 0.3535

Sample Size = 66

Table of V49 by VV3

V49(Cont-cls : V49) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	3	3	6
	2.7692	3.2308	
	0.0192	0.0165	
	4.62	4.62	9.23
	50.00	50.00	
	10.00	8.57	
3	12	17	29
	13.385	15.615	
	0.1432	0.1228	
	18.46	26.15	44.62
	41.38	58.62	
	40.00	48.57	
4	15	15	30
	13.846	16.154	
	0.0962	0.0824	
	23.08	23.08	46.15
	50.00	50.00	
	50.00	42.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V49 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.4803	0.7865
Likelihood Ratio Chi-Square	2	0.4814	0.7861
Mantel-Haenszel Chi-Square	1	0.1244	0.7243
Phi Coefficient		0.0860	
Contingency Coefficient		0.0856	
Cramer's V		0.0860	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0535
Pr <= P	0.8164

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V50 by VV3

V50 (Teach-aids : V50)		VV3		
Frequency	Expected	English	Other	Total
2	0	2	2	2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	10	16		26
	11.818	14.182		
	0.2797	0.2331		
	15.15	24.24		39.39
	38.46	61.54		
	33.33	44.44		
4	20	18		38
	17.273	20.727		
	0.4306	0.3589		
	30.30	27.27		57.58
	52.63	47.37		
	66.67	50.00		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V50 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.9690	0.2266
Likelihood Ratio Chi-Square	2	3.7289	0.1550
Mantel-Haenszel Chi-Square	1	2.5794	0.1083
Phi Coefficient		0.2121	
Contingency Coefficient		0.2075	
Cramer's V		0.2121	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V50 by VV3

Fisher's Exact Test

Table Probability (P) 0.0323
Pr <= P 0.2803

Sample Size = 66

The FREQ Procedure

Table of V31 by VV3

V31 (Ss-cor : V31)		VV3		
Frequency	Expected	English	Other	Total
2	0	2	2	2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	11	11	11	22
	10	12		
	0.1	0.0833		
	16.67	16.67		33.33
	50.00	50.00		
	36.67	30.56		
4	19	23	23	42
	19.091	22.909		
	0.0004	0.0004		
	28.79	34.85		63.64
	45.24	54.76		
	63.33	63.89		
Total	30	36	36	66
	45.45	54.55	54.55	100.00

Statistics for Table of V31 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.8508	0.3964
Likelihood Ratio Chi-Square	2	2.6079	0.2715
Mantel-Haenszel Chi-Square	1	0.1346	0.7137
Phi Coefficient		0.1675	
Contingency Coefficient		0.1652	
Cramer's V		0.1675	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V31 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0571
 Pr <= P 0.5298

Sample Size = 66

Table of V32 by VV3

V32 (Pron-Ss : V32) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	2	1	3
	1.3636	1.6364	
	0.297	0.2475	
	3.03	1.52	4.55
	66.67	33.33	
	6.67	2.78	
3	8	22	30
	13.636	16.364	
	2.3297	1.9414	
	12.12	33.33	45.45
	26.67	73.33	
	26.67	61.11	
4	20	13	33
	15	18	
	1.6667	1.3889	
	30.30	19.70	50.00
	60.61	39.39	
	66.67	36.11	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V32 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	7.8711	0.0195
Likelihood Ratio Chi-Square	2	8.0837	0.0176
Mantel-Haenszel Chi-Square	1	3.3821	0.0659
Phi Coefficient		0.3453	
Contingency Coefficient		0.3264	
Cramer's V		0.3453	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0018
Pr <= P	0.0095

Sample Size = 66

The FREQ Procedure

Table of V33 by VV3

V33(Ss-cotxt : V33)		VV3		
Frequency		English	Other	Total
2	0	3		3
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55		4.55
	0.00	100.00		
	0.00	8.33		
3	8	19		27
	12.273	14.727		
	1.4875	1.2396		
	12.12	28.79		40.91
	29.63	70.37		
	26.67	52.78		
4	22	14		36
	16.364	19.636		
	1.9414	1.6178		
	33.33	21.21		54.55
	61.11	38.89		
	73.33	38.89		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V33 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.7864	0.0124
Likelihood Ratio Chi-Square	2	10.0199	0.0067
Mantel-Haenszel Chi-Square	1	8.6506	0.0033
Phi Coefficient		0.3649	
Contingency Coefficient		0.3428	
Cramer's V		0.3649	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V33 by VV3

Fisher's Exact Test

Table Probability (P) 0.0015
Pr <= P 0.0091

Sample Size = 66

Table of V34 by VV3

V34 (Exp-Ss : V34)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
2	0	2		2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	10	22		32
	14.545	17.455		
	1.4205	1.1837		
	15.15	33.33		48.48
	31.25	68.75		
	33.33	61.11		
4	20	12		32
	14.545	17.455		
	2.0455	1.7045		
	30.30	18.18		48.48
	62.50	37.50		
	66.67	33.33		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V34 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.0208	0.0181
Likelihood Ratio Chi-Square	2	8.8596	0.0119
Mantel-Haenszel Chi-Square	1	7.8993	0.0049
Phi Coefficient		0.3486	
Contingency Coefficient		0.3292	
Cramer's V		0.3486	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0026
Pr <= P	0.0172

Sample Size = 66

The FREQ Procedure

Table of V35 by VV3

V35 (Ex-mod : V35)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	4	4	
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06	6.06	
	0.00	100.00		
	0.00	11.11		
3	10	17	27	
	12.273	14.727		
	0.4209	0.3507		
	15.15	25.76	40.91	
	37.04	62.96		
	33.33	47.22		
4	20	15	35	
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73	53.03	
	57.14	42.86		
	66.67	41.67		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V35 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.0335	0.0490
Likelihood Ratio Chi-Square	2	7.5514	0.0229
Mantel-Haenszel Chi-Square	1	5.6752	0.0172
Phi Coefficient		0.3024	
Contingency Coefficient		0.2894	
Cramer's V		0.3024	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V35 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0050
 Pr <= P 0.0448

Sample Size = 66

Table of V36 by VV3

V36(Ss-task-dev : V36) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	4	4
	1.8182	2.1818	
	1.8182	1.5152	
	0.00	6.06	6.06
	0.00	100.00	
	0.00	11.11	
3	11	17	28
	12.727	15.273	
	0.2344	0.1953	
	16.67	25.76	42.42
	39.29	60.71	
	36.67	47.22	
4	19	15	34
	15.455	18.545	
	0.8134	0.6778	
	28.79	22.73	51.52
	55.88	44.12	
	63.33	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V36 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.2543	0.0723
Likelihood Ratio Chi-Square	2	6.7664	0.0339
Mantel-Haenszel Chi-Square	1	4.6904	0.0303
Phi Coefficient		0.2822	
Contingency Coefficient		0.2716	
Cramer's V		0.2822	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0072
Pr <= P	0.0907

Sample Size = 66

The FREQ Procedure

Table of V37 by VV3

V37 (Sum : V37)	VV3		
Frequency	English	Other	Total
2	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
3	6	18	24
	10.909	13.091	
	2.2091	1.8409	
	9.09	27.27	36.36
	25.00	75.00	
	20.00	50.00	
4	24	15	39
	17.727	21.273	
	2.2196	1.8497	
	36.36	22.73	59.09
	61.54	38.46	
	80.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V37 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	10.6192	0.0049
Likelihood Ratio Chi-Square	2	11.9874	0.0025
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4011	
Contingency Coefficient		0.3723	
Cramer's V		0.4011	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V37 by VV3

Fisher's Exact Test

Table Probability (P) 6.134E-04
Pr <= P 0.0035

Sample Size = 66

The FREQ Procedure

Table of V17 by VV3

V17(Trans : V17)	VV3		
Frequency	English	Other	Total
Needs-atten	0	5	5
Expected	2.2727	2.7273	
Cell Chi-Square	2.2727	1.8939	
Percent	0.00	7.58	7.58
Row Pct	0.00	100.00	
Col Pct	0.00	13.89	
Acceptable	5	16	21
Expected	9.5455	11.455	
Cell Chi-Square	2.1645	1.8038	
Percent	7.58	24.24	31.82
Row Pct	23.81	76.19	
Col Pct	16.67	44.44	
H-satisfact	25	15	40
Expected	18.182	21.818	
Cell Chi-Square	2.5568	2.1307	
Percent	37.88	22.73	60.61
Row Pct	62.50	37.50	
Col Pct	83.33	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V17 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	12.8224	0.0016
Likelihood Ratio Chi-Square	2	14.9714	0.0006
Mantel-Haenszel Chi-Square	1	12.4164	0.0004
Phi Coefficient		0.4408	
Contingency Coefficient		0.4033	
Cramer's V		0.4408	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V17 by VV3

