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**Language learning beliefs and motivation of
Foundation and Intermediate Phase
Education students in developing mastery in
English**

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and Intermediate Phase Education students in
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A dissertation submitted in fulfilment of the requirements in respect of the
Master's Degree (English Language Studies) in the Department of English, in
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“All things are possible if you believe.”

Mark 9:23

Declaration

I, PraysGod Siphesihle Mhlongo, declare that the Master's Degree research dissertation that I herewith submit for the Master's Degree qualification (English Language Studies) at the University of the Free State is my independent work, and that I have not previously submitted it for a qualification at another institution of higher education. I certify that all the assistance received in preparing this dissertation and sources have been acknowledged.

Abstract

Understanding what makes some individuals more successful in learning second languages is imperative if we are to design solutions that can potentially improve the language learning skills of learners who are not doing so well. Consequently, the ongoing debate over the predictors of successful language learning has prompted a number of investigations attempting to address this enquiry. Most noticeably, Language Learning Beliefs (LLBs) and language learning motivation, which are at the center of the current study, have significantly shaped the current views in the field of second language acquisition. Although one cannot overlook the valuable findings on these two language learning aspects over the past decades, the concern is that very few studies have attempted to study the potential interdependence among factors that inform language learning. Furthermore, the findings of previous studies do not consider the variation and role of learners' socio-economic backgrounds and ethnicity. The current study hopes to address this knowledge gap and come up with interventions that can help to improve the performance of learners and students in English.

The study first seeks to identify the LLBs and motivation of Foundation and Intermediate Phase Education students before determining which of the two aspects can best predict the performance of students in mastering English. The nature of the study necessitated the adoption of a mixed-methods approach. A survey questionnaire, Beliefs About Language Learning and Motivation Inventory-Modified (BALLMI-M) consisting of open and closed-ended statements was

designed to identify students' views pertaining to LLBs, as well as to investigate their motivation for learning English. Furthermore, students were asked to complete the Test of Academic Literacy (TAL) as a pre- and post-test in order to identify their initial literacy levels, and to measure any improvement of their language ability, subsequent to the language course intervention.

All the data collected were then analysed on two different occasions. In the first phase the LLBs and motivation were analysed separately in an attempt to identify the predominant LLBs, as well as to measure the students' levels of motivation. The outcomes resulting from this analysis revealed the inconsistencies in students' LLBs. This conflict in students' LLBs made it impossible to correlate their LLBs with the motivation score. The conclusion, however, was that the anticipated relationship between students' LLBs and their language learning motivation was insufficient to ensure mastery of English. This inference was based on the observation that a large number of students were highly motivated despite the eclectic nature of their LLBs. The second phase involved correlating dependent and independent variables with the aim of finding the best predictor of students' achievement in English. Following the meticulous correlation of these variables, the TAL pre-test emerged as the best predictor of academic success, outperforming both the LLBs and language learning motivation which were initially anticipated to predict or determine students' performance.

In conclusion, a few important issues surfaced through the investigation. Of particular relevance are the following: 1) Contrary to the anticipated interrelation between LLBs and motivation, TAL's strong predictive ability can be ascribed to its reliability to measure language learning ability; 2) that possessing constructive LLBs does not necessarily guarantee mastery of English at a more advanced level; 3) that the need to assimilate and adopt the identity of native speakers of English is not the primary reason for learning English for the majority of students in South Africa; and 4) that the students' motive for learning English in the South African context is largely extrinsic. As a result of such factors, the current study proposes that language researchers focus on examining the factors that inhibit mastery of English in a multilingual and multicultural context such as ours, as opposed to prioritizing research on strategies to increase the motivation levels of students or aligning the LLBs to those of a teacher or a lecturer, as this has proven to be difficult.

Keywords: Language learning beliefs, language learning motivation, second language learning, second language learners, language proficiency, literacy, language of learning and teaching, English mastery, pre-service educators, inequality in education.

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CHAPTER 1

MOTIVATION AND BELIEFS IN LANGUAGE LEARNING

1.1 Introduction

Concerns continue to be raised about the standard of education in South Africa and the low literacy levels of students at both public schools and at institutions of higher learning. Apart from the problems that have been identified in studies focusing on the early years of learning (Madiba 2013; Spaul 2015; Spaul, Van der Berg, Wills, Gustafsoon and Kotze 2016), research on the inadequate language and academic literacy skills of students at universities shows that further interventions are necessary to address the literacy issue in the country (Weideman 2003b; Parkinson, Jackson, Kirkwood and Padayachee 2008; Weideman and Van Dyk 2014; Mhlongo 2014; Van Rooy and Coetzee-Van Rooy 2015).

There are numerous approaches that can be adopted to counteract the problem of inadequate language ability and low levels of academic literacy. Universities, for instance, can ensure that their teacher training programmes are effectively designed to assist pre-service teachers to develop the knowledge and skills necessary to succeed in their studies and to improve the literacy and language skills of their own students. In this respect, Spaul *et al.* (2016:12) recommend that to deal with the reading difficulties faced by many South African school students there should be “a course to teach Foundation Phase (Grades 1-3) teachers how to teach reading”. It seems that there is a need to review the courses universities offer to Education students so as to make sure that the way we train students is undertaken in a

responsible and accountable manner. This can be achieved by introducing comprehensive language development modules offered to Education students.

The learning of languages and development of language skills constitute an integral part of attaining academic literacy. However, there are different views on how languages are learnt and how best to attain high levels of literacy. In addition to the debates on suitable methods and practices, there is much to be said about the role of the learners in this process. Ntete (2001) shows in a case study on a South African English Second Language (ESL) learner, Unathi, who manages to excel in writing in English, that language learning needs the active participation of learners, as skills cannot be taught or developed passively. Unathi is one of five learners studied who despite their disadvantaged home and school background have nevertheless proven to be highly proficient at writing in English. Some of the affective attributes mentioned by Ntete which distinguish such learners from others include attributes such as an excitement towards language learning and a positive attitude to English. For one to learn the language well, “love of the language” is essential (Ntete 2001:42). The success of students such as Unathi can be ascribed to spending substantial amounts of time speaking, listening, reading and writing in English. Other attributes mentioned in the study include willingness “to take risks” and to be corrected, willingness “to try out a wide range of strategies and techniques”, and a willingness to learn independently (Ntete 2001:45).

Taking the above factors into account, the current study aims to address some of the literacy challenges in the country by focusing on two aspects relevant to the training of pre-service educators: the language learning beliefs held by Foundation and Intermediate Phase Education students, and the role of students' motivation in developing mastery in English. This mastery would entail the ability to access and process information in English in different formats, a matter that requires the integration of the skills typically referred to as listening, speaking, reading and writing. Language learning beliefs are defined by Lepota and Weideman (2002:206) as "the sets of assumptions and preconceptions about language learning that learners often carry with them into class, and that may refer to, or find expression in, their learning styles and strategies." There are several reasons why a study of language learning beliefs is necessary. According to Lepota and Weideman (2002:206) beliefs provide a framework of expectations of how learning will take place, and can either enhance or hamper the learning of a language. If the learners' beliefs clash with the teacher's, learning may not take place. Moreover, if learners hold unproductive views of language learning, progress may be very slow. It should, however, be noted that learners' views of language learning can potentially be changed.

Apart from how beliefs can facilitate or impede language learning, motivation itself is a phenomenon that can influence the effectiveness of a language course. Motivation is defined by Gardner (1985:10) as "the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes toward learning the language". The proposed study will therefore also investigate how motivation

can assist with developing mastery in English. The decision to limit the study to a cohort of Education students registered for a course in English at a centrally located university derives from the fact that English is the dominant language of learning and teaching (LOLT) in South Africa. Although all eleven official languages are granted equal status in the Constitution (Republic of South Africa 1996) and despite the Department of Education's (DBE) "position that an additive approach to bilingualism is to be seen as the normal orientation of our language-in-education policy" (DBE 1997:1), English is still a widely-used language in the media, technology, commerce, government and more importantly in education. This is also noted by Madiba (2013:3) who states that in "educational, testing, and workplace settings" English clearly assumes a dominant role. In the interests of securing employment, pre-service educators will need to have good mastery of English. The English skills of the cohort of Education students who are the focus of this study will most likely influence the development of their own academic literacy (AL) at university, as well as that of the students they teach later at schools. Poor language ability and low AL thus also have a bearing on the quality of education, in other words the "acquisition of the knowledge, skills and values that society deems valuable – usually articulated in the curriculum" (Spaull 2015:34). The poor quality of education in turn has a debilitating ripple effect that undermines socio-economic advancement, which is more fully discussed in the next section.

1.2 Inequality in education as backdrop of this study

Figure 1.1 shows the inequality of our society in terms of the quality of education received by individuals from different social classes and the impact of that. The majority of the country, 80% of the population, have a low socio-economic status and are subjected to low-quality primary and secondary education. Due to the low-quality education received by the majority, about 35% end up unemployed, 18% are unskilled labourers and 32% are capable of doing only semi-skilled jobs (Spaull 2015:38). Only a few “motivated, lucky or talented students make the transition” (Spaull 2015:38). On the other hand, a minority 20% of the country’s population are from a high socio-economic background with access to early child development and high-quality primary and secondary education (Spaull 2015:38). The high-quality education received by the minority enables them to proceed with their studies at higher institutions of learning such as Technical Vocational Education and Training (TVET) colleges and universities and finish in the top 15% of people with high productivity jobs and incomes (Spaull 2015:38).

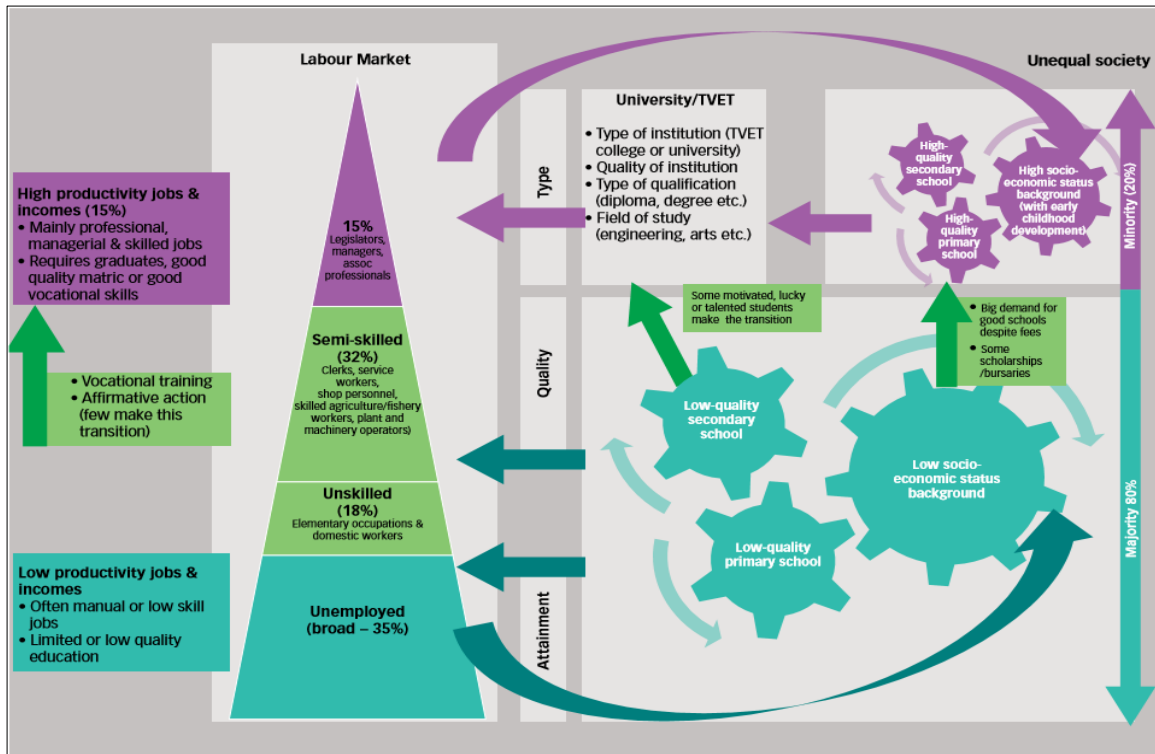


Figure 1.1: The links between society, the education system and the labour market in South Africa (Spaull 2015:38)

The quality of education in South Africa is the backdrop of this study into language in education, and the language skills and knowledge of pre-service educators and students. The language learning beliefs and motivation of Foundation and Intermediate Phase Education students in developing mastery in English will without a doubt have an influence on their role as teachers in the development of language ability in their learners in order to make it possible for those learners to participate fully in education, and in opportunities for further study.