Fisher's Exact Test

 Table Probability (P) 1.484E-04
 Pr <= P 0.0011

Sample Size = 66

Table of V26 by VV3

V26(Frm-q : V26)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent			
Row Pct	Col Pct	English	Other	Total
Needs-atten	1	3		4
	1.8182	2.1818		
	0.3682	0.3068		
	1.52	4.55		6.06
	25.00	75.00		
	3.33	8.33		
Acceptable	10	15		25
	11.364	13.636		
	0.1636	0.1364		
	15.15	22.73		37.88
	40.00	60.00		
	33.33	41.67		
H-satisfact	19	18		37
	16.818	20.182		
	0.283	0.2359		
	28.79	27.27		56.06
	51.35	48.65		
	63.33	50.00		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V26 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4939	0.4738
Likelihood Ratio Chi-Square	2	1.5341	0.4644
Mantel-Haenszel Chi-Square	1	1.4592	0.2271
Phi Coefficient		0.1504	
Contingency Coefficient		0.1488	
Cramer's V		0.1504	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0419
Pr <= P	0.5686

Sample Size = 66

The FREQ Procedure

Table of V31 by VV3

V31 (Ss-cor : V31)		VV3		
Frequency	Expected	English	Other	Total
2	0	2	2	2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	11	11	11	22
	10	12		
	0.1	0.0833		
	16.67	16.67		33.33
	50.00	50.00		
	36.67	30.56		
4	19	23	23	42
	19.091	22.909		
	0.0004	0.0004		
	28.79	34.85		63.64
	45.24	54.76		
	63.33	63.89		
Total	30	36	36	66
	45.45	54.55	54.55	100.00

Statistics for Table of V31 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.8508	0.3964
Likelihood Ratio Chi-Square	2	2.6079	0.2715
Mantel-Haenszel Chi-Square	1	0.1346	0.7137
Phi Coefficient		0.1675	
Contingency Coefficient		0.1652	
Cramer's V		0.1675	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V31 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0571
 Pr <= P 0.5298

Sample Size = 66

Table of V32 by VV3

V32 (Pron-Ss : V32) VV3

Frequency	Expected	Cell Chi-Square	Percent	Row Pct	Col Pct	English	Other	Total
2	1.3636	0.297	3.03	66.67	6.67	2	1	3
						1.3636	1.6364	4.55
						0.297	0.2475	
						3.03	1.52	
						66.67	33.33	
						6.67	2.78	
3	2.3297	12.12	26.67	26.67	8	22	30	45.45
						13.636	16.364	
						2.3297	1.9414	
						12.12	33.33	
						26.67	73.33	
						26.67	61.11	
4	1.6667	30.30	60.61	66.67	20	13	33	50.00
						15	18	
						1.6667	1.3889	
						30.30	19.70	
						60.61	39.39	
						66.67	36.11	
Total						30	36	66
						45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V32 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	7.8711	0.0195
Likelihood Ratio Chi-Square	2	8.0837	0.0176
Mantel-Haenszel Chi-Square	1	3.3821	0.0659
Phi Coefficient		0.3453	
Contingency Coefficient		0.3264	
Cramer's V		0.3453	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0018
Pr <= P	0.0095

Sample Size = 66

The FREQ Procedure

Table of V33 by VV3

V33(Ss-cotxt : V33)		VV3		
Frequency	Expected	English	Other	Total
2	0	3		3
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55		4.55
	0.00	100.00		
	0.00	8.33		
3	8	19		27
	12.273	14.727		
	1.4875	1.2396		
	12.12	28.79		40.91
	29.63	70.37		
	26.67	52.78		
4	22	14		36
	16.364	19.636		
	1.9414	1.6178		
	33.33	21.21		54.55
	61.11	38.89		
	73.33	38.89		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V33 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.7864	0.0124
Likelihood Ratio Chi-Square	2	10.0199	0.0067
Mantel-Haenszel Chi-Square	1	8.6506	0.0033
Phi Coefficient		0.3649	
Contingency Coefficient		0.3428	
Cramer's V		0.3649	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V33 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0015
 Pr <= P 0.0091

Sample Size = 66

Table of V34 by VV3

V34 (Exp-Ss : V34)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
2	0	2		2
	0.9091	1.0909		
	0.9091	0.7576		
	0.00	3.03		3.03
	0.00	100.00		
	0.00	5.56		
3	10	22		32
	14.545	17.455		
	1.4205	1.1837		
	15.15	33.33		48.48
	31.25	68.75		
	33.33	61.11		
4	20	12		32
	14.545	17.455		
	2.0455	1.7045		
	30.30	18.18		48.48
	62.50	37.50		
	66.67	33.33		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V34 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.0208	0.0181
Likelihood Ratio Chi-Square	2	8.8596	0.0119
Mantel-Haenszel Chi-Square	1	7.8993	0.0049
Phi Coefficient		0.3486	
Contingency Coefficient		0.3292	
Cramer's V		0.3486	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0026
Pr <= P	0.0172

Sample Size = 66

The FREQ Procedure

Table of V35 by VV3

V35 (Ex-mod : V35)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	4	4	
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06	6.06	
	0.00	100.00		
	0.00	11.11		
3	10	17	27	
	12.273	14.727		
	0.4209	0.3507		
	15.15	25.76	40.91	
	37.04	62.96		
	33.33	47.22		
4	20	15	35	
	15.909	19.091		
	1.0519	0.8766		
	30.30	22.73	53.03	
	57.14	42.86		
	66.67	41.67		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V35 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.0335	0.0490
Likelihood Ratio Chi-Square	2	7.5514	0.0229
Mantel-Haenszel Chi-Square	1	5.6752	0.0172
Phi Coefficient		0.3024	
Contingency Coefficient		0.2894	
Cramer's V		0.3024	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V35 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0050
 Pr <= P 0.0448

Sample Size = 66

Table of V36 by VV3

V36(Ss-task-dev : V36) VV3

Frequency	Expected	Cell Chi-Square	Percent	Row Pct	Col Pct	English	Other	Total
2	0	4	4	1.8182	2.1818	1.8182	1.5152	6.06
	0.00	6.06	0.00	0.00	100.00	0.00	11.11	
3	11	17	28	12.727	15.273	0.2344	0.1953	42.42
	16.67	25.76	39.29	60.71	36.67	47.22		
4	19	15	34	15.455	18.545	0.8134	0.6778	51.52
	28.79	22.73	55.88	44.12	63.33	41.67		
Total	30	36	66	45.45	54.55	100.00		

The FREQ Procedure

Statistics for Table of V36 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.2543	0.0723
Likelihood Ratio Chi-Square	2	6.7664	0.0339
Mantel-Haenszel Chi-Square	1	4.6904	0.0303
Phi Coefficient		0.2822	
Contingency Coefficient		0.2716	
Cramer's V		0.2822	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0072
Pr <= P	0.0907

Sample Size = 66

The FREQ Procedure

Table of V37 by VV3

V37 (Sum : V37)	VV3		
Frequency	English	Other	Total
2	0	3	3
	1.3636	1.6364	
	1.3636	1.1364	
	0.00	4.55	4.55
	0.00	100.00	
	0.00	8.33	
3	6	18	24
	10.909	13.091	
	2.2091	1.8409	
	9.09	27.27	36.36
	25.00	75.00	
	20.00	50.00	
4	24	15	39
	17.727	21.273	
	2.2196	1.8497	
	36.36	22.73	59.09
	61.54	38.46	
	80.00	41.67	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V37 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	10.6192	0.0049
Likelihood Ratio Chi-Square	2	11.9874	0.0025
Mantel-Haenszel Chi-Square	1	10.3577	0.0013
Phi Coefficient		0.4011	
Contingency Coefficient		0.3723	
Cramer's V		0.4011	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V37 by VV3

Fisher's Exact Test

 Table Probability (P) 6.134E-04
 Pr <= P 0.0035

Sample Size = 66

Table of V39 by VV3

V39(Pre-know : V39) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	1	1
	0.4545	0.5455	
	0.4545	0.3788	
	0.00	1.52	1.52
	0.00	100.00	
	0.00	2.78	
3	7	11	18
	8.1818	9.8182	
	0.1707	0.1423	
	10.61	16.67	27.27
	38.89	61.11	
	23.33	30.56	
4	23	24	47
	21.364	25.636	
	0.1253	0.1044	
	34.85	36.36	71.21
	48.94	51.06	
	76.67	66.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V39 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.3761	0.5026
Likelihood Ratio Chi-Square	2	1.7577	0.4153
Mantel-Haenszel Chi-Square	1	1.0895	0.2966
Phi Coefficient		0.1444	
Contingency Coefficient		0.1429	
Cramer's V		0.1444	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0930
Pr <= P	0.6722

Sample Size = 66

The FREQ Procedure

Table of V41 by VV3

V41(Q-ind : V41)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	4	5	
	2.2727	2.7273		
	0.7127	0.5939		
	1.52	6.06	7.58	
	20.00	80.00		
	3.33	11.11		
3	13	15	28	
	12.727	15.273		
	0.0058	0.0049		
	19.70	22.73	42.42	
	46.43	53.57		
	43.33	41.67		
4	16	17	33	
	15	18		
	0.0667	0.0556		
	24.24	25.76	50.00	
	48.48	51.52		
	53.33	47.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V41 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.4396	0.4868
Likelihood Ratio Chi-Square	2	1.5545	0.4597
Mantel-Haenszel Chi-Square	1	0.7855	0.3755
Phi Coefficient		0.1477	
Contingency Coefficient		0.1461	
Cramer's V		0.1477	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V41 by VV3