Inadequate literacy levels of students have been identified as one of the critical factors leading to high rates of students dropping out at schools and universities. It is estimated that almost 50% of learners do not reach grade 12 (Spaull 2015:36). For

example, only 532 860 learners out of 1 085570 learners who started grade 1 together wrote the 2014 grade 12 examinations (Spaull 2015:36). It is assumed that the rest dropped out in grade 10 and 11 (Spaull 2015:36). At universities, it is estimated that only 40% of students graduate and less than 10% of South African youths complete a three-year degree (Spaull 2015:36).

The fact that so many students leave without completing their studies is partly due to the difficulties experienced by these students in dealing with academic texts (Van Dyk 2005:38) as a result of their poor English language skills. When students do not complete their undergraduate courses, this also has financial implications for both the students and their tertiary institutions. It is estimated that universities lose close to R1.3 billion annually in this way (Van Dyk 2005:38). This is a clear indication that under-preparedness of students cannot be taken lightly. In fact, it should be approached with a sense of urgency. In the next paragraph, possible causes of low literacy and language ability will be briefly discussed.

1.3 Locating the possible causes of low literacy and language ability

As has been suggested in the preceding discussion, the problems encountered by students who have low literacy levels when they reach the tertiary sector can be traced to the early years of learning at school. Studies such as those reported by Spaull (2015) and Spaull *et al.* (2016) indicate that educators, particularly Foundation and Intermediate Phase teachers, lack the necessary competence and subject knowledge of English and other languages used as the language of learning and

teaching (LOLT) for the first few years of school education. They can thus not adequately teach reading and other essential literacy skills, which in turn hinders the progress of their students. The South African Child Gauge findings (Spaull 2015:36), reveal that 41% of Grade 6 learners in rural areas are “functionally illiterate”. Weideman and Van Dyk (2014: ii) also note that one’s ability to use academic language commences long before one reaches university. One starts using academic language from pre-school where learners are exposed to activities that “enable them to seek solutions to problems by making inferences, reaching conclusions, and coming up with rational plans” (Gruhn 2015, Gruhn and Weideman 2017).

According to Madiba (2013:9) one of the main contributing factors to the low levels of literacy in the foundational phase of schooling is ineffective teaching strategies employed by teachers. These ineffective teaching strategies may be informed by disadvantageous or erroneous language learning beliefs, which are one of the main focuses of this study. Madiba (2013:17) also states that the insufficient literacy levels of learners in the Foundation Phase is evident in the results of the Annual National Assessment (ANA) tests. ANA tests are the diagnostic tool to monitor learners’ progress in English and Mathematics (DBE 2014a:2). After analysing the 2011 ANA report and an extract from one of the Grade 3 English language tests, Madiba (2013) comes to the conclusion that the language of learning and teaching – which is predominantly English in the Intermediate Phase – is a barrier to the progress learners can make (Madiba 2013:8). Although Spaull (2015:34) warns us against the use of ANA results to measure the standard of education, as the tests are still “in their

infancy”, the South African education system is generally of a low quality when compared to that of other countries, as the Child Gauge report (Spaull 2015) shows.

Apart from ineffective teaching and learning, the influence of motivation in developing mastery in English, which is an additional language for the majority of students, is indisputable. For instance, I have on several occasions witnessed in the language classes that I teach at a school in QwaQwa and at the University of the Free State that learners who are struggling to learn an additional language such as English are the ones who are passive in class. In other words, they do not participate in class activities and appear not to be motivated to learn. Low levels of motivation to learn English may obstruct their performance in the language courses. Gass, Behney and Plonsky (2013:165) state that in any learning situation, be it the learning of a second language or a new sport or game, human beings will often display different levels of motivation. These levels of motivation go a long way towards determining whether a person will succeed in learning that specific activity. This will be discussed in detail in the chapter dealing with the theoretical rationale for this study.

1.4 Propositions

What these introductory observations indicate is that, although there are already measures in place at higher institutions of learning to address the problem of low literacy levels of students, they may not be sufficient. The current study therefore proposes that if we are to address the poor English language skills and literacy levels of students successfully, we need to deal with the roots of the problem. In other

words, we should work with the educators of the future and ensure that they receive the best possible education, as “no education system can go beyond the competencies and quality of its teachers” (Spaull 2015:39). To do this, the current study proposes the following:

- Undergraduate Education students should be made aware of the importance of having their beliefs of language learning aligned with research findings on effective language teaching practice.
- Furthermore, those beliefs should preferably be aligned with those of their students to ensure that learning, development and progress are not impeded as a result of contradiction and conflict within the instructional situation.
- Education students should be taught about the important role of motivation in developing mastery in a language such as English, with the intention that they will also be able to increase the motivation of their own learners once they commence with their careers.

Failure to address these issues in the Foundation Phase can impede the progress of learners and as a consequence “they will battle to engage with the curriculum in higher grades and will fall further and further behind” (Spaull 2015:39).

1.5 Theoretical framework

A theoretical framework is a researcher’s compass. It also indicates that the study is based on reputable theories and empirical facts obtained from credible studies. The proposed study will be conducted within the paradigm of applied linguistics as a

discipline of design (Weideman 2017) in which solutions are sought to large-scale or pervasive language-related problems. Principles relevant to the learning of languages will be discussed on the basis of a literature study. Research studies dealing with language learning beliefs and motivation will be consulted, in particular the study by Lepota and Weideman (2002), Griffiths's (2008) "Lessons from Good Language Learners", Gardner's (1985) socio-educational model (attitudes to learning situation, instrumental and integrative aspects) and Dörnyei's (2005) L2 motivational self system.

1.6 Problem statement and research questions

As stated in the introduction, all teaching approaches are informed by certain beliefs about language learning. These are the very same beliefs which determine whether effective teaching and learning occurs in the classroom. As Lepota and Weideman (2002:207) state:

Where these learners' teachers have recently been professionally trained and, therefore, use methods of language teaching and approaches that, for example, promote fluency and communication instead of conventional grammar teaching, it is quite possible that conflicts may arise between learners' beliefs and expectations on the one hand, and teachers' instructional practices on the other. Learners' resistance to instructional practices may well be related to such a conflict between expectations and beliefs.

In relation to the above-mentioned, this study will attempt to answer the following research questions:

Main questions:

What are the language learning beliefs and motivation of Foundation and Intermediate Phase Education students? Do they serve as predictors of their performance in mastering English?

1.7 Research design and methodology

A mixed-methods research design will be followed. In a mixed methods study a researcher collects and examines data quantitatively and qualitatively in an attempt to consolidate both approaches (Johnson and Christensen 2004), i.e. to come up with a potentially multi-faceted but integrated, systematic and reasoned, coherent and credible argument that integrates the various inputs, data, observations and analyses.

1.8 Participants

Due to financial and time constraints the current study will employ convenience sampling based on the availability and willingness of the participants to take part in the study (Dörnyei 2007:129). The study will use a group of Foundation (Grades 1-3) and Intermediate Phase (Grades 4-7) Education students at the University of the Free State (Bloemfontein campus) for the empirical part of the research. Intermediate Phase students will be included in the study in view of the fact that they register for the same English language course as the Foundation Phase students and attend classes together. Students registered at the Bloemfontein campus in 2016 will be used to pilot and refine the survey instrument for full implementation in 2017. The purpose

of the pilot is mainly to check the clarity of the questions and length of time it takes to complete the survey.

1.9 Data collection

Students will be asked to complete a survey questionnaire on language learning beliefs and motivation. The survey will be a cross-sectional one. According to Paltridge and Phakiti (2010:304), cross-sectional surveys are aimed at giving brief details or outcomes of a particular aspect studied. The survey will be administered during the first quarter of the academic year. The English proficiency of the students will be measured by means of a standardised pre- and post-test. The Test of Academic Literacy (TAL) will be used (ICELDA 2017). The information obtained from the test will be correlated with the responses of the survey questionnaire, and to determine whether there was any improvement in the students' performance at the end of the course. Other course assessment data will also be used, but semester tests and assignments are not of a standardised nature and may lack reliability, which is why the employment of TAL is necessary.

As data collection instrument, the modified BALLI-M questionnaire will be used. BALLI-M was used by Lepota and Weideman (2002:208) in their pilot study, "Our ways of learning language", to identify "learners' beliefs and assumptions about language learning". The BALLI-M questionnaire derives from the Beliefs About Language Learning Inventory (BALLI) developed by Horwitz in the early 1980s (Kuntz 1996:4). BALLI consists of 34 statements and the modified version BALLI-

M has 25 statements. The main reason for the revision of the original inventory was its assumption that “learning English could take place only or ideally in an English-speaking country” (Lepota and Weideman 2002:208). For the current study, BALLI-M will be revised further by adding a number of statements related to motivation based on the instruments developed by Gardner and Dörnyei, since motivation is one of the focal points of the study. It will then be referred to as BALLMI-M (Beliefs About Language Learning and Motivation Inventory-Modified). The final number of items to be included will be determined by the results of the pilot study.

1.10 Data analysis

Data analysis entails the categorisation of collected data for the purpose of examining their meaningfulness and the relationship between variables studied. For the current study, data in the form of survey responses provided by students will be measured quantitatively using the “data transformation” method, which is defined by Dörnyei (2007:269) as converting “one data type into the other ...”. Responses to the survey instrument will be quantitized, that is, converted into numerical codes that can be further processed statistically using correlation analysis (Dörnyei, 2007:270). In addition, information obtained from the open-ended questions in the survey questionnaire will be categorised and used to supplement the empirical data. Multiple correlations will be used to correlate students’ language learning beliefs and levels of motivation with students’ performance in the course. Course performance will be measured quantitatively by pre- and post-test course marks using TAL, as well as the results of formative and summative tests and assignments. The analysis of results in

relation to students' course performance is one of the suggestions made by Lepota and Weideman (2002:218):

Moreover, it would be ideal if we could extend this study to see how well the profiles of learners in terms of their assumptions about language learning correlated with their language course marks and their marks in other academic subjects. This is one line of future investigation that we think may yield potentially useful results. If learners' beliefs as measured by such an instrument as the one we used turn out to be a good predictor of language proficiency, and if, furthermore, these beliefs are indeed shown to be amenable to change, it would not only be important, but necessary to attend to such beliefs early on in a course. Any way of minimising risk [sic] those who are most prone to failure will help to eliminate at least some waste in our higher education system.

The quantitative and other data gathered in this study will therefore also eventually be subjected to various interpretative explanations in order to provide a qualitative synthesis of the different possible interpretations and meanings of the results of the investigation.

1.11 Ethical statement

The term 'ethics' is simply defined in the Collins Cobuild Advanced Learner's Dictionary (2006:482) as "moral beliefs and rules about right and wrong". In a booklet published by the UFS Postgraduate School, De Reuck (2014:5) states that "in order to foster a strong and sound research culture at the University of the Free State, as well as to meet institutional values, ethical approval is required for all research projects". As a researcher, I am aware that it is my responsibility to ensure

that the identities, interests, and information provided by the participants are protected, handled with care and that the interpretation and reporting of the results are accurate. To ensure that the participants' identities and inputs are protected and as part of the university's procedure for researchers to adhere to, an application for formal ethical clearance was filed. Participants will be informed about the purpose of the study and will have to give their formal consent for the data to be used by the researcher. Ethical clearance was obtained for the study (UFS-HSD2016/1564).