Fisher's Exact Test

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Table Probability (P)      0.0396
Pr <= P                    0.5604
```

Sample Size = 66

Table of V42 by VV3

V42(Q-clas : V42)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
3	12	17	29	
	13.182	15.818		
	0.106	0.0883		
	18.18	25.76	43.94	
	41.38	58.62		
	40.00	47.22		
4	18	19	37	
	16.818	20.182		
	0.083	0.0692		
	27.27	28.79	56.06	
	48.65	51.35		
	60.00	52.78		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V42 by VV3

Statistic	DF	Value	Prob
Chi-Square	1	0.3465	0.5561
Likelihood Ratio Chi-Square	1	0.3472	0.5557
Continuity Adj. Chi-Square	1	0.1153	0.7342
Mantel-Haenszel Chi-Square	1	0.3413	0.5591
Phi Coefficient		-0.0725	
Contingency Coefficient		0.0723	
Cramer's V		-0.0725	

Fisher's Exact Test

Cell (1,1) Frequency (F)	12
Left-sided Pr <= F	0.3676
Right-sided Pr >= F	0.7987
Table Probability (P)	0.1662
Two-sided Pr <= P	0.6233

Sample Size = 66

The FREQ Procedure

Table of V43 by VV3

V43 (Res-I-q : V43)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	1	3	4	
	1.8462	2.1538		
	0.3878	0.3324		
	1.54	4.62	6.15	
	25.00	75.00		
	3.33	8.57		
3	15	18	33	
	15.231	17.769		
	0.0035	0.003		
	23.08	27.69	50.77	
	45.45	54.55		
	50.00	51.43		
4	14	14	28	
	12.923	15.077		
	0.0897	0.0769		
	21.54	21.54	43.08	
	50.00	50.00		
	46.67	40.00		
Total	30	35	65	
	46.15	53.85	100.00	

Frequency Missing = 1

Statistics for Table of V43 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	0.8934	0.6397
Likelihood Ratio Chi-Square	2	0.9346	0.6267
Mantel-Haenszel Chi-Square	1	0.6332	0.4262
Phi Coefficient		0.1172	
Contingency Coefficient		0.1164	
Cramer's V		0.1172	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V43 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0553
 Pr <= P 0.7282

Effective Sample Size = 65
 Frequency Missing = 1

Table of V44 by VV3

V44 (Res-ic-ans : V44) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
2	0	2	2
	0.9091	1.0909	
	0.9091	0.7576	
	0.00	3.03	3.03
	0.00	100.00	
	0.00	5.56	
3	13	19	32
	14.545	17.455	
	0.1642	0.1368	
	19.70	28.79	48.48
	40.63	59.38	
	43.33	52.78	
4	17	15	32
	14.545	17.455	
	0.4142	0.3452	
	25.76	22.73	48.48
	53.13	46.88	
	56.67	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V44 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7271	0.2558
Likelihood Ratio Chi-Square	2	3.4831	0.1752
Mantel-Haenszel Chi-Square	1	2.2070	0.1374
Phi Coefficient		0.2033	
Contingency Coefficient		0.1992	
Cramer's V		0.2033	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0356
Pr <= P	0.3616

Sample Size = 66

The FREQ Procedure

Table of V45 by VV3

V45(Use-alt : V45)		VV3		
Frequency	Expected	English	Other	Total
2	0	4		4
	1.8182	2.1818		
	1.8182	1.5152		
	0.00	6.06		6.06
	0.00	100.00		
	0.00	11.11		
3	12	17		29
	13.182	15.818		
	0.106	0.0883		
	18.18	25.76		43.94
	41.38	58.62		
	40.00	47.22		
4	18	15		33
	15	18		
	0.6	0.5		
	27.27	22.73		50.00
	54.55	45.45		
	60.00	41.67		
Total	30	36		66
	45.45	54.55		100.00

Statistics for Table of V45 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.6276	0.0989
Likelihood Ratio Chi-Square	2	6.1385	0.0465
Mantel-Haenszel Chi-Square	1	3.8015	0.0512
Phi Coefficient		0.2648	
Contingency Coefficient		0.2560	
Cramer's V		0.2648	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V45 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0098
 Pr <= P 0.1183

Sample Size = 66

Table of V48 by VV3

V48(Instr : V48)		VV3		
Frequency	Expected	Cell Chi-Square	Percent	Row Pct
Col Pct	English	Other	Total	
2	0	3	3	
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55	4.55	
	0.00	100.00		
	0.00	8.33		
3	11	11	22	
	10	12		
	0.1	0.0833		
	16.67	16.67	33.33	
	50.00	50.00		
	36.67	30.56		
4	19	22	41	
	18.636	22.364		
	0.0071	0.0059		
	28.79	33.33	62.12	
	46.34	53.66		
	63.33	61.11		
Total	30	36	66	
	45.45	54.55	100.00	

The FREQ Procedure

Statistics for Table of V48 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.6963	0.2597
Likelihood Ratio Chi-Square	2	3.8324	0.1472
Mantel-Haenszel Chi-Square	1	0.5357	0.4642
Phi Coefficient		0.2021	
Contingency Coefficient		0.1981	
Cramer's V		0.2021	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0313
Pr <= P	0.3535

Sample Size = 66

The FREQ Procedure

Table of V11 by VV3

V11 (V-proj : V11)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	7	17	24
Expected	10.909	13.091	
Cell Chi-Square	1.4008	1.1673	
Percent	10.61	25.76	36.36
Row Pct	29.17	70.83	
Col Pct	23.33	47.22	
H-satisfact	23	17	40
Expected	18.182	21.818	
Cell Chi-Square	1.2768	1.064	
Percent	34.85	25.76	60.61
Row Pct	57.50	42.50	
Col Pct	76.67	47.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V11 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.5756	0.0373
Likelihood Ratio Chi-Square	2	7.4263	0.0244
Mantel-Haenszel Chi-Square	1	6.4755	0.0109
Phi Coefficient		0.3156	
Contingency Coefficient		0.3010	
Cramer's V		0.3156	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V11 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0056
 Pr <= P 0.0283

Sample Size = 66

Table of V12 by VV3

V12(V-pitc : V12)		VV3		
Frequency	Expected			
Cell Chi-Square	Percent	English	Other	Total
Row Pct	Col Pct			
Needs-atten	0	1		1
	0.4545	0.5455		
	0.4545	0.3788		1.52
	0.00	1.52		
	0.00	100.00		
	0.00	2.78		
Acceptable	12	20		32
	14.545	17.455		
	0.4455	0.3712		48.48
	18.18	30.30		
	37.50	62.50		
	40.00	55.56		
H-satisfact	18	15		33
	15	18		
	0.6	0.5		50.00
	27.27	22.73		
	54.55	45.45		
	60.00	41.67		
Total	30	36		66
	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V12 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.7500	0.2528
Likelihood Ratio Chi-Square	2	3.1346	0.2086
Mantel-Haenszel Chi-Square	1	2.5645	0.1093
Phi Coefficient		0.2041	
Contingency Coefficient		0.2000	
Cramer's V		0.2041	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0424
Pr <= P	0.2162

Sample Size = 66

The FREQ Procedure

Table of V13 by VV3

V13 (Pron : V13)	VV3		
Frequency	English	Other	Total
Needs-atten	2	5	7
Expected	3.1818	3.8182	
Cell Chi-Square	0.439	0.3658	
Percent	3.03	7.58	10.61
Row Pct	28.57	71.43	
Col Pct	6.67	13.89	
Acceptable	12	23	35
Expected	15.909	19.091	
Cell Chi-Square	0.9605	0.8004	
Percent	18.18	34.85	53.03
Row Pct	34.29	65.71	
Col Pct	40.00	63.89	
H-satisfact	16	8	24
Expected	10.909	13.091	
Cell Chi-Square	2.3758	1.9798	
Percent	24.24	12.12	36.36
Row Pct	66.67	33.33	
Col Pct	53.33	22.22	
Total	30	36	66
Expected	45.45	54.55	100.00

Statistics for Table of V13 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	6.9213	0.0314
Likelihood Ratio Chi-Square	2	7.0169	0.0299
Mantel-Haenszel Chi-Square	1	5.8711	0.0154
Phi Coefficient		0.3238	
Contingency Coefficient		0.3081	
Cramer's V		0.3238	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V13 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0023
 Pr <= P 0.0375

Sample Size = 66

Table of V15 by VV3

V15(Dist-q-s-i : V15) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	1	2
	0.9091	1.0909	
	0.0091	0.0076	
	1.52	1.52	3.03
	50.00	50.00	
	3.33	2.78	
Acceptable	6	17	23
	10.455	12.545	
	1.898	1.5817	
	9.09	25.76	34.85
	26.09	73.91	
	20.00	47.22	
H-satisfact	23	18	41
	18.636	22.364	
	1.0217	0.8514	
	34.85	27.27	62.12
	56.10	43.90	
	76.67	50.00	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V15 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.3695	0.0682
Likelihood Ratio Chi-Square	2	5.5475	0.0624
Mantel-Haenszel Chi-Square	1	3.6341	0.0566
Phi Coefficient		0.2852	
Contingency Coefficient		0.2743	
Cramer's V		0.2852	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0074
Pr <= P	0.0421

Sample Size = 66

The FREQ Procedure

Table of V16 by VV3

V16(NB-wds : V16)	VV3		
Frequency	English	Other	Total
Needs-atten	1	5	6
Expected	2.7273	3.2727	
Cell Chi-Square	1.0939	0.9116	
Percent	1.52	7.58	9.09
Row Pct	16.67	83.33	
Col Pct	3.33	13.89	
Acceptable	7	14	21
Expected	9.5455	11.455	
Cell Chi-Square	0.6788	0.5657	
Percent	10.61	21.21	31.82
Row Pct	33.33	66.67	
Col Pct	23.33	38.89	
H-satisfact	22	17	39
Expected	17.727	21.273	
Cell Chi-Square	1.0298	0.8582	
Percent	33.33	25.76	59.09
Row Pct	56.41	43.59	
Col Pct	73.33	47.22	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V16 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.1380	0.0766
Likelihood Ratio Chi-Square	2	5.3862	0.0677
Mantel-Haenszel Chi-Square	1	5.0175	0.0251
Phi Coefficient		0.2790	
Contingency Coefficient		0.2687	
Cramer's V		0.2790	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V16 by VV3

Fisher's Exact Test

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Table Probability (P)      0.0065
Pr <= P                    0.0854
```