1.12 Value of the research

The effects of language learning beliefs and motivation of Education students extend beyond their own academic performance at university. Their beliefs about language learning and motivation to master English may not only influence their own progress as language learners, but also have the potential to affect the performance of those they ultimately teach at schools. As Weideman (2002:5) observes:

...as teachers, we owe it to the learners who are in our care to question our own beliefs, to probe for our hidden assumptions, and to bring them to the surface. Once we can hold up our beliefs about language teaching [and learning] to the light, we might be able to understand our own professional practice so much better.

Regarding the professionalism of teachers, Weideman (2002:6) further states that:

To have a set of beliefs about language teaching [and learning] that is in tune with one's view of the world is a magnificent achievement... For aspiring teachers it is not only about identifying a style that is in tune with their beliefs, but of developing one with which they will be personally satisfied. It is about the complacency that comes with the adoption of a specific style,

and about overcoming it through the continual examination of one's own practices. It is about being able to evaluate critically the teaching practices proposed by prescribed syllabuses, with which many teachers are forced to work...

With respect to the role of motivation, Samad, Etemadzadeh and Far (2012:432) state that there is no significant learning that can take place without motivation, irrespective of one's intelligence, the curriculum in place and "whoever the teacher" may be. To verify such claims it is important that a study of this nature which investigates the impact of language learning beliefs and motivation on developing mastery in English is conducted.

I believe that the proposed study can make an important contribution in the field of teacher training. If we are serious about successfully addressing the poor English or low levels of language ability of university and school students successfully, we need to deal with the early causes of the problem. The way to do this is to ensure that Foundation and Intermediate Phase teachers are properly trained and are made aware of language related matters which may impact on the language and literacy development of their learners in future. If we know about the disadvantages and advantages, or the strengths and weaknesses of different beliefs about language learning, the developers of language programmes may be able to design their courses differently, to be more effective. This could assist with the mastery of English skills at both university and school level. In other words, if "learners' beliefs are aligned

with those of the teacher” and they are motivated to learn, learning is likely to take place and learners will benefit greatly (Lepota and Weideman 2002:207).

1.13 Chapter division and outline

1.13.1 Chapter 1

Chapter 1 briefly outlines the reasons for the study. It provides a rationale for studying in greater depth certain aspects of learning such as motivation and language learning beliefs. This is done by discussing briefly the relationship between the inadequacies of the South African education system and other important aspects that play a role in the outcomes of our education system. These aspects are language in education, academic literacy, language learning beliefs and motivation. It further outlines the methodology adopted by the researcher by introducing the theoretical framework of the study, its problem statement and research questions, the purpose of the research, and the objectives and potential value of the research.

1.13.2 Chapter 2

Chapter 2 focuses on two main aspects, namely the nature of language learning and motivation in language learning. The idea of ‘motivation’ is explored, and in particular Gardner’s socio-educational model, attitudes to learning situation, instrumental and integrative aspects, as well as Dörnyei’s perspectives on motivation. Thereafter, several recent studies on motivation and language learning beliefs will be summarized, with particular attention to how these studies have applied or adapted hypotheses or theories mentioned above. Similarly, with reference

to the theme of the “nature of language learning”, language learning beliefs, learners’ styles of learning and strategies, vocabulary and language learning, the role of grammar in language learning, the role of L1 in L2 learning, and the learning of English in the classroom and outside the classroom are discussed.

1.13.3 Chapter 3

Chapter 3 focuses on the research design and research methods used by the researcher. Firstly, the research objectives are restated, and methodology and research design are presented. Secondly, there is a brief discussion of the selection of participants. Thirdly, the methods for data collection are discussed, such as the theoretical rationale for the design of the survey questionnaire and the decision to use TAL and other assessment data. Finally, issues pertaining to ethics are outlined.

1.13.4 Chapter 4

The administration procedures, analyses, and interpretation of the pre- and post test, Test of Academic Literacy (TAL), and also those of the survey questionnaire are presented in this chapter. Details on what pre- and post TAL tests entail, population and specifications, and the summary statistics of both tests are discussed. This is followed by concise discussions of students’ perceptions on language learning and also of their levels of motivation.

1.13.5 Chapter 5

In this chapter, the overall set of results which include the correlation of students' motivation, language learning beliefs, and course assessment scores are outlined in an attempt to integrate the various findings into a coherent interpretation.

1.13.6 Chapter 6

Chapter 6 outlines the researcher's conclusions from the findings of the study. Recommendations which may be useful to language educators and researchers are presented. Finally, limitations and shortfalls of the study, and recommendations for future studies are presented.

CHAPTER 2

LITERATURE REVIEW OF MOTIVATION AND BELIEFS IN LANGUAGE LEARNING

2.1 Introduction

The purpose of the literature review of the current study is specifically to trace the views of different authors on motivation and language learning beliefs to see how these views may be relevant within the South African context to this investigation. These perspectives will be analysed and synthesised in an attempt to come up with a new interpretation or reconceptualization of the role of motivation and language learning beliefs in second language learning. In other words, it is an attempt to investigate the possible bi-directional relationship between what students (in this case a specific group of pre-service educators) believe about language learning and their levels of motivation towards the learning of English. The impact of this relationship on language learning is also investigated.

This bi-directional relationship is illustrated by the diagram on the next page which advances the propositions in the first chapter regarding the need to make pre-service teachers aware of the importance of language learning beliefs and motivation in learning English. This relationship advances the idea that motivation and language learning beliefs are interdependent language learning factors necessary for the mastery of English, as shown in the diagram on the following page:

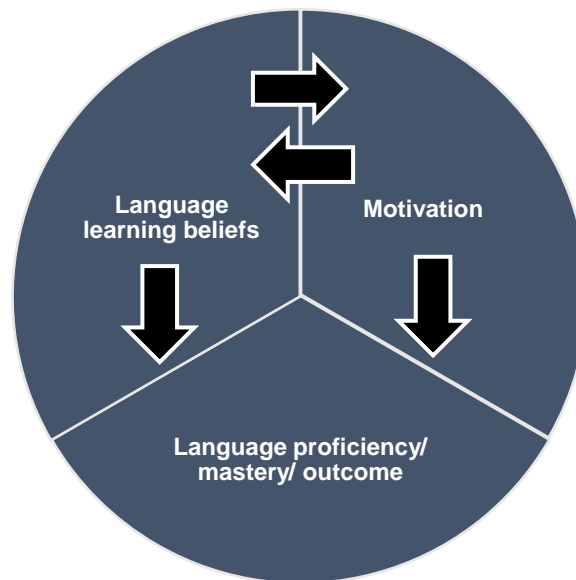


Figure 2.1: Interdependency in attaining language learning proficiency or mastery

Although most studies on language learning beliefs seem to include motivational statements, the current study aims to investigate whether some beliefs may influence motivation which in turn may affect mastery of English, or vice-versa. The researcher will thus statistically analyse the responses to motivational statements and language learning beliefs separately and in combination.

The literature review will refer to a number of previous studies deemed relevant to the topic. Although several relevant studies will be considered, the literature review for the current study will focus on the three main perspectives mentioned in the first chapter, namely, Gardner's socio-educational model, which covers attitudes to learning situations and integrative and instrumental aspects of language learning, Dörnyei's perspectives on motivation and language learning, and Griffiths's (2008)

perspectives on language learning beliefs. Following that will be a brief discussion of the applications of their models or concepts in the findings of some recent studies on motivation and language learning beliefs.

2.2 Motivation in language learning

Motivation is a complex phenomenon and there is no simple definition of it (Gardner 2005:3). As a result, different definitions of motivation have been coined by different researchers. The one proposed by Keller (1983:389) refers to motivation as “the choices people make as to what experiences or goals they will approach or avoid, and the degree of effort they will exert in this respect”. This definition incorporates most of the essential characteristics often displayed by individuals who are motivated (Gardner 2005:3). According to Gardner (2005:3) motivated individuals display the following characteristics:

1. They are goal-directed;
2. They express effort in attaining the goal;
3. They show persistence;
4. They attend to the tasks necessary to achieve the goals;
5. They have a strong desire to attain their goal;
6. They enjoy the activities necessary to achieve their goal;
7. They are aroused in seeking their goals;
8. They have expectancies about their successes and failures;
9. When they are achieving some degree of success they demonstrate self-efficacy;
10. They are self-confident about their achievements;
11. They have reasons for their behaviour, and these reasons are often called motives; and

12. They make use of strategies to aid in achieving the goal. (Gardner 2005:3)

As a further attempt to define motivation, Gardner (2007:10) divides motivation into “language learning motivation and classroom learning motivation”, briefly explained below:

Language learning motivation refers to the motivation to learn (and acquire) a second language. It is a general form of motivation relevant in any second-language context. It is not a trait... but it is a general characteristic of the individual that applies to any opportunity to learn the language. It is relatively stable, because of its presumed antecedents, but amenable to change under certain conditions. *Classroom learning motivation* refers to the motivation in the classroom situation or in any specific situation. The focus is on the individuals’ perception of the task at hand, and is largely state oriented. (Gardner 2007:10)

The categorization of motivation into the above-mentioned by Gardner seems confusing and adds to the difficulty of defining motivation; for example, he defines language learning motivation as a “general characteristic” and not a ‘trait’ when in fact these two terms have synonymous meanings. He also refers to classroom learning motivation as the motivation in “any specific situation” which is also confusing as it is not clear what this “specific situation” refers to or entails. One would guess that “any specific situation” should be interpreted as “any specific instructional or pedagogical situation”, an interpretation that would largely eliminate confusion.

I think the latter can best be understood by what Dörnyei (1998:206) terms “learning situation level” in his “components of foreign language learning motivation”. Learning situation level refers to the learner’s motives which are influenced by the specific classroom components. These components are the course-specific motivational components, such as learning activities, teaching materials used, the syllabus and teaching methods, teacher-specific motivational components such as the behaviour of the teacher, his or her personality, style of teaching, etc., and group-specific motivational components which include cooperativeness, competition and individuality (Dörnyei and Csizer 1998:207) as these contribute or detract from the specific motivation of the learner to learn a language in instructional and pedagogical settings.

Language learning motivation on the other hand I think is broader, encompassing both the classroom learning motivation components discussed above and the learner’s effort beyond the classroom. In other words, in addition to the classroom learning motivation components, language learning motivation consists of ‘grit’ and affective attributes such as those displayed by Unathi (mentioned in the first chapter) which include the love of the language, the desire to invest a substantial amount of time in speaking, listening and writing in the target language, and showing interest in television and radio programmes in the target language. Grit is defined by Duckworth, Peterson, Matthews and Kelly (2007:1087) “as perseverance and passion for long-term goals”, a kind of enthusiastic tenacity.

Ryan and Deci (2000) have also proposed the terms intrinsic and extrinsic motivation. These are closely related to the notions of integrativeness and instrumentality discussed in 2.2.1.2 and 2.2.1.3 as a further attempt to conceptualise motivation. Intrinsic and extrinsic motivations are part of self-determination theory (SDT) which focuses “on the extent to which individuals can exert control over their environment” (Woodrow 2010:303). According to Ryan and Deci (2000:54), people’s motivation does not only vary in terms of levels, but also in terms of the type of motivation they possess (i.e. their orientation). That is, an intrinsically motivated person performs “an activity for its inherent satisfactions rather than for some separable consequences” and this type of motivation can be equated to integrativeness (Ryan and Deci 2000:56). Extrinsic motivation on the other hand is the opposite of intrinsic motivation; it refers to doing something because of some separable outcome and can be equated to instrumentality. Furthermore, as far as extrinsic motivation is concerned, the motives behind the action can also vary. That is, some actions may be motivated by the fear of negative consequences and some actions may be motivated by the eagerness to secure positive consequences.

The difficulty of conceptualising motivation is evident. The multifarious nature of some of the concepts discussed in this section shows how complex it is. Although there have been several attempts to define motivation, there is as yet no simple definition of it. In the following section, the researcher analyses the conceptualisation of motivation in language learning as a variable in relation to other variables in Gardner’s socio-educational model.

2.2.1 Gardner's socio-educational model

The socio-educational model was developed from the work of Gardner and colleagues on motivation in the field of second language studies. It was influential and served as a foundation that paved the way for various and even diverse views on second language motivation and further studies. According to their model, motivation consists of three aspects, namely the desire to learn a second language, the motivational intensity of the learning and the attitudes toward learning a specific language (Gardner and Lalonde 1985:7, Woodrow 2010:302). Gardner and Lalonde (1985:7) refer to these aspects as the “tri-partite complex” and they argue that a motivated individual should display all three of these aspects.

The initial model proposed by Gardner in 1985 was based on the notion that social settings and cultural beliefs have the power to influence an individual's motivation “which influences the formal and informal contexts of language learning which, in turn, results in linguistic and non-linguistic outcomes” (Woodrow 2010:302). The model shows four categories of variables which can influence the successful learning of a language, namely the social milieu, individual differences, second language acquisition contexts, and learning outcomes (Gardner 1985:148, Woodrow 2010:302). These are depicted in figure 2.2.

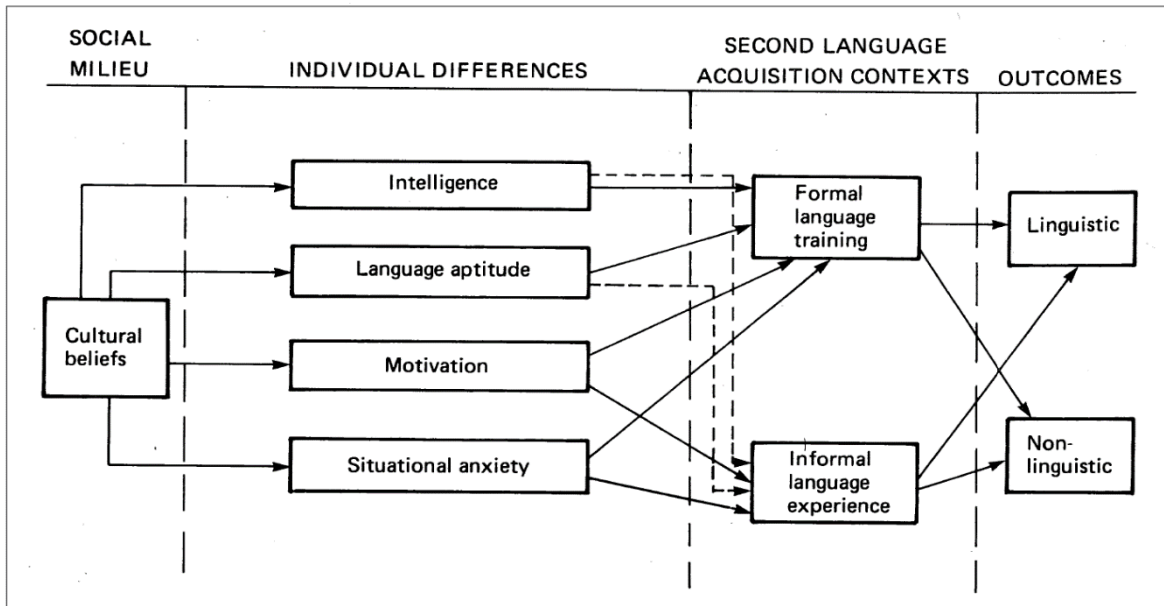


Figure 2.2: The original socio-educational model (Gardner 1985:147)

The central idea of the model is the belief that second language acquisition is dependent on the cultural context where the learning of a language takes place (social milieu) (Gardner 1985:146). That is, if a specific community considers the learning of a particular language important, and, for example, places great value on the learning of that language, chances are the acquisition of that language may be a success.

Cultural beliefs influence the four individual differences as shown in the diagram, and each individual difference has a unique function that manifests itself in both formal and informal contexts. Intelligence determines the pace at which one will be able to grasp or understand a learning task or explanation given; language aptitude is viewed as the verbal and cognitive abilities which facilitate the learning or acquisition of a second language; motivation determines the effort put in by an individual in an attempt to “acquire language material”; and situational anxiety can

inhibit an individual's performance and interfere with the acquisition of the particular language (Gardner 1985:148). The language acquisition contexts in turn determine whether the outcomes will be linguistic or non-linguistic in nature. Linguistic outcomes refer to the second or target language proficiency characterised by extensive vocabulary knowledge, grammar, pronunciation, fluency, etc. (Gardner 1985:149). Non-linguistic outcomes refer to qualities such as values, attitudes, etc. that develop as a result of experiences (Gardner 1985:149).

In the original model the perception is created that cultural beliefs influence intelligence and language aptitude, which is problematic. It is also not clear what the main variables are that affect language learning. Perhaps these are some of the reasons the model has taken on a different form. The latest adaptation proposes that language learning depends primarily on two individual difference variables, namely ability and motivation. Whereas ability incorporates aptitude and intelligence, motivation for learning a second language involves two main "classes of variables" – "Attitudes toward the learning situation" and "Integrativeness" (Gardner 2005:6), as shown in the diagram on the next page.

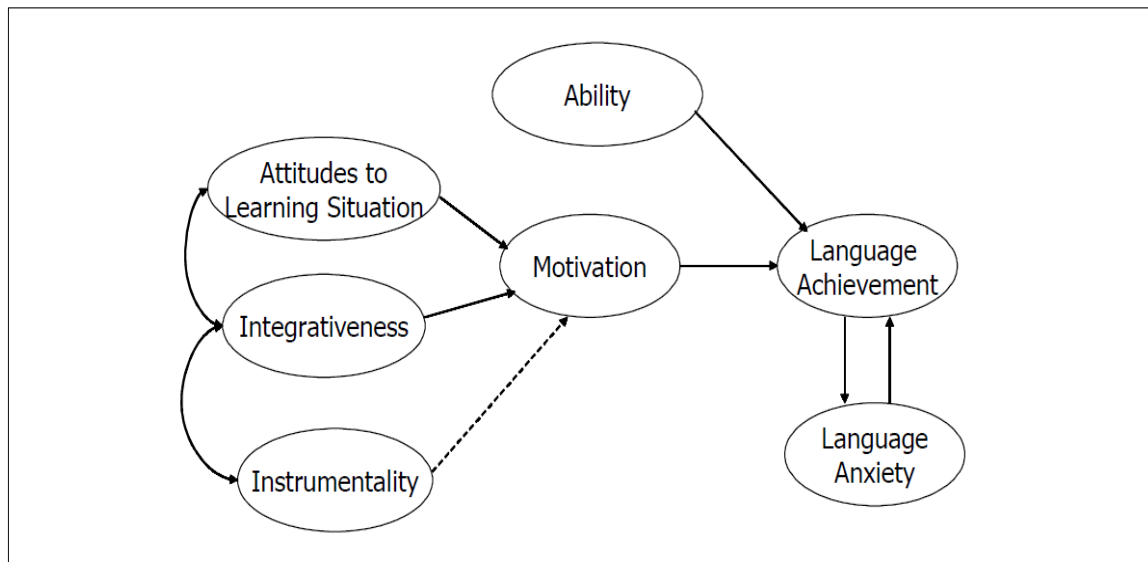


Figure 2.3: The refined socio-educational model (Gardner 2005:6)

Although the latest model emphasises attitudes to the learning situation and integrativeness as the key factors underlying one’s motivation necessary for L2 learning, instrumentality can also increase one’s motivation for language learning (Gardner 2005:8). It is important to note that the uncertainty of the influence of cultural and social setting on one’s intelligence and aptitude seems to have been rectified in the recent model by integrating intelligence and aptitude variables under ability. The three variables mentioned above, namely, attitudes to learning situation, integrativeness and instrumentality that influence and maintain an individual’s levels of motivation will be discussed briefly next.

2.2.1.1 Attitudes toward the learning situation

The concept “Attitudes toward the learning situation” refers to the learner’s attitude towards the aspects of a learning environment or learning situation where the learning is taking place (Gardner 2005:10). These aspects can amongst other things

include the teacher who is teaching the content, the course as a whole or the curriculum, fellow classmates, the quality of the material used, extra-curricular or formal learning activities related to the course, and availability of the material (Gardner 2005:10). It is not clear, however, how to conceptualise attitude. Gardner (1985:8) admittedly states that “the concept of attitude is complex” and this has led to numerous further attempts to define it. Gardner and Lalonde (1985:2) refer to “attitudinal components” as the ‘emotional’ variables, i.e. how the learner feels towards the target language community, etc. This explanation coincides with the definition provided by Richards and Schmidt (2010:314), who view language attitudes as “the attitudes which speakers of different languages or language varieties have towards each other’s languages or to their own language”. In their view one’s attitude towards the target language may reveal the person’s feelings about the speakers of the target language (Richards and Schmidt 2010:314). Another way to define attitude comes from Kazantseva, Valiakhmetova, Minisheva, Anokhina and Latypova (2016:2), who state that it refers to one’s “willingness to make personal effort with the purpose of mastering the language”, which I find problematic because often ‘effort’ is associated with the concept of motivation as is a high degree of ‘willingness’. This again illustrates how problematic it is to try to separate and define concepts that are so closely connected.

2.2.1.2 Integrativeness

Integrativeness is generally understood as one’s desire to learn a language to become part of or to be similar to a target language community and is characterised by the

learner's favourable attitudes toward the target language. The wide interest in integrative motivation resulted in various conceptualisations which according to Gardner (2005:2) "overlap the concept of integrative motivation that [he has] been discussing for a number of years but not completely". According to him integrative motivation can best be described as follows:

The concept of the integrative motive includes not only the orientation but also the motivation (i.e., attitudes toward learning the language, plus desire plus motivational intensity) and a number of other attitude variables involving the other language community, out-groups in general and the language context. (Gardner 1985:54)

This definition is a counter-argument to what many researchers perceive as integrative motivation, and the earlier interpretation of what this entails. Gardner (2005:2) therefore argues that statements or definitions, such as those that claim that integrative motivation is characterised by the learner's favourable attitudes towards the target language community, and is evident when one learns the language with the aim of being assimilated into a speech community, do not define integrative motivation completely. He further observes that statements such as "Studying [English] is important to me because it will enable me to better understand and appreciate [English] art and literature" or "Studying [English] can be important to me because it will allow me to meet and converse with more and varied people" do not necessarily measure integrative motivation. They are merely a reflection of orientation, unless such statements consist of elements mentioned in the definition he proposed in 1985 and cited above (Gardner 2005:2). Orientation in this case would refer to the learner's reasons for learning a language with the sole purpose of wanting

to be part of a target language community. The reason for the conceptual hedging around what integrative motivation entails probably derives from the findings of later studies that showed how a desire and motivation to learn another language may just as likely leave the learner's cultural identity intact (Coetzee-Van Rooy 2006:439), and may not necessarily derive from any intention to assimilate.