Sample Size = 66

Table of V17 by VV3

V17(Trans : V17)	VV3		
Frequency	English	Other	Total
Needs-atten	0	5	5
Expected	2.2727	2.7273	
Cell Chi-Square	2.2727	1.8939	
Percent	0.00	7.58	7.58
Row Pct	0.00	100.00	
Col Pct	0.00	13.89	
Acceptable	5	16	21
Expected	9.5455	11.455	
Cell Chi-Square	2.1645	1.8038	
Percent	7.58	24.24	31.82
Row Pct	23.81	76.19	
Col Pct	16.67	44.44	
H-satisfact	25	15	40
Expected	18.182	21.818	
Cell Chi-Square	2.5568	2.1307	
Percent	37.88	22.73	60.61
Row Pct	62.50	37.50	
Col Pct	83.33	41.67	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V17 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	12.8224	0.0016
Likelihood Ratio Chi-Square	2	14.9714	0.0006
Mantel-Haenszel Chi-Square	1	12.4164	0.0004
Phi Coefficient		0.4408	
Contingency Coefficient		0.4033	
Cramer's V		0.4408	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	1.484E-04
Pr <= P	0.0011

Sample Size = 66

The FREQ Procedure

Table of V18 by VV3

V18 (Fac-exp : V18)		VV3		
Frequency		English	Other	Total
Unsatisfact	0	1		1
Expected	0.4545	0.5455		
Cell Chi-Square	0.4545	0.3788		
Percent	0.00	1.52		1.52
Row Pct	0.00	100.00		
Col Pct	0.00	2.78		
Needs-atten	1	3		4
Expected	1.8182	2.1818		
Cell Chi-Square	0.3682	0.3068		
Percent	1.52	4.55		6.06
Row Pct	25.00	75.00		
Col Pct	3.33	8.33		
Acceptable	14	13		27
Expected	12.273	14.727		
Cell Chi-Square	0.2431	0.2026		
Percent	21.21	19.70		40.91
Row Pct	51.85	48.15		
Col Pct	46.67	36.11		
H-satisfact	15	19		34
Expected	15.455	18.545		
Cell Chi-Square	0.0134	0.0111		
Percent	22.73	28.79		51.52
Row Pct	44.12	55.88		
Col Pct	50.00	52.78		
Total	30	36		66
Expected	45.45	54.55		100.00

The FREQ Procedure

Statistics for Table of V18 by VV3

Statistic	DF	Value	Prob
Chi-Square	3	1.9785	0.5769
Likelihood Ratio Chi-Square	3	2.3953	0.4945
Mantel-Haenszel Chi-Square	1	0.2136	0.6439
Phi Coefficient		0.1731	
Contingency Coefficient		0.1706	
Cramer's V		0.1731	

WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0270
Pr <= P	0.6684

Sample Size = 66

The FREQ Procedure

Table of V19 by VV3

V19 (Gest : V19)	VV3		
Frequency	English	Other	Total
Needs-atten	4	5	9
Expected	4.1538	4.8462	
Cell Chi-Square	0.0057	0.0049	
Percent	6.15	7.69	13.85
Row Pct	44.44	55.56	
Col Pct	13.33	14.29	
Acceptable	9	15	24
Expected	11.077	12.923	
Cell Chi-Square	0.3894	0.3338	
Percent	13.85	23.08	36.92
Row Pct	37.50	62.50	
Col Pct	30.00	42.86	
H-satisfact	17	15	32
Expected	14.769	17.231	
Cell Chi-Square	0.3369	0.2888	
Percent	26.15	23.08	49.23
Row Pct	53.13	46.88	
Col Pct	56.67	42.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V19 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	1.3595	0.5067
Likelihood Ratio Chi-Square	2	1.3675	0.5047
Mantel-Haenszel Chi-Square	1	0.6856	0.4077
Phi Coefficient		0.1446	
Contingency Coefficient		0.1431	
Cramer's V		0.1446	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V19 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0310
 Pr <= P 0.5164

 Effective Sample Size = 65
 Frequency Missing = 1

Table of V20 by VV3

V20(S-speed : V20) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	3	8	11
	5	6	
	0.8	0.6667	
	4.55	12.12	16.67
	27.27	72.73	
	10.00	22.22	
Acceptable	13	23	36
	16.364	19.636	
	0.6914	0.5762	
	19.70	34.85	54.55
	36.11	63.89	
	43.33	63.89	
H-satisfact	14	5	19
	8.6364	10.364	
	3.3311	2.7759	
	21.21	7.58	28.79
	73.68	26.32	
	46.67	13.89	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V20 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	8.8413	0.0120
Likelihood Ratio Chi-Square	2	9.0656	0.0108
Mantel-Haenszel Chi-Square	1	7.4194	0.0065
Phi Coefficient		0.3660	
Contingency Coefficient		0.3437	
Cramer's V		0.3660	

Fisher's Exact Test

Table Probability (P)	8.037E-04
Pr <= P	0.0099

Sample Size = 66

The FREQ Procedure

Table of V21 by VV3

V21(S-fluen : V21)	VV3		Total
Frequency	English	Other	
Needs-atten	2	7	9
Expected	4.1538	4.8462	
Cell Chi-Square	1.1168	0.9573	
Percent	3.08	10.77	13.85
Row Pct	22.22	77.78	
Col Pct	6.67	20.00	
Acceptable	10	20	30
Expected	13.846	16.154	
Cell Chi-Square	1.0684	0.9158	
Percent	15.38	30.77	46.15
Row Pct	33.33	66.67	
Col Pct	33.33	57.14	
H-satisfact	18	8	26
Expected	12	14	
Cell Chi-Square	3	2.5714	
Percent	27.69	12.31	40.00
Row Pct	69.23	30.77	
Col Pct	60.00	22.86	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

Statistics for Table of V21 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	9.6296	0.0081
Likelihood Ratio Chi-Square	2	9.9020	0.0071
Mantel-Haenszel Chi-Square	1	8.6211	0.0033
Phi Coefficient		0.3849	
Contingency Coefficient		0.3592	
Cramer's V		0.3849	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V21 by VV3

Fisher's Exact Test

Table Probability (P) 5.616E-04
Pr <= P 0.0101

Effective Sample Size = 65
Frequency Missing = 1

Table of V22 by VV3

V22(Expr-id : V22) VV3

Frequency Expected Cell Chi-Square Percent Row Pct Col Pct	English	Other	Total
Needs-atten	0	2	2
	0.9231	1.0769	
	0.9231	0.7912	
	0.00	3.08	3.08
	0.00	100.00	
	0.00	5.71	
Acceptable	11	19	30
	13.846	16.154	
	0.585	0.5015	
	16.92	29.23	46.15
	36.67	63.33	
	36.67	54.29	
H-satisfact	19	14	33
	15.231	17.769	
	0.9328	0.7995	
	29.23	21.54	50.77
	57.58	42.42	
	63.33	40.00	
Total	30	35	65
	46.15	53.85	100.00

Frequency Missing = 1

The FREQ Procedure

Statistics for Table of V22 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	4.5331	0.1037
Likelihood Ratio Chi-Square	2	5.3075	0.0704
Mantel-Haenszel Chi-Square	1	4.3151	0.0378
Phi Coefficient		0.2641	
Contingency Coefficient		0.2553	
Cramer's V		0.2641	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0149
Pr <= P	0.0870

Effective Sample Size = 65

Frequency Missing = 1

The FREQ Procedure

Table of V24 by VV3

V24 (Ver-gram : V24)		VV3		
Frequency				
Expected				
Cell Chi-Square				
Percent				
Row Pct				
Col Pct	English	Other	Total	
Needs-atten	0	3	3	
	1.3636	1.6364		
	1.3636	1.1364		
	0.00	4.55	4.55	
	0.00	100.00		
	0.00	8.33		
Acceptable	15	25	40	
	18.182	21.818		
	0.5568	0.464		
	22.73	37.88	60.61	
	37.50	62.50		
	50.00	69.44		
H-satisfact	15	8	23	
	10.455	12.545		
	1.9763	1.6469		
	22.73	12.12	34.85	
	65.22	34.78		
	50.00	22.22		
Total	30	36	66	
	45.45	54.55	100.00	

Statistics for Table of V24 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	7.1440	0.0281
Likelihood Ratio Chi-Square	2	8.3040	0.0157
Mantel-Haenszel Chi-Square	1	6.9561	0.0084
Phi Coefficient		0.3290	
Contingency Coefficient		0.3125	
Cramer's V		0.3290	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

The FREQ Procedure

Statistics for Table of V24 by VV3

Fisher's Exact Test

 Table Probability (P) 0.0036
 Pr <= P 0.0213

Sample Size = 66

Table of V29 by VV3

V29(Learn-say : V29) VV3

Frequency			
Expected			
Cell Chi-Square			
Percent			
Row Pct			
Col Pct	English	Other	Total
Needs-atten	1	5	6
	2.7273	3.2727	
	1.0939	0.9116	
	1.52	7.58	9.09
	16.67	83.33	
	3.33	13.89	
Acceptable	11	15	26
	11.818	14.182	
	0.0566	0.0472	
	16.67	22.73	39.39
	42.31	57.69	
	36.67	41.67	
H-satisfact	18	16	34
	15.455	18.545	
	0.4193	0.3494	
	27.27	24.24	51.52
	52.94	47.06	
	60.00	44.44	
Total	30	36	66
	45.45	54.55	100.00

The FREQ Procedure

Statistics for Table of V29 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	2.8780	0.2372
Likelihood Ratio Chi-Square	2	3.1004	0.2122
Mantel-Haenszel Chi-Square	1	2.5788	0.1083
Phi Coefficient		0.2088	
Contingency Coefficient		0.2044	
Cramer's V		0.2088	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Fisher's Exact Test

Table Probability (P)	0.0185
Pr <= P	0.2488

Sample Size = 66

The FREQ Procedure

Table of V30 by VV3

V30 (Seek-clar : V30)	VV3		
Frequency	English	Other	Total
Needs-atten	0	2	2
Expected	0.9091	1.0909	
Cell Chi-Square	0.9091	0.7576	
Percent	0.00	3.03	3.03
Row Pct	0.00	100.00	
Col Pct	0.00	5.56	
Acceptable	6	14	20
Expected	9.0909	10.909	
Cell Chi-Square	1.0509	0.8758	
Percent	9.09	21.21	30.30
Row Pct	30.00	70.00	
Col Pct	20.00	38.89	
H-satisfact	24	20	44
Expected	20	24	
Cell Chi-Square	0.8	0.6667	
Percent	36.36	30.30	66.67
Row Pct	54.55	45.45	
Col Pct	80.00	55.56	
Total	30	36	66
	45.45	54.55	100.00

Statistics for Table of V30 by VV3

Statistic	DF	Value	Prob
Chi-Square	2	5.0600	0.0797
Likelihood Ratio Chi-Square	2	5.8818	0.0528
Mantel-Haenszel Chi-Square	1	4.9670	0.0258
Phi Coefficient		0.2769	
Contingency Coefficient		0.2668	
Cramer's V		0.2769	

WARNING: 33% of the cells have expected counts less than 5. Chi-Square may not be a valid test.

Mrs T Peyper - Research Project - T11018 21:29 Thursday, October 4, 2012 123
(P02-R8.14.6) : n-Way PROC FREQ of component varbs for ITEM = VRSKILL data set TEACHER

The FREQ Procedure

Statistics for Table of V30 by VV3

Fisher's Exact Test

Table Probability (P) 0.0124
Pr <= P 0.0805

Sample Size = 66



FACULTY OF EDUCATION
DEPARTMENT OF HUMANITIES EDUCATION

PRE-SERVICE TEACHER QUESTIONNAIRE

Dear Pre-service teacher,

Instructions

- Please complete the following questionnaire **directly after presenting your 5th lesson**.
- Completing the questionnaire is a once-off procedure.
- The lesson must be presented in **English**.
- Please **circle** an appropriate **number** on the 4-point rating scale in the **shaded blocks** or write your answer in the shaded space provided.
- Please ensure you have completed the 'informed consent form'.
- Please place the completed questionnaire and the informed consent form in the envelope marked '**Completed consent forms and questionnaires**'.
- Please return the sealed envelope to the teaching practice office (Aldoel 1-36) by 18 June 2012.
- Should you have any queries please contact **Tammy Peyper** on **072 674 8800**.
- The completion of this questionnaire is anonymous and voluntary.

Thank you for taking the time to participate in this study.

Regards

Tammy Peyper
tpeyper@vodamail.co.za
Cell: 072 674 8800



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

FACULTY OF EDUCATION
DEPARTMENT OF HUMANITIES EDUCATION

Pre-service teacher's perception of his/her classroom English proficiency

Student's code:

V1

--	--	--

 1

Mentor's code:

V2

--	--	--

 5

Please remember that this is not a formal assessment of your proficiency but rather a rating of how you **perceive** your level of proficiency.

SECTION A BIOGRAPHICAL INFORMATION

1. What **language** do you **most often speak** at home? (Please choose a **single answer**)

Afrikaans	1
English	2
IsiNdebele	3
IsiXhosa	4
IsiZulu	5
Sesotho sa Leboa	6
Sesotho	7
Setswana	8
siSwati	9
Tshivenda	10
Xitsonga	11
Other (specify:)	

V3

--	--

 9

2. What was the **predominant (most often used) language** of instruction in **your Grade 12 year**? (Please choose a **single answer**)

Afrikaans	1
English	2
IsiNdebele	3
IsiXhosa	4
IsiZulu	5
Sesotho sa Leboa	6
Sesotho	7
Setswana	8
siSwati	9
Tshivenda	10
Xitsonga	11
Other (specify:)	

V4

--	--

 12

Question 3 follows on the next page ...

3. Please indicate which language did you write as a **'Home language paper'** in your **Grade 12 year**. (Please choose a *maximum of two*.)

Afrikaans	1
English	2
IsiNdebele	3
IsiXhosa	4
IsiZulu	5
Sesotho sa Leboa	6
Sesotho	7
Setswana	8
siSwati	9
Tshivenda	10
Xitsonga	11

V5

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 15
 V6

--	--

 18

SECTION B CURRENT PROGRAMME INFORMATION

4. Which **phase** are you **specialising** in? (Please choose a *single answer*.)

Foundation Phase (FP)	1
Intermediate Phase (IP)	2
Senior Phase (SP)	3
Further Education and Training Phase (FET)	4

V7

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 21

5. Did you take **English** as an **elective during your BEd programme**?
If so please indicate to which **level**.

No, I did not	1
1st year	2
2nd year	3
3rd year	4

V8

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 23

SECTION C LESSON INFORMATION

6. Which **grade** did you teach for **this specific lesson**?

Pre School (Pre Grade R)	1
R	2
1	3
2	4
3	5
4	6
5	7
6	8
7	9
8	10
9	11
10	12
11	13
12	14

V9

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 25

Question 7 *follows on the next page ...*

7. Which learning area/subject did you teach for *this specific lesson*?
(e.g. Numeracy, Geography, Life Skills etc.)

V10 28

SECTION D PROFICIENCIES

GENERAL LANGUAGE PROFICIENCY

8. Please rate your ...

	Highly satisfactory	Acceptable	Needs attention	Unsatisfactory		
voice projection (everyone in the class can hear what is being said)	4	3	2	1	V11	<input type="text"/> 31
voice pitch (voice is not too high or too low)	4	3	2	1	V12	<input type="text"/> 33
enunciation of words (words are clear)	4	3	2	1	V13	<input type="text"/> 35
sentence structure (sentences are correctly formulated)	4	3	2	1	V14	<input type="text"/> 37
ability to distinguish between questions, statements and instructions (voice used to correctly indicate the difference)	4	3	2	1	V15	<input type="text"/> 39
ability to stress important words (emphasises important words when speaking)	4	3	2	1	V16	<input type="text"/> 41
ability to mark transitions from one idea to the next (using words such as "so", "now", "right", "we're going" to show the link between sentences or ideas)	4	3	2	1	V17	<input type="text"/> 43
use of facial expressions to support the verbal message	4	3	2	1	V18	<input type="text"/> 45
use of gestures (body language is not distracting e.g. over-use of hand signals, pacing)	4	3	2	1	V19	<input type="text"/> 47
speed of speech (not too fast and not too slow)	4	3	2	1	V20	<input type="text"/> 49
fluency of speech (express yourself effortlessly)	4	3	2	1	V21	<input type="text"/> 51
ability to express ideas in different ways as to assist learners with understanding (If learners do not understand what is being said, I provide different ways of explaining)	4	3	2	1	V22	<input type="text"/> 53
use of synonyms (words that have the same meaning) for difficult words	4	3	2	1	V23	<input type="text"/> 55
accuracy of verbal grammar (spoken sentences are grammatically correct)	4	3	2	1	V24	<input type="text"/> 57
accuracy of written grammar (written sentences are grammatically correct)	4	3	2	1	V25	<input type="text"/> 59
ability to ask clearly formulated questions (the questions are understood by learners)	4	3	2	1	V26	<input type="text"/> 61
spelling	4	3	2	1	V27	<input type="text"/> 63
punctuation	4	3	2	1	V28	<input type="text"/> 65
ability to understand what learners are saying when they speak to you	4	3	2	1	V29	<input type="text"/> 67
ability to seek clarification from learners, when necessary (asking learners to explain if needed)	4	3	2	1	V30	<input type="text"/> 69

Question 9 follows on the next page ...