2.2.1.3 Instrumentality

The concept of instrumental orientation refers to the language learning reasons based on “practical or utilitarian purposes” (Gardner 2005:11). For instance, some learners may be interested in learning English because it will improve their chances of getting employment, or of business or development opportunity. A good example of instrumentality in South Africa and in many other countries around the world is the perception of the English language as a lingua franca or a language of opportunity. This is also noticeable in the South African basic education curriculum where reference is made to the mastery of subjects such as English taught as “home languages’ primarily as a passport to the world of work” (Weideman, Du Plessis and Steyn 2017:3). It therefore comes as no surprise that many parents would prefer to send their children to former Model-C schools where English is taught as a home language even though it may be their second or third language. In the BALLMI-M, instrumentality is measured by statements such as “Studying English is important to me because I think it will someday be useful in getting a good job” and “I have to learn English because without passing the English course I cannot get my degree”.

Gardner’s confusing conceptualisation of motivation is evident in the discussion on his socio-educational model. In his definition of integrative motivation discussed above, for example, Gardner seems to consider attitude to be part of integrativeness rather than a second or separate class of variables. This makes it hard to understand why in figure 2.3 attitudes and integrativeness are separated. The impression one gets is that they are inseparable and that it may be more helpful to list behaviours and traits associated with motivated persons than trying to define all these concepts. In an attempt to eliminate this confusion in the survey instrument used for the current study, the researcher attempted to cover all related aspects without categorising each separately as attitude, or integrativeness, and so forth.

2.2.2 Criticism of Gardner’s Attitude Motivation Test Battery (AMTB)

The socio-educational model led to the development of the Attitude Motivation Test Battery (AMTB) designed to measure some of the constructs which were discussed in the previous sections. The scales of the model are shown in the table below.

Construct	Scales
Motivation	Motivation intensity Desire to learn the language Attitudes toward learning the language
Integrativeness	Integrative orientation Interest in foreign languages Attitudes toward the target language community
Attitudes toward the Learning Situation	Language teacher evaluation Language course evaluation
Language Anxiety	Language class anxiety Language use anxiety
Instrumentality	Instrumental orientation

Table 2.1: Constructs and scales from the AMTB (Gardner 2009:4)

Although the questionnaire designed for the current study covers all of the aspects in the table except language anxiety, the nature of the current study renders Gardner's AMTB as at least partly inappropriate, since language anxiety is not directly related to its objectives. This was also noted in the pilot survey, which identified the statements related to anxiety as problematic and not that closely related to the rest of the statements. These were thus omitted in the refined version of the questionnaire. What is more, the apparent indefinability of the concepts of 'attitude', 'motivation', and others that are potentially key constructs make the generalizability of the AMTB questionable. The preference in this study for the employment of an instrument that is more fully aligned with its objectives is therefore indicated. As will be shown in the following discussion, this quest for a relevant and appropriate instrument led to the compilation of BALLMI-M. Though BALLMI-M does utilize certain AMTB scales and scales from other questionnaires with the aim of integrating language learning beliefs and motivation statements into one questionnaire, the AMTB itself would have been less useful. Gardner (2005:4) himself in fact notes that motivation is so complex that it cannot be measured by one scale, adding "perhaps the whole range of motivation cannot be assessed by even three or four scales", a statement that supports the decision of integrating different scales used by different researchers.

Furthermore, the unsuitability of AMTB for the current study is linked to concerns over the conceptualisation of some of the constructs, such as integrativeness, which have been questioned by several researchers since the early 1990s, the period which signified the rebirth of L2 motivation research. Gardner (1985:54) makes a clear

distinction between integrative motivation and integrative orientation, and this is reflected in his definition of integrativeness, coined in 1985. Dörnyei (1994:518) argues that motivation and orientation concepts are often used interchangeably in L2 research. He further points out that one's motivation to do something or to pursue a goal "is often understood in everyday speech as the person's reasons for doing something" (Dörnyei 1994:518). Besides the problems with the concept integrativeness, Gardner has also inadequately conceptualised motivation, attitude, orientation and other factors in terms of other variables which may be related, but do not actually define those concepts.

Other researchers are also of the view that the social psychological approach to L2 motivation which is associated with the work of Gardner and his colleagues is inadequate and neglects, for example, the educational aspect of L2 motivation and diverse learning contexts (Dörnyei 1994:515; Dörnyei 2006:52). In an attempt to address this inadequacy in conceptualisation and approach to L2 motivation, Dörnyei (2005) proposes what he refers to as "the L2 motivational self system".

Although the argument presented here does not invalidate the construct of integrativeness or question its existence, it does serve as a call to reconsider "some aspects of the construct and some items in the test battery" (Dörnyei 1994:518), which is exactly what was done by the researcher when compiling BALLMI-M. In the following section, integrativeness is reconsidered with reference to Dörnyei's (2005) L2 motivational self system.

2.2.3 From integrativeness to the ideal L2 self: Dörnyei's L2 motivational self system

As mentioned in the previous section, the 1990s signalled a turning point in the field of L2 learning motivation, to such an extent that this period has even been referred to as a “motivational renaissance” (Gardner and Tremblay 1994:526). The turning point was partly due to concerns raised by some researchers regarding the relevance of Gardner's socio-educational model to all learning contexts. There were also concerns about the conceptualization of integrativeness by the social psychological model of Lambert, the acculturation model of Schumann, the social context model of Clement, the intergroup model of Giles *et al.* and the socio-educational model of Gardner (Coetzee-Van Rooy 2006:438).

Dörnyei (2005:94) argues that the conceptualization of integrativeness in the socio-educational model fits perfectly in multicultural environments such as Montreal (Canada) where Gardner's research on integrativeness was initiated. However, this conceptualization is not applicable to learning environments that are different from Montreal (Canada) and where “there is no real contact with L2 speakers available for learners”; for example, in countries such as China, Japan, etc. In support of this claim, Coetzee-Van Rooy (2006:437) argues that “second-language acquisition theories [mentioned above] that rely on any assumption of integrativeness should not be applied uncritically to sociolinguistic contexts where learners are acquiring a variety of world English today”. She further states that the learning of a L2 does not necessarily result in the loss of one's first language. Therefore, it cannot be true that assimilation or the desire to learn about the target language community leads to

successful learning of an L2, as this view disregards multilingual groups with complex identities such as those who speak African languages (Coetzee-Van Rooy 2006:439). In a South African context, for example, where the majority of learners are learning English as their second language, English is perceived as a language of opportunity and not necessarily as a tool for integrating with the target language community (Coetzee-Van Rooy 2006:440). Coetzee-Van Rooy (2006:447) concludes:

... the notion of integrativeness is untenable for second-language learners in world Englishes contexts. Researchers who use the construct should at least interrogate its use within the context in which the second language is learnt and the extent of multidimensionality of the learner's identity.

These concerns resulted in revised L2 learning motivation models such as “the L2 motivational self system” by Dörnyei (2005). The L2 motivational self system, while based on previous research, does not entail a complete break with the past, but aims instead to “reinterpret the concept [integrativeness] in a way that goes beyond the literal meaning of the verb ‘integrate’” by incorporating several influential L2 theories (Dörnyei 2005:94, Dörnyei 2006:53). In other words, the L2 motivational self system is aimed at addressing the confusion in the conceptualization of integrativeness and other constructs highlighted in the previous discussion of the socio-educational model. It consists of three components which are perceived as the most powerful motivators for L2 learners. These components are explained briefly on the next page:

1. *Ideal L2 Self*, which is the L2-specific facet of one's "ideal self": if the person we would like to become speaks an L2, the "*ideal L2 self*" is a powerful motivator to learn L2 because of the desire to reduce the discrepancy between our actual and ideal selves. Traditional integrative... motives would typically belong to this component.
2. *Ought-to L2 Self*, which concerns the attributes that one believes one ought to possess to meet expectations and to *avoid* possible negative outcomes. This dimension corresponds to [extrinsic or instrumental motivation].
3. *L2 Learning Experience*, which concerns situated, 'executive' motives related to the immediate learning environment and experience (e.g. the impact of the teacher, the curriculum, the peer group, the experience of success). (Dörnyei 2009a:29)

In short, individuals with an integrative disposition who have an idea of what they would like to become (ideal L2 self) and the qualities they believe are necessary to realise *Ideal L2 self* (ought-to L2 Self), and who have a favourable learning environment and learning experience (L2 Learning Experience), are more likely to succeed in learning an L2. The *Ideal L2 self*, which is the representation of one's wishes, dreams, visions, hopes, aspirations and desires, is an essential component of the L2 motivational self system, and regulates the changes in one's motivation. In other words, the stronger the wish, dream, vision, hope, aspiration or desire to achieve something, the stronger the motivation. Dörnyei (2009b:17) also notes that "it requires little justification that if someone has a powerful ideal self – for example a student envisions him/herself as a successful business [person] or scholar – this self image can act as a potent self-guide, with considerable motivational power". What I also find interesting in as far as the current study is concerned is that the component

ought-to L2 Self which moderates the “discrepancy between the actual L2 self and the ideal L2 self” (Coetzee-Van Rooy 2011:152) is centred on the beliefs about what one thinks are essential attributes necessary to sustain L2 learning motivation. Although it is not stated explicitly, these could be the language learning beliefs that are at the centre of this investigation, advancing again the idea that motivation and language learning beliefs may be interdependent language learning factors necessary for the mastery of English, as proposed by the current study. Below is an alternative interpretation of the L2 motivational self system by Coetzee-Van Rooy (2011:152):

In this theory, perceptions of the actual, ideal and ought-to L2 self are crucial. The theory hinges on the notion that a discrepancy between the actual L2 self and the ideal L2 self, moderated by influences from the ought-to L2 self and the L2 learning experience, would relate to sustained motivation and effort that would result in successful L2 learning. In other words, this theory proposes that a specific type of Ideal L2 self-perception would mediate language learners’ motivation and effort and that it would ultimately determine the success or failure of language learning.

Although the L2 motivational self system seems to have addressed the confusion evident in Gardner’s conceptualization of constructs such as integrativeness, integrative motivation, attitudes etc., Coetzee-Van Rooy (2011:153) is of the view that the relevance of this theory in multilingual societies such as South Africa is questionable since it “was developed for and has to date been evaluated in foreign language learning contexts like Hungary”. She points out that “comprehensive evaluations (conceptually and empirically) would need to be conducted in South Africa (and other multilingual societies) to determine the validity and explanatory power of the theory in those contexts”.

In conclusion, although the theory of L2 motivational self system is relatively new, empirical findings, some of which are discussed towards the end of this chapter, have pointed to the need to reinterpret integrativeness. In the following section, the role of language learning beliefs in learning an L2 will be discussed briefly.

2.3 Language learning beliefs

In the first chapter, Language Learning Beliefs (LLBs) were defined as “the sets of assumptions and preconceptions about language learning that learners often carry with them into class, and that may refer to, or find expression in, their learning styles and strategies” (Lepota and Weideman 2002:206). These assumptions and preconceptions often determine an individual’s language learning approach. That is:

A student who believes, for example, that learning a second language primarily involves learning a new vocabulary will expend most of his/her energy on vocabulary acquisition, while adults who believe in the superiority of younger learners probably begin language learning with fairly negative expectations of their own ultimate success. An unsuccessful learning experience could easily lead a student to the conclusion that special abilities are required to learn a foreign language and that s/he does not possess these necessary abilities. (Horwitz 1988:283)

The LLBs held by a learner can also enhance or hamper the learning of a language (Lepota and Weideman 2002:206). Therefore, it is important that learners’ LLBs are aligned with those of a teacher to avoid a mismatch of both parties’ LLBs which can impede, or have a generally negative effect on learning. However, what is worth

noting is that LLBs are dynamic and situated (Ellis 2008:8). In other words, given time, LLBs do and can potentially change, as was noted in the first chapter. This means that if pre-service and in-service teachers are made aware of the importance of identifying their learners' LLBs and an attempt is made to match learners' LLBs with the teachers', learners' LLBs can potentially change.