PEDOGOGICAL LANGUAGE PROFICIENCY
9. Please rate your ...

	Highly satisfactory	Acceptable	Needs attention	Unsatisfactory		
understanding of subject specific terms (subject specific terms are used correctly)	4	3	2	1	V31	<input type="text"/> 71
pronunciation of subject specific terms (terms are pronounced correctly)	4	3	2	1	V32	<input type="text"/> 73
appropriate use of subject specific terms (terms are used within the correct context)	4	3	2	1	V33	<input type="text"/> 75
use of language to explain specific terms (the language used to explain terms is appropriate for the level of the learner)	4	3	2	1	V34	<input type="text"/> 77
explanations of diagrams/models (explanations are understandable)	4	3	2	1	V35	<input type="text"/> 79
use of subject specific terms in developing tasks for learners (terms in written tasks are used correctly)	4	3	2	1	V36	<input type="text"/> 81
ability to summarise information for learners (main ideas are consolidated)	4	3	2	1	V37	<input type="text"/> 83

INTERPERSONAL LANGUAGE PROFICIENCY
10. Please rate your ...

	Highly satisfactory	Acceptable	Needs attention	Unsatisfactory		
use of forms of address to involve students (such as using learners' names or terms of encouragement to involve them)	4	3	2	1	V38	<input type="text"/> 85
use of questioning to determine pre-knowledge (questioning is used to elicit an understanding of what learners already know)	4	3	2	1	V39	<input type="text"/> 87
level of questioning (questions are not too easy or too difficult for learners)	4	3	2	1	V40	<input type="text"/> 89
posing of questions to individual learners	4	3	2	1	V41	<input type="text"/> 91
posing of questions to the whole class	4	3	2	1	V42	<input type="text"/> 93
response to learners' questions (responses are appropriate to students' questions)	4	3	2	1	V43	<input type="text"/> 95
handling of incorrect answers (responds appropriately to incorrect answers)	4	3	2	1	V44	<input type="text"/> 97
ability to use alternative means of eliciting responses from learners (rephrasing questions, offering encouragement and providing clues)	4	3	2	1	V45	<input type="text"/> 99
level of formality when interacting with learners	4	3	2	1	V46	<input type="text"/> 101
level of firmness when interacting with learners (not too strict nor too lenient)	4	3	2	1	V47	<input type="text"/> 103
provision of instructions to learners (instructions are clear and concise)	4	3	2	1	V48	<input type="text"/> 105
ability to maintain contact with the class while dealing with individual learners	4	3	2	1	V49	<input type="text"/> 107
ability to maintain contact with the class when using teaching aids (black board, flash cards, data projector etc.)	4	3	2	1	V50	<input type="text"/> 109

Thank you for your time and co-operation

This instrument is based on Elder's Classroom Assessment Schedule 2001

Pre-service teacher questionnaire



GDE RESEARCH APPROVAL LETTER

Date:	29 August 2011
Name of Researcher:	Peyper T.J.
Address of Researcher:	4 Petra Place
	Springbok Avenue
	Eldoraigne
	Centurion
	0157
Telephone Number:	072 674 8800
Email address:	tpeyper@vodamail.co.za
Research Topic:	Determining the perceived classroom English proficiency of Pre-service teachers
Number and type of schools:	THIRTY NINE Primary Schools and THIRT TWO Secondary Schools
District/s/HO	Tshwane North; Tshwane South and Tshwane West

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1. *The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*
2. *The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.*

1

Making education a societal priority

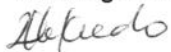
Office of the Director: Knowledge Management and Research

9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506
Email: David.Makhado@gauteng.gov.za
Website: www.education.gpg.gov.za

3. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.
4. A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
5. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
6. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
7. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year.
8. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
9. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
10. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
11. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
12. On completion of the study the researcher must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.
13. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
14. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

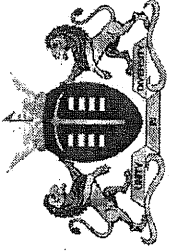
Kind regards



Dr David Makhado

2011 / 08 / 29

Director: Knowledge Management and Research



GAUTENG PROVINCE

Department: Education
REPUBLIC OF SOUTH AFRICA

Reference : Policy and Planning: Partnerships
Enquiries : Sello George Ngwenya
Telephone : 012 401 6322
Fax : 012 401 6323
E-mail : Sello.Ngwenya@gauteng.gov.za
Date : 30 April 2012

T.J Peyper
4 Petra Place
Springbok Avenue, Eldoraigne
Centurion, 0157
072 674 8800 (Mobile)
tpeyper@vodamail.co.za

Cc: The Principal and SGB

Dear Sir/ Madam

PERMISSION TO CONDUCT RESEARCH: T.J PEYPER

Your research application has been approved by Head Office. The full title of your Research: **"Determining the perceived classroom English proficiency of Pre-service teachers"**. Kindly be advised to communicate with the school principal/s and/or SGB/s regarding your research and time schedule.

Our commitment of support may be rescinded if any form of irregularity/ no compliance to the terms in this letter or any other departmental directive/ if any risk to any person/s or property or our reputation is realised, observed or reported.

Terms and conditions

1. The safety of all the learners and staff at the school must be ensured at all times.
2. All safety precautions must be taken by the researcher and the school. The Department of Education may not be held accountable for any injury or damage to property or any person/s resulting from this process. The school/s must ensure that sound measures are put in place to protect the wellness of the researcher and his/her property.

NB Kindly submit your report including findings and recommendations to the District at least two weeks after conclusion of the research. You may be requested to participate in the Department of Education's mini-research conference to discuss your findings and recommendations with departmental officials and other researchers.

The District wishes you well.

Yours sincerely


Mrs. H.E Kekana

Director: Tshwane South District

1/1

Making education a societal priority

Office of the District Director: Tshwane South District

(Mamelodi/ Eersterust/ Pretoria East/ Pretoria South/ Atteridgeville/ Laudium)

265 Pretorius Street, Pretoria 0001



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

T Peyper

M Ed-student

Faculty of Education

University of Pretoria

**Faculty of Education
Office of the Dean**

21 October 2011

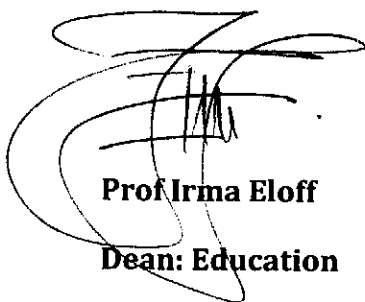
Dear Me Peyper,

PERMISSION FOR RESEARCH

With this permission is granted for you to conduct research on the theme of "*Determining the perceived Classroom English proficiency of Prospective Teachers*" as explained in the research proposal dated May 2011.

Best wishes on the successful completion of this important study.

Kind regards,



Prof Irma Eloff
Dean: Education



FACULTY OF EDUCATION

Department of Humanities Education

11 April 2012

Dear Sir / Madam,

LETTER of CONSENT to CONDUCT RESEARCH: PRINCIPAL and SCHOOL GOVERNING BODY

I would like to invite your school to participate in a study to determine the perceived language ability of pre-service teachers who are undertaking their teaching practice at your school. This letter serves to explain my study to you in order for you to decide if your school would be willing to participate in the study.

Title of study

A study of perceived classroom language proficiency of pre-service teachers

Purpose and Research questions

The purpose of this study is to understand what the perceived English proficiency of University of Pretoria's 4th year Bachelor of Education students is at the time they undertake their final year of study. This will be done by answering the following research question and sub questions:

What is the perceived classroom English proficiency of pre-service teachers in their final year teaching practice?

- How do pre-service teachers and mentor teachers perceive the proficiency of pre-service teachers in classroom English?
- What areas of classroom English need specific addressing within the Bachelor of Education Degree programme?

This study is being undertaken as part of my Master's degree in Education specialising in Humanities Education at the University of Pretoria.

Method

In order to achieve this mentor teacher(s), who is/are assigned by your school to mentor pre-service teachers during their teaching practice, will be asked to complete a once-off questionnaire while observing the pre-service teacher teaching a lesson. Thereafter, the pre-service teacher will complete a self- reflection questionnaire based on the same lesson.