The LLBs do not only influence the approach taken by learners in learning a language, they also shape the teaching styles of teachers. In other words, teaching styles serve as the platforms utilized by teachers to express their beliefs about language learning (Weideman 2002:8). For example, "a method of language teaching that requires lots of repetition by learners is an expression of the belief that language learning is learning a set of habits", and this will often result in the designing of exercises that require learners to repeat (Weideman 2002:8). As the influences behind styles of teaching, LLBs are compelling, and it is almost unimaginable that one will be able to teach – except mindlessly - without having any belief of how, in this case, learners learn English (Weideman 2002:8). As Weideman (2002:1) also notes, these beliefs are not always conscious choices that teachers make. At times they can be adopted unconsciously. It is therefore important for teachers to discover their teaching styles and understand the LLBs that are embedded in them, as the failure to do that may affect not only their practices but their learners as well (Weideman 2002:6). The benefits of identifying a teaching method that is aligned with one's beliefs include personal satisfaction that comes with choosing a specific style, being able to monitor this style continually, and being able to evaluate critically

the teaching practices that characterise the prescribed syllabus. Moreover, such a deliberate choice enables one to have a better understanding of a variety of teaching styles, thus “overcoming prejudice against [any particular style] of teaching” (Weideman 2002:6-7). There is no doubt that understanding the beliefs underlying teaching styles also make improvements to one’s own teaching possible (Weideman 2002:7).

In conclusion, the discussion presented here highlights the important role of LLBs in the language learning process and also supports one of the propositions of the current study, which is that, for successful learning of a language to occur, it is desirable that the LLBs of learners and teachers must be in harmony. This is also observed by Ellis (2008:24), who states that:

If beliefs influence the actions that learners perform to learn an L2, they cannot be ignored by teachers. Little learning is likely if there is a mismatch between the teacher’s and the students’ belief systems. This suggests the need for teachers to make their own beliefs about language learning explicit, to find out about their students’ beliefs, to help their students become aware of and to evaluate their own beliefs and to address any mismatch in their and their students’ beliefs systems. (Ellis 2008:24)

2.3.1 Brief history of language learning beliefs

The history and study of LLBs can be traced for the greater part to the work of Elaine Horwitz. Following several studies, Horwitz (1987) developed a language learning beliefs measuring instrument, BALLI, which she used to assess learners’ beliefs about language learning. The original survey consisted of 34 statements categorized

into aptitude, difficulty of language learning, nature of language learning, learning and communication strategies, and motivations (Lepota and Weideman 2002:209). Since then, BALLI has been adapted to suit various learning contexts. For example, in their study, Lepota and Weideman (2002) argue that the adaptation of BALLI to BALLI-M was necessary as some of the statements in the instrument “implied that learning English [can] take place only or ideally in an English-speaking country”. For the current study, BALLI-M was further revised to incorporate additional motivation statements to match the objectives of the study, and this has resulted in the Beliefs about Language Learning and Motivation Inventory Modified (BALLMI-M).

Although there has been a growing interest in LLBs research over the years, it is still not clear what the basis of LLBs is. According to Little and Singleton (1990:14), “past experience, both of education in general and of language learning in particular, [plays] a major role in shaping attitudes to language learning”. Ellis (2008:10) cites cultural background as a possible factor that influences one’s LLBs. However, Horwitz (1999) argues that there is little evidence which shows that LLBs are determined by one’s cultural background. She proposes, instead, that personality and cognitive style are possible factors that influence LLBs, but again this is yet to be confirmed. I think LLBs may be the products of one’s self-efficacy, which may be instilled and cultivated at home or by one’s immediate environment through mentors, role models, etc. This assumption is also supported by White (2008:121), who argues

that LLBs “are not only cognitive constructs but also social constructs arising from experience”. Self-efficacy is defined by Richard and Schmidt (2010:526) as:

A person’s belief in their own capabilities and their ability to attain specific goals. A learner’s sense of efficacy affects their motivation to learn, the goals they set, the effort they devote to attaining these goals and their willingness to persist in the face of difficulty. Self-efficacy has been found to influence learners’ achievement in language learning.

In other words, self-efficacy can be described in terms of “I think I can” or “I think I cannot” concepts. For example, in my early years of schooling I always thought that I was not capable of learning mathematics and this was fuelled by most learners’ perception of mathematics. I was told by everyone that mathematics is a difficult subject and as a result I did not elect to study it in the FET phase because of the belief built on my self-efficacy and crystallised by the perception of others in my immediate environment that mathematics was hard to master.

2.3.2 Classification of language learning beliefs

After several trials of BALLI, Horwitz (1987) came to the conclusion that LLBs can be divided into five categories or types. These categories are shown in the table on the following page and under each category the LLBs statements that appear in BALLMI-M are outlined. Although there are other categories or types of LLBs proposed by other researchers, the ones which emerged from Horwitz’s (1987) study remain the most widely referenced.

Aptitude

I believe that some people have a special ability for learning English.

It is easier for children than for adults to learn English as another language.

Women are better than men at learning languages.

Difficulty of language learning

English is one of the most difficult languages to learn for someone who does not have it as a first language.

Nature of language learning

Learning English is different from learning other academic subjects.

The most important part of learning another language is learning its vocabulary.

The most important part of learning another language is learning its grammar.

The most important part of learning another language is learning how to translate from my home language into English.

The most important part of learning English is to become fluent in communicating.

Learning and communication strategies

I should rely on my lecturer to explain the work to me.

I like to have the lecturer correct every error I make, so that I don't learn bad habits.

Regularly repeating the work will help me improve my English.

You shouldn't say anything in English until you can say it correctly.

I need to spend time memorizing the meanings of new words.

Guessing the meaning of the word from context helps to improve one's vocabulary.

I like to rehearse in my mind what I want to say in English before I say it.

I am the person who is most responsible for my progress in this English course.

Practising speaking English with my friends gives me confidence to express myself in English.

Motivations

Discussed in section 2.2

Table 2.2: Classification of language learning beliefs (Horwitz 1988:284)

The focus of this study will be on LLBs most relevant to ESL contexts, and relevant in particular to the cohort of students participating in the research project. The variables mentioned by Griffiths (2008) relate to other dimensions and constructs, many of which fall beyond the scope of the current study.

In the following section, some predominant views on effective language learning will be discussed briefly. Some LLBs have been found to support language learning, while others may obstruct learning; on the basis of this distinction and the responses of students to the survey questionnaire statements on LLBs, it will be possible to generate a score per student on their profile as potentially “good language learners”.

2.3.3 Variables that make for effective learning

For the sake of conciseness and context relevance, this section focuses on the role of vocabulary, grammar, learner autonomy and error correction in the learning of a second language. Many South African learners who are learning English as their second language and who perform poorly in the subject often display a lack of vocabulary in the target language and an inability to construct simple and grammatically correct sentences. These aspects are investigated in detail as part of the analysis of survey and assessment data in chapter 4. Furthermore, the perception is that students tend to rely too much on a teacher to make progress and that they expect error correction in order to improve their English. This study will examine the actual beliefs of the cohort of Education students and whether they are aligned with current views on effective second language teaching and what Griffiths (2008) and others have referred to as “good language learners”. In the section that follows attention will be devoted to a selection of variables deemed most relevant for the current study.

2.3.3.1 Vocabulary and language learning

Over the years there has been a strong conviction that for one to learn a second language successfully one must have an extensive and rich knowledge of vocabulary. Nation (2005:7) states that “modern researchers have reached conclusions that are similar to those of many foreign language learners: vocabulary acquisition is a crucial, and in some senses, the central component in successful foreign language acquisition”. This is supported by Pretorius, Jackson, McKay, Murray and Spaul (2016:12):

Vocabulary (i.e. knowledge of words in a language) correlates very strongly with all aspects of language proficiency – in both HL and in a FAL. Knowledge of vocabulary is very strongly related to oral language proficiency (i.e. spoken language), to listening comprehension, to reading comprehension and to writing ability in an L2. It also correlates very strongly with general knowledge. Learners who know more words are smarter, better at what they do and more self-confident.

These views and others have prompted much research on vocabulary acquisition. Paul Nation, in particular, has been a leading expert and has published extensively on the topic. However, the importance of vocabulary knowledge in learning a second language can be traced to the early work of Elaine Horwitz on LLBs.

The belief relating to the importance of vocabulary acquisition can have an impact on the language learning process. For example, “a student who believes that learning a second language primarily involves learning a new vocabulary will expend most of his/her energy on vocabulary acquisition” (Horwitz 1988:283). The impact of such a

belief is also evident in the design of school and university curricula and course content that often incorporates a number of vocabulary exercises. If the acquisition of vocabulary plays such an important role in the learning process, pre-service teachers should, therefore, be conscientised about the importance of holding productive LLBs in order to help learners to become good language learners. In the next sub-section the importance of grammar in learning a language is discussed briefly.

2.3.3.2 Grammar and language learning

The importance of grammar in learning a language continues to draw enormous research interest and the findings of numerous studies reveal that most learners and teachers still view grammar as an essential element that everyone should be exposed to if they are to learn a language successfully (Bade 2008:182). The importance placed on grammar is also evident in various language learning materials such as textbooks, which are the products of LLBs embedded in certain teaching methodologies.

The belief that grammar is central to learning a second language provides the grounds for many of the techniques to be found in the audio-lingual method (ALM) and earlier methods of language teaching, and there is no doubt that these conventional language teaching methods have had a tremendous influence on the thinking about LLBs as well. The ALM, for example, is “a method of additional and foreign language teaching that is characterized in the first instance by the fact that it is grammatical in

orientation” (Weideman 2017:98). It is derived from the behaviourist approach which views “language learning [as] the learning of a set of habits” (Weideman 2002:20). Weideman (2017:98) observes that:

The obsession with language structure, specifically with structural units at and below the level of the sentence, is the outcome of a firm belief that language is in fact nothing but structure. Not only does it identify language with its structural units: it also views language learning as nothing more than the mastery of such structures. (Weideman 2017:98)

During its heyday in the 1950s and 1960s, the emphasis on these starting points of the ALM by teachers was so strong that it was often perceived as the “correct method of teaching additional and foreign languages” (Weideman 2017:98). This perception also led to the belief that the learning of grammar through rehearsing and repeating structures is one of the most important components of learning a language. Such a belief is also reflected in the grammar translation method, where language structure and the translation to or from the target language are emphasised.

However, despite the initial popularity of the ALM amongst English teachers and language practitioners, subsequent research has questioned the superiority of knowledge of grammar over communicative competence. There is consensus that a language cannot be learnt by teaching discrete units of grammar and the repetition and memorisation of rules, which is what the ALM entailed. This debate was of course further stimulated by what was raised as an issue when Communicative Language Teaching (CLT) took over from the ALM as language teaching orthodoxy in the mid-1980s (Weideman 2017:107). Within CLT, there has therefore

additionally been a debate about whether we should as language teachers be aiming for ‘fluency’ among learners, or for ‘accuracy’ (= grammatical correctness), and, additionally then, about whether grammar should be explicitly taught. There is also a view, again stimulated by CLT, that if language is primarily about meaning making, then grammar cannot be the most important part of learning a language. In an attempt to address such concerns, Larsen-Freeman (2014:258) has proposed “a three dimensional grammar framework”. This framework, which is illustrated on the next page, is designed to “help students use the language accurately, meaningfully, and appropriately” (Larsen-Freeman 2014:258). According to this framework, the teaching of grammar goes beyond the ‘form’, a set of rules or structures that learners are supposed to master. It also incorporates lexical aspects and how grammar contributes meaning, as well as conventions for using language (Larsen-Freeman 2014:258).

In the figure on the next page, the three-dimensional grammar framework is illustrated. The form or structure segment addresses the ‘how’ question. That is, for example, how the simple grammatically correct sentence of English is formed or structured. The meaning or semantic segment deals “with what a grammar construction means” (Larsen-Freeman 2014:258). Lastly, the use or pragmatics dimension is concerned with “the use of language in context” (Larsen-Freeman 2014:258).

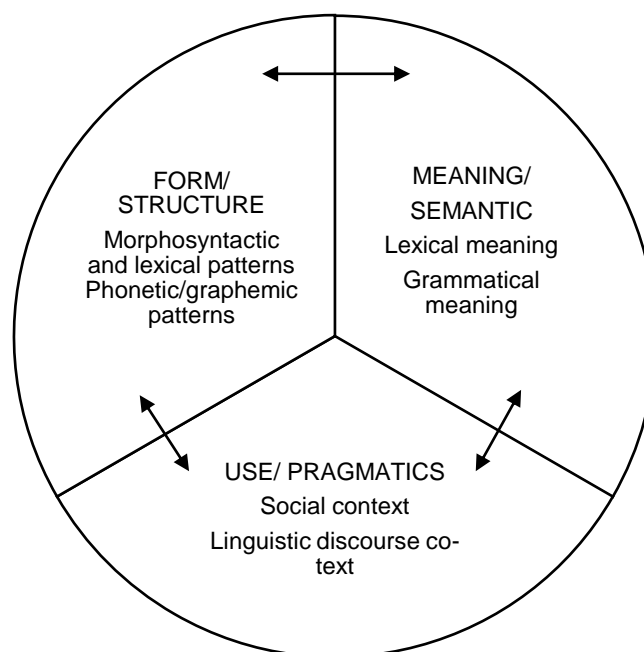


Figure 2.4: A three dimensional grammar framework (Larsen-Freeman 2014:258)

In conclusion, the re-interpretation of grammar as a “system of lexicogrammatical patterns that are used to make meaning in appropriate ways” (Larsen-Freeman 2014:258), seems to offer a richer and more useful conception of grammar that may eliminate confusion about its role and importance in the language learning process. Therefore, investigating awareness amongst pre-service and in-service teachers about functional and communicative ways to teach grammar is worthwhile so that they can align their LLBs with those of their learners.

2.3.3.3 Learner autonomy and language learning

In language learning, autonomy is defined as:

The ability to take charge of one's own learning and to be responsible for decisions concerning the goals, learning processes, and implementation of one's language learning needs. The result is an autonomous learner, as compared to one who depends on others to make such decisions. (Richards and Schmidt 2010:44)

Although autonomy is referred to as an 'ability', some learners hold the belief that learning a language is something that occurs in the classroom only and that the teacher is the one who is solely responsible for their learning. Often this is the determining factor which differentiates between poor and good language learners. Good language learners are often characterized by their willingness to go the extra mile to learn a language. This was also noted in the first chapter, in the case of Unathi, a Grade 12 learner from Mdantsane Township in the Eastern Cape who excels in writing despite his dire circumstances. Unathi "takes every opportunity to read and listen to English, [he] loves writing, [he] is a self-directed writer, etc.". In other words, autonomous or good language learners often employ a variety of learning strategies that facilitate the learning of a language (Griffiths 2008:92). These include:

- Strategies to manage their own learning (metacognitive)
- Strategies to expand their vocabulary
- Strategies to improve their knowledge of grammar
- Strategies involving the use of resources (such as TV or movies)
- Strategies involving all language skills (reading, writing, listening, speaking). (Griffiths 2008:92)¹

¹ For a detailed discussion on learning strategies, including the controversy over the definition, categorization of language learning strategies, etc., see Oxford (1990), Griffiths (2006, 2008), and Griffiths and Oxford (2014).

The case of Unathi indicates that learner autonomy is possible even in poorly resourced schools and illustrates the potential gains of a learner-centred approach in the language classroom. Learners should, therefore “be encouraged to assume a maximum amount of responsibility for what they learn and how they learn it” (Richards and Schmidt 2010:362). This can be achieved by exposing learners to different language learning strategies frequently utilized by good language learners to regulate their own language learning (Griffiths 2008:92), with the intention that this will eventually lead to the adoption of appropriate LLBs.

2.3.3.4 Error correction and language learning

The debate referred to above about the explicit teaching of grammar, and the concomitant notion of creating “language awareness” – broadly interpreted as awareness of grammatical correctness or error – relates also to how the correction of error should be undertaken (if at all) by teachers. Although error correction is often encouraged, there is uncertainty regarding its effectiveness on learners’ work. An early study in South Africa on this was done by Botha (1987:46), who states that error correction does not really improve the language proficiency of learners who are learning a second language. He observes that even though teachers provide feedback by means of error correction on learners’ written and oral tasks, they often do that with little hope that learners will actually “register the error and rectify it when the same structure is again used” (Botha 1987:46).

Similarly, some stronger versions of the Communicative Language Teaching (CLT) approach in the 1980s argued strongly that the correction of errors was not really helpful in improving the language proficiency of learners. According to this interpretation of CLT, errors are an indication of growth and development of the target language, and teachers are not encouraged to “spend too much effort on the overt correction of errors” (Weideman 2002:2). It could also be argued that although error correction may result in minor improvement on learners’ work, this is often on an individual basis and “not in the performance of the class as a whole” (Weideman 2002:2). This raises questions as to whether an improvement on some individual’s work is in the first place due to correcting of errors, or to other factors (Weideman 2002:3).

Researchers in favour of error correction may obviously hold differing views from those discussed above. Nevertheless, despite the possible contradictory views on this matter, there is no doubt that learners hold certain assumptions about the importance of error correction and this may also determine how they respond to feedback and the effectiveness of such practice. From my observations over the years as a teacher, I think that the practice of error correction can benefit some learners. In other words, learners who perceive error correction as important, and who are eager to identify and correct their language errors, are likely to profit from it.

In conclusion, this section has attempted to support the objectives of the study by discussing areas that may obstruct language learning. Unless the conflict between

learners' and teachers' LLBs is addressed, or at least some desirable alignment of beliefs about language learning is established between the learners and their teachers, learning is less likely to occur. Therefore, and once again, learners and teachers should be made aware of the importance of holding mutually productive LLBs that support language learning and of the impact that LLBs can have on the learning process. In the next section, some brief findings of recent empirical studies on motivation and LLBs are presented.

2.4 Recent empirical studies on motivation and language learning beliefs

The following two studies that will be discussed briefly support the premise adopted in the current study: motivation should be viewed as an important variable in second language learning, and the language learning beliefs of students can influence the language learning process.

2.4.1 Empirical study on motivation and language learning in China

The particular study to be discussed here was selected for a number of reasons. Firstly, the context in which the study was conducted resembles that of South Africa in that most students in China are learning English as a second or third language. Secondly, it is a large-scale survey with high reliability, involving over 10 000 learners in secondary schools and universities from different geographical regions and teaching contexts (You and Dörnyei 2014:495). Lastly, it is one of the most recent motivation studies by leading experts in language motivation.

China is one of the biggest emerging economies in the world and this has also affected the cultural patterns of the country. Changes in these are evident in the prioritisation of the learning of certain languages such as English, which is often perceived as a language of business, communication, commerce and trade (You and Dörnyei 2014:495-496). By 2005, about 176.7 million of the Chinese population were learning English (You and Dörnyei 2014:495). However, irrespective of this sudden increase in the number of people learning English, studies on language motivation have not really been able to provide a clear picture of “the motivational basis of language learning” in China (You and Dörnyei 2014:495). The aim of the study discussed here was, therefore, “to obtain a systematic and comprehensive overview of the motivational characteristics of learning English in China [by] presenting a balanced overview of the general level of L2 motivation in China through the lens of the L2 Motivational Self System” (You and Dörnyei 2014:495).

Although several findings emerged from this study, the one worth noting and which is relevant to the current study is that “the L2 Motivational Self System appeared to offer a framework that seemed no less relevant and usable in China than in other learning environments in which it has been successfully applied in the past” (You and Dörnyei 2014:516). This finding and similar others justify the need for the reinterpretation of the idea of integrativeness as pointed out earlier in section 2.2.3. The current study will further attempt to shed some light on the usefulness of the L2 Motivational Self System particularly in South Africa and in relation to some concerns expressed by Coetzee-Van Rooy (2006) in section 2.2.3.

2.4.2 Empirical study on language learning beliefs

Boakye's (2007) study was selected mainly because it is similar to a study conducted by Lepota and Weideman in 2002, which had an influence on the current study. The aim of her study was mainly to "present the results of an investigation into students' beliefs, drawing comparisons between a similar study in 2002 in the same institution and another study by Horwitz (1987) in the United States" (Boakye 2007:2). It made use of the same survey questionnaire as Lepota and Weideman's (2002); and first year students who were at risk were identified and used as participants (Boakye 2007:2).

The findings of the study resemble those of Lepota and Weideman (2002): "beliefs of the students can have a negative influence on their learning strategies which, in turn, affect the success or otherwise of the language learning process" (Boakye 2007:1). These findings support the current study's views on LLBs and their potential to affect learning strategies and progress of pre-service Foundation and Intermediate Phase education students in a language course.

2.5 Conclusion

This chapter has analysed and synthesised various views on motivation and LLBs in an attempt to understand their role in the language learning process. The researcher was able to provide a historical framework of both phenomena, and to reconceptualise in particular the variable of motivation for the purposes of operationalising it in the survey questionnaire.

The first part of the discussion focused on motivational theories, namely Gardner's socio-educational model and Dörnyei's L2 motivational self system. The shortfalls and validity concerns of the socio-educational model and its measuring instrument in various learning contexts were discussed. Furthermore, Dörnyei's recent model, the L2 motivational self system, which consists of various inputs from other motivational theories, was also analysed, paying particular attention to the construct of integrativeness.

In the second part of the discussion, the nature and the types of LLBs, as well as the predominant LLBs, were discussed in relation to the objectives of the study. The final part of the literature review dealt briefly with two recent empirical studies on motivation and LLBs that support the approach adopted in the current study.

In the next chapter the specific research design and methodology are outlined.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The aim of this chapter is to provide the blueprint for the study. First, a brief outline of the objectives is presented. Thereafter the decision to use a mixed methods research design is motivated, following which attention is paid to the research population and data collection instruments used. Finally, there is a discussion on the methods of data analysis and ethical considerations concerning the study.

3.2 Research objectives

The primary objective of the study is to determine the language learning beliefs and motivation of Foundation and Intermediate Phase Education students to see if they could serve as predictors of their performance in mastering English. Furthermore, the study attempts to determine whether students' language learning beliefs are aligned with current views on the learning of languages. Lastly, the study aims at determining students' awareness of the role of motivation in learning a language, and the kinds of strategies that can be used to help language learners increase their awareness about language learning beliefs and motivation.

3.3 Research design

In addition to insights gained from the literature study, the empirical part of the study includes quantitative and qualitative data of a primary nature obtained through the

survey questionnaire and administration of the Test of Academic Literacy (TAL) as part of the mixed methods approach. The integration of these two forms of data will assist the researcher to understand better how motivation and language learning beliefs may influence progress in a language course, and will make it more likely for stronger and credible investigation outcomes to be reached (Plano Clark and Ivankova 2016:4,9).

The growth in the acceptance of a mixed methods research approach has contributed to the complexity of the field. Lately, scholars have articulated a further number of reasons to do mixed methods research. With reference to the usual dichotomy of ‘qualitative’ and ‘quantitative’ research, O’Leary (2014:147) observes that investigators tend to use a mixed methods research approach because it can:

- help capitalize on the best of both traditions and overcome many of their shortcomings;
- allow for the use of both inductive and deductive reasoning;
- build a broader picture by adding depth and insights to ‘numbers’ through inclusion of dialogue, narratives and pictures;
- add precision to ‘words’ through inclusion of numbers and statistics (which can make results more generalizable);
- allow research protocols to be developed in stages;
- offer more than one way of looking at a situation
- facilitate capturing varied perspectives;
- allow for triangulation.

In short, a mixed methods approach seeks to exploit the best of both of these alternatives in order to achieve an even richer understanding of the problem under investigation.

A mixed methods approach thus refers to a research design which allows researchers to integrate quantitative and qualitative methods to achieve their research purpose (Plano Clark and Ivankova 2016:107). Three basic types of mixed methods designs can be distinguished: concurrent Quantitative + Qualitative design, sequential Quantitative → Qualitative design and the sequential Qualitative → Quantitative design, as shown in the diagrams below.

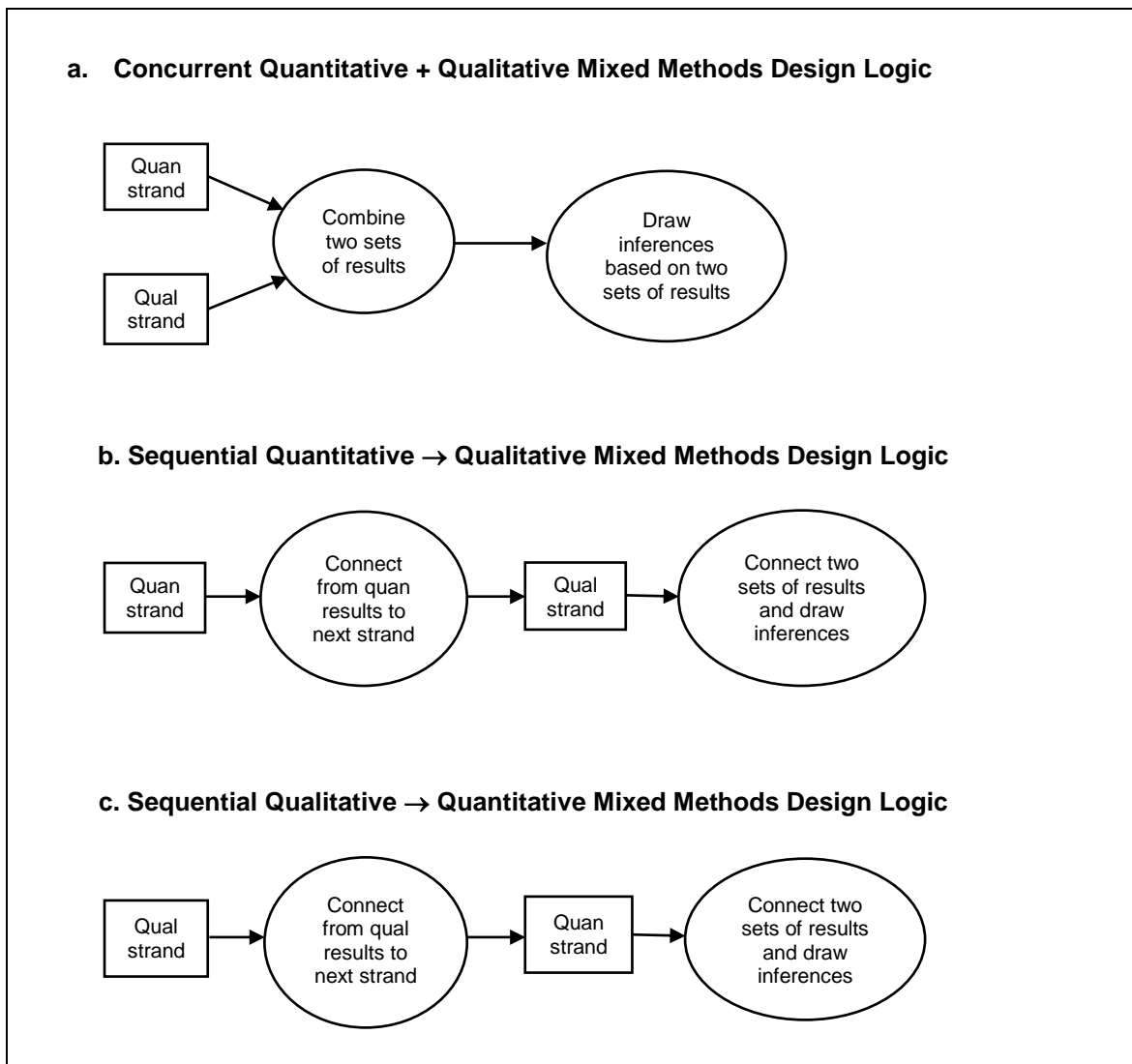


Figure 3.1: Three basic mixed methods design logics (Plano Clark and Ivankova 2016:118)

The current study makes use of a concurrent Quantitative + Qualitative design. In other words, data will be collected concurrently using both quantitative and qualitative methods of data collection. The quantitative part of the study includes the administration of a survey questionnaire and the correlation of responses with test scores, while the qualitative dimension is covered through a number of open-ended questions in the questionnaire.

3.4 Participants

Sampling is the process of selecting elements of a population for inclusion in a research study. Many samples attempt to be representative: that is, the sample distribution and characteristics allow findings to be generalized back to the relevant population. (O’Leary 2014:183)

Non-probability, convenience sampling was used. Dörnyei (2007) defines convenience sampling as a selection of members of a target population to determine whether they fit into the requirements of a study taking into account mainly participants’ willingness to participate. The reason for choosing convenience sampling was the availability of students and also their willingness to take part in the survey. Non-probability sampling is also less complicated, saves time and it is economical, and financially less costly (Welman, Kruger and Mitchell 2005:68).

The primary target population was the Foundation Phase (Grade 1-3) and Intermediate Phase (Grade 4-6) Education students registered at the UFS in 2017 for the compulsory ENGE 1608 language development module on the Bloemfontein

campus. For the piloting of the questionnaire, a group of Foundation Phase (Grade 1-3) and Intermediate Phase (Grade 4-6) Education students completing the language development module in 2016 on the Bloemfontein main campus were used. What made this group of students suitably representative of the research population was the fact that they share a number of commonalities with the students who would be participating in the full study in 2017. These include similar demographics, level of study, choice of course modules, learning environment and the number of students registered just to mention a few variables.

3.5 Methods of data collection

Several methods of data collection were used, including the administration of a survey questionnaire and TAL. Dörnyei and Csizer (2012:75) describe data collection instruments as the key or the backbone of any research study. O’Leary (2014:202) defines surveying as “the process of collecting data through a questionnaire that asks a range of individuals the same questions related to their characteristics, attributes, how they live, or their opinions”. They are a means of tapping into peoples’ thoughts about a particular subject that is being investigated (O’Leary 2014:202). Brown (2001:6) defines questionnaires as any written instruments that present participants with a number of questions or statements which require their written responses or the selection of responses from the options provided for them, i.e. they can be closed-ended or open-ended. Dörnyei and Csizer (2011:75) outline benefits of using surveys, in particular that they can give an indication of students’ behaviour associated with specific language learning

situations. They can also inform us generally about students' attitudes towards the learning of languages, particularly in the case of second language (L2) speakers, how they feel about learning a specific language, their beliefs about language learning, prior language knowledge and their language learning background.

The next section will provide the rationale for developing a survey questionnaire used to investigate language learning beliefs and motivation, and discuss the choice of TAL as a data collection instrument. A questionnaire which aims at producing reliable and valid data entails a rigorous design process which consists of specific steps outlined below.

3.5.1 Design of the survey questionnaire

In the first phase of the study, a survey questionnaire was designed and piloted amongst the 2016 cohort of Education students registered for the B.Ed. qualification in Foundation and Intermediate Phase Education at the Bloemfontein campus of the University of the Free State. The survey was administered to this group of students solely for the purpose of refining the measurement instrument. The refined cross-sectional survey was then administered to the 2017 cohort of Education students towards the end of the first quarter of the academic year.

The first few weeks of classes gave students enough time to get to know their lecturers, their teaching styles, etc., so that they would be able to respond to the survey questions. The questionnaire that was designed for use in this study,

BALLMI-M (Beliefs About Language Learning and Motivation Inventory-Modified), consists of a combination of language learning beliefs (LLBs) and motivation statements adapted from different surveys used previously, and a number of newly-generated statements. These statements are rated on a 5-point Likert scale. Likert scale items enable a researcher to use several items to measure the same construct which can then be interpreted numerically using statistical analysis (Paltridge and Phakiti 2010:28). The use of several items to measure a particular construct also increases the chances of producing reliable and valid data (Paltridge and Phakiti 2010:28).

The idea of designing and using a unique survey instrument different from the ones used by Gardner and Dörnyei was guided by the nature of the study and also the research questions. This necessitated the construction of a questionnaire that would address, concurrently, the language learning beliefs and motivation of students in developing mastery in English. The newly developed questionnaire was largely influenced by the Beliefs About Language Learning Inventory (BALLI) (Horwitz 1987) and the “Ten Commandments for motivating language learners” by Dörnyei and Csizer (1998).

BALLI was used originally by Horwitz (1987) in her study “Surveying student beliefs about language learning”. It was then adapted and refined by Lepota and Weideman (2002) and further amended for the purposes of the current study. The Ten Commandments are motivational macrostrategies that were identified as a result

of an empirical survey aimed at exploring and articulating various motivational strategies used by Hungarian teachers of English (Dörnyei and Csizer 1998:203). These Ten Commandments, which had been found to increase the motivation of language learners, were used to categorise the questionnaire statements into different domains. Below is a table outlining the Ten Commandments.

<ol style="list-style-type: none">1. Set a personal example with your own behaviour.2. Create a pleasant, relaxed atmosphere in the classroom.3. Present the tasks properly.4. Develop a good relationship with the learners.5. Increase the learners' self-confidence to use the target language.6. Make the language classes interesting.7. Promote learner autonomy.8. Personalize the learning process.9. Increase the learners' goal-orientedness.10. Familiarize learners with the target language culture.
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Table 3.1: Ten commandments for motivating language learners (adapted from Dörnyei and Csizer 1998:215)

The Ten Commandments were also used to formulate motivation statements. In an attempt to come up with a data collection instrument that is both valid and reliable, the principles of designing a questionnaire proposed by Dörnyei and Csizer (2012) and discussed below were followed.

3.5.1.1 Selecting suitable survey statements

A number of statements from the questionnaires used previously by Gardner, Dörnyei, and Lepota and Weideman that were deemed fit for the current study were scrutinized, modified and adapted. New and relevant language learning beliefs and

motivation statements were also generated to ensure that there were enough statements per domain. In the end, and as shown in the table below, five domains for motivation statements were established. The first domain consisted of 11 statements, while the second domain had 14 statements, the third domain contained 8 statements, the fourth domain had 10 statements, and there were 9 motivation statements in the fifth domain. In addition to these, 16 language learning beliefs statements taken from BALLI-M questionnaire were featured.

MOTIVATION STATEMENTS
<p>Domain 1: Lecturer-specific motivational components (Dörnyei's set a personal example with your own behaviour; develop a good relationship with the learners)</p> <ol style="list-style-type: none"> 1. My lecturer's passion for English inspires me to learn English (self-generated/Gardner modified) 2. The better the kind of English used by my lecturer, the more motivated I am to learn English. 3. I look forward to going to class because my English lecturer has a dynamic teaching style. (Gardner modified) 4. I am unmotivated to participate in English class activities if my lecturer has not prepared well for the class. 5. My motivation to learn English has nothing to do with my lecturer. 6. When I have a problem understanding something in my English class, I can always ask my lecturer for help. (Gardner modified) 7. I would prefer to have a different English lecturer. (Gardner) 8. I really like my English lecturer. (Gardner) 9. My English lecturer never humiliates me in class. (Gardner modified) 10. My English lecturer makes me feel stupid. 11. My English lecturer makes positive comments when giving feedback.

Domain 2: Learner-specific motivational components (self-confidence/anxiety/self-efficacy)

(Dörnyei's create a pleasant, relaxed atmosphere in the classroom; increase learners' linguistics self-confidence)

1. I am afraid that other students will laugh at me when I speak English. (Dörnyei)
2. My English lecturer helps