Duration of study

This study will take place from March 2012 to June 2012 during the first practice teaching period for the final year pre-service teachers. The questionnaire will be administered only once during this time.

Ethical considerations

In order to undertake this study, I have received permission from the University of Pretoria's Ethical Committee, the Dean of the Faculty of Education and the Gauteng Department of Education (please see letters attached). Such permission is given on the understanding that all participants (principals, mentor teachers and pre-service teachers) have provided informed consent to participate in the study before the study takes place.



FACULTY OF EDUCATION

Department of Humanities Education

Participation in this study is voluntary. If you do not wish to participate, kindly indicate the name of your school and draw a line through the consent letter. To ensure confidentiality of all participants neither questionnaire will include any identifying details. As I am studying general trends, I will not be analysing data individually but will be using a computer programme to analyse the entire group.

Possible implications for your school

The study will take place during schools hours but will not take any time away from teaching. It will require the completion of a questionnaire by the teacher but otherwise will place no further work or responsibility on the teacher.

Possible benefits for your school may include that teachers who participate may gain an increased awareness of what constitutes classroom English proficiency and thus, potentially, better equipped to assess their own language practice in the classroom. Beyond the direct scope of this study, the data obtained from participants will be used to further add to the debate surrounding the importance of teacher language proficiency within a South African context. With improved classroom English proficiency the impact long term may be an enhanced learning experience for the learners.

Should you participate and require a copy of the findings, I will gladly forward you either a hard copy or an electronic copy of the findings to your address. Further, I will be available to discuss the findings with you should you choose.

Contact Details:

If you have any questions or require any further information regarding this study at any time before, during or after the study, please contact me directly:

Tammy Peyper

Cell: 072 674 8800

Email: tpeyper@vodamail.co.za

Should you have concerns regarding the researcher, please contact my supervisor directly:

Dr Hanlie Dippenaar

Cell: 082 2202 2122

Office: 012 420 5821

Email: ajf.dippenaar@up.ac.za

At this time I would like to thank you for taking time to read this letter and considering my request. I trust you will find this study meaningful and hope you will participate.

Ms Tammy Peyper

Masters Student (MED: Humanities)

Dr Hanlie Dippenaar

Supervisor



FACULTY OF EDUCATION

Department of Humanities Education

PRINCIPALS and SCHOOL GOVERNING BODY

CONSENT TO PERMIT MED STUDY ON THE PERCEIVED PROFICIENCY OF PRE-SERVICE TEACHERS ON SCHOOL SITE

I, _____, the principal/SGB chairperson of _____ have been informed and understand the nature and purpose of the research project entitled *A study of perceived classroom language proficiency of pre-service teachers* being undertaken by Tamrynne Peyper as part of a Masters degree study. Having considered the project, I agree to my school being used as a research site.

1. Overview of study

I understand that the purpose of this study is to determine how both mentor teachers and pre-service teachers perceive the Classroom English proficiency of pre-service teachers. This study will take place during the teaching practical period from April 2012-June 2012 and participants will be mentor teachers and pre-service teachers currently in their final year of the Bachelor of Education programme. Numerical data collected from questionnaires completed by both mentor teachers and pre-service teachers will be used to determine the perceived proficiency of pre-service teachers. The focus of this study is how the classroom proficiency of pre-service teachers is perceived and does not focus on any one participant.

2. Procedures

Mentor teachers who have indicated their willingness to participate will be asked to complete a questionnaire while observing the pre-service teacher present their fifth lesson. The questionnaire will focus on the classroom English competencies demonstrated by the pre-service teacher. Directly after the lesson the pre-service teachers, who have indicated their willingness to participate, will complete a questionnaire on how they perceive their own classroom English proficiency. This is a once off event with no further participation required. The questionnaires will not elicit any data relating directly to either the mentor teacher or the school. After data analysis, a summary of findings will be made available to any participant who so requests.

3. Conditions of participation

- I understand that no research will be undertaken without express informed consent from the mentor teacher and the pre-service teachers.
- Even though informed consent will be obtained in writing before the start of the study, participants may at any time withdraw from the study by informing the researcher either verbally or in writing without fear of penalty.
- I am free at any time to contact the researcher should I have any concerns or questions regarding this study.
- I understand that the focus of the study is the pre-service teacher and that no information regarding either the mentor teacher or my school will be gathered.
- I understand that the findings of this study may be disseminated within an academic context.



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I have carefully read and understood the above and consent to my school being used as a research site for the purposes of this study as described above.

Name of principal: _____

Signature: _____

Contact number: _____

E-mail: _____

(If applicable)

Name of SGB chairperson: _____

Signature: _____

Contact number: _____

E-mail: _____

Do you have any comments or suggestions?

This form will be collected by the pre-service Student Leader at your school who will return it to the Teaching Practice Office (Aldoel 1-36) on 18 June 2012.



MT

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Department of Humanities Education

11 April 2012

Dear Mentor Teacher,

LETTER OF INFORMED CONSENT TO CONDUCT RESEARCH: MENTOR TEACHER

I would like to invite you to participate in a study to determine the perceived language ability of pre-service teachers who are currently completing their teaching practice in your classroom. This letter aims to explain my study to you in order for you to make an informed decision as whether to participate or not.

Title of study

A study of perceived classroom language proficiency of pre-service teachers

Purpose and Research questions

The purpose of this study is to understand what the perceived English proficiency of University of Pretoria's 4th year Bachelor of Education students is at the time they undertake their final year of study. This will be done by answering the following research question and sub questions:

What is the perceived classroom English proficiency of pre-service teachers in their final year teaching practice?

- How do pre-service teachers and mentor teachers perceive the proficiency of pre-service teachers in classroom English?
- What areas of classroom English need specific addressing within the Bachelor of Education Degree programme?

This study is being undertaken as part of my Master's degree in Education specialising in Humanities Education at the University of Pretoria.

Method

In order to achieve this you will be asked to complete a questionnaire (marked 'mentor teacher questionnaire') while observing the pre-service teacher presenting their **fifth lesson**. Thereafter, the pre-service teacher will complete a self-reflection questionnaire (marked 'pre-service teacher questionnaire') based on the same lesson. Both these questionnaires are provided in the accompanying envelope. I would like to request that you **do not** provide the pre-service teacher with either the questionnaire or the date that you will be observing as this may influence the credibility of the data collected. Once each questionnaire has been completed kindly place both questionnaires and both completed consent forms in the envelope provided (marked 'completed consent forms and questionnaires'). Please be so kind as to give this envelope to the pre-service teacher to return the Teaching Practice Office (Aldoel 1-36) on 18 June 2012.

Duration of study

The study will take place from March 2012 to June 2012 during the first practice teaching period for the final year pre-service teachers. The questionnaire will be administered only once during this time.

Ethical considerations

In order to undertake this study, I have received permission from the University of Pretoria's Ethical Committee, the Dean of the Faculty of Education and the Gauteng Department of Education (please see



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letters attached). Such permission is given on the understanding that all participants (principals, mentor teachers and pre-service teachers) have provided informed consent to participate in the study before the study takes place.

Participation in this study is entirely voluntary. If you do not wish to participate, kindly ask the pre-service teacher to return all documents in the accompanying envelope to the Teaching Practice Office (Aldoel 1-36). To ensure confidentiality of all participants neither questionnaire will include any identifying details. As I am studying general trends, I will not be analysing data individually but will be using a computer programme to analyse the entire group.

Possible implications for your school

Possible benefits for both yourself and the pre-service teacher may include an increased awareness of what constitutes classroom English proficiency. Beyond the direct scope of this study, the data obtained from participants will be used to further add to the debate surrounding the importance of teacher language proficiency within a South African context. With improved classroom English proficiency the impact long term may be an enhanced learning experience for learners.

Should you participate and require a copy of the findings, I will gladly forward you either a hard copy or an electronic copy of the findings to your preferred address. Further, I will be available to discuss the findings with you should you choose so.

Contact Details:

If you have any questions or require any further information regarding this study at any time before, during or after the study, please contact me directly:

Tammy Peyper

Cell: 072 6748800

Email: tpeyper@vodamail.co.za

Should you have concerns regarding the researcher, please contact my supervisor directly:

Dr Hanlie Dippenaar

Cell: 082 202 2122

Office: 012 420 5281

Email: ajf.dippenaar@up.ac.za

At this time I would like to thank you for taking time to read this letter and considering my request. I trust you will find this study meaningful and hope you will participate.

Ms Tammy Peyper

Masters Student (MED: Humanities)

Dr Hanlie Dippenaar

Supervisor



MT

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MENTOR TEACHER

INFORMED CONSENT FORM

CONSENT TO PARTICIPATE IN A STUDY OF THE PERCEIVED PROFICIENCY OF PRE-SERVICE TEACHERS

I _____ a teacher at _____ (name of school) and the mentor teacher of _____ (name of pre-service teacher) have been informed and understand the nature and purpose of the research project entitled *A study of perceived classroom language proficiency of pre-service teachers* being undertaken by Tamrynne Peyper as part of a Masters degree study. Having considered the study, I agree to participate.

1. Overview of study

I understand that the purpose of this study is to determine how both mentor teachers and pre-service teachers perceive the Classroom English proficiency of pre-service teachers. This study will take place during the teaching practical period from April 2012-June 2012 and participants will be mentor teachers and pre-service teachers completing their final year teaching practice. Numerical data collected from questionnaires completed by both mentor teachers and pre-service teachers will be used to determine the perceived proficiency of pre-service teachers. The focus of this study is how the classroom proficiency of pre-service teachers is perceived and does not focus on any one participant.

2. Procedures

Mentor teachers will be asked to complete a questionnaire while observing the pre-service teacher present their fifth lesson. The questionnaire will focus on the classroom English competencies demonstrated by the pre-service teacher while presenting their lesson. Directly after the lesson the pre-service teachers will complete a questionnaire on how they perceive their own classroom English proficiency. This is a once off event with no further participation required. The questionnaires will not elicit any data relating directly to either the mentor teacher or the school. After data analysis, a summary of findings will be made available to you upon request.

3. Conditions of participation

- I understand that no research will be undertaken without informed consent from both me and the pre-service teacher.
- Even though informed consent will be obtained in writing before the start of the study, I may at any time withdraw from the study by informing the researcher either verbally or in writing without fear of penalty.
- My identity will remain strictly confidential and will not be made available to anyone other than the researcher.
- I am free at any time to contact the researcher should I have any concerns or questions regarding this study.
- I understand that the focus of the study is the pre-service teacher and that no information regarding either myself or my school will be gathered.



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- I understand that the findings of this study may be disseminated within an academic context.

I have carefully read and understood the above and consent to participate in this study.

Name: _____

Signature: _____

Contact number: _____

E-mail (if applicable): _____

Do you have any comments or suggestions?

Kindly return this form and the completed questionnaire in the accompanying envelope to the pre-service teacher after observing the fifth lesson presented.



PT

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Dear Pre-service Teacher,

LETTER OF INFORMED CONSENT TO CONDUCT RESEARCH: PRE-SERVICE TEACHER

I would like to invite you to participate in a study to determine the perceived language ability of pre-service teachers. This letter aims to explain my study to you in order for you to make an informed decision as whether to participate or not.

Title of study

A study of perceived classroom language proficiency of pre-service teachers

Purpose and Research questions

The purpose of this study is to understand what the perceived English proficiency of University of Pretoria's 4th year Bachelor of Education students is at the time they undertake their final year of study. This will be done by answering the following research question and sub questions:

What is the perceived classroom English proficiency of pre-service teachers in their final year teaching practice?

- How do pre-service teachers and mentor teachers perceive the proficiency of pre-service teachers in classroom English?
- What areas of classroom English need specific addressing within the Bachelor of Education Degree programme?

This study is being undertaken as part of my Master's degree in Education specialising in Humanities Education at the University of Pretoria.

Method

In order to achieve this you, will be asked to complete a questionnaire (marked 'pre-service teacher questionnaire') directly after a lesson you have presented. This lesson must be conducted through the medium of English. While presenting the lesson, your mentor teacher will observe you and complete a questionnaire based on your classroom language usage. Both questionnaires have the same questions regarding language usage. The reason for withholding both the questionnaire and the date for completion from you at this time is two-fold; firstly, this is not an assessment and there is no awarding of marks and no need for you to do any additional lesson preparation. Secondly, to allow you to present as natural a lesson as possible without changing your teaching style because you are being observed.

Once you and your mentor teacher have completed your respective questionnaires place both completed consent forms (attached to this letter) and questionnaires in the envelope provided (marked 'consent forms and questionnaires'). Please ensure this envelope is sealed and return to the Teaching Practice Office (Aldoel 1-36) at the end of this teaching practice (second term) and before the start of the next teaching practice (third term).

Duration of study

The study will take place from March 2012 to June 2012 during the first practice teaching period for the final year pre-service teachers. The questionnaire will be administered only once during this time.



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Ethical considerations

In order to undertake this study, I have received ethical clearance from the University of Pretoria's Ethical Committee, the Dean of the Faculty of Education and the Gauteng Department of Education (please see letters attached). Such clearance is granted on the understanding that all participants (principals, mentor teachers and pre-service teachers) have provided informed consent to participate in this study before the study takes place.

Participation in this study is entirely voluntary. If you do not wish to participate, kindly ask the pre-service teacher to return all documents in the accompanying envelope to the Teaching Practice Office (Aldoel 1-36). To ensure confidentiality of all participants neither questionnaire will include any identifying details. As I am studying general trends, I will not be analysing data individually but will be using a computer programme to analyse the entire group.

Possible implications of participation

Possible benefits for you may include an increased awareness of what constitutes classroom English proficiency and an understanding how your classroom English impacts on the learners. Beyond the direct scope of this study, the data obtained from participants will be used to further add to the debate surrounding the importance of teacher language proficiency within a South African context. With improved classroom English proficiency the impact long term may be an enhanced learning experience for learners.

Should you participate and require a copy of the findings, I will gladly forward you either a hard copy or an electronic copy of the findings to your address. Further, I will be available to discuss the findings with you should you choose.

Contact Details

If you require additional further information regarding this study at any time, please contact me directly:

Tammy Peyper

Cell: 072 674 8800

Email: tpeyper@vodamail.co.za

Should you have concerns regarding the researcher, please contact my supervisor directly:

Dr Hanlie Dippenaar

Cell: 082 202 2122

Office: 012 420 5281

Email: ajf.dippenaar@up.ac.za

At this time I would like to thank you for taking time to read this letter and considering my request. I trust you will find this study meaningful and hope you will participate.

Ms Tammy Peyper

Masters Student (MED: Humanities)

Dr Hanlie Dippenaar

Supervisor



PT

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PRE-SERVICE TEACHER

CONSENT TO PARTICIPATE IN A STUDY OF THE PERCEIVED PROFICIENCY OF PRE-SERVICE TEACHERS

I _____, student number _____ undertaking my teaching practice at _____ (name of school) have been informed and understand the nature and purpose of the research project entitled *Determining the perceived classroom English proficiency of pre-service teachers* being undertaken by Tamrynne Peyper as part of a Masters degree study. Having considered the study, I agree to participate.

1. Overview of study

I understand that the purpose of this study is to determine how both mentor teachers and pre-service teachers perceive the Classroom English proficiency of pre-service teachers. This study will take place during the teaching practical period from April 2012-June 2012 and participants will be mentor teachers and pre-service teachers completing their final year teaching practice. Numerical data collected from questionnaires completed by both mentor teachers and pre-service teachers will be used to determine the perceived proficiency of pre-service teachers. The focus of this study is how the classroom proficiency of pre-service teachers is perceived and does not focus on any one participant.

2. Procedures

Mentor teachers will be asked to complete a questionnaire while observing the pre-service teacher presenting a lesson. The questionnaire will focus on the classroom English competencies demonstrated by the pre-service teacher. Directly after the lesson the pre-service teacher will complete a questionnaire on how they perceive their own classroom English proficiency. This is a once off event with no further participation required. The questionnaires will not elicit any data relating directly to either the mentor teacher or the school. After data analysis, a summary of findings will be made available to you upon request.

3. Conditions of participation

- I understand that no research will be undertaken without express informed consent from both me and my mentor teacher.
- Even though informed consent will be obtained in writing before the start of the study, I may at anytime withdraw from the study by informing the researcher either verbally or in writing without fear of penalty.
- My identity will remain strictly confidential and will not be made available to anyone other than the researcher.
- I am free at anytime to contact the researcher should I have any concerns or questions regarding this study.
- I understand that the focus of the study is the pre-service teacher and that no information regarding either myself or my school will be gathered.
- Data gathered from me will be used for the purposes of this study alone.
- Participation will have no influence on my academic progress.
- I understand that the findings of this study may be disseminated within an academic context.

I have carefully read and understood the above and consent to participate in this study.



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Name: _____

Student no: _____

Signature: _____

Contact number: _____

E-mail (if applicable): _____

Do you have any comments or suggestions?

Kindly return this form with the completed questionnaire as well as your mentor teacher's consent form and completed questionnaire to the Teaching Practice Office (Aldoel1-36).



RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE

CLEARANCE NUMBER :

HU 11/09/01

DEGREE AND PROJECT

MEd

A study of perceived classroom language proficiency of pre-service teachers

INVESTIGATOR(S)

Tamrynne Peyper

DEPARTMENT

Humanities Education

DATE CONSIDERED

13 November 2013

DECISION OF THE COMMITTEE

APPROVED

Please note:

For Masters applications, ethical clearance is valid for 2 years

For PhD applications, ethical clearance is valid for 3 years.

**CHAIRPERSON OF ETHICS
COMMITTEE**

Prof Liesel Ebersöhn

DATE

13 November 2013

CC

Jeannie Beukes
Liesel Ebersöhn
Dr AJF Dippenaar
Prof. R Evans

This ethical clearance certificate is issued subject to the following condition:

1. It remains the students' responsibility to ensure that all the necessary forms for informed consent are kept for future queries.

Please quote the clearance number in all enquiries.

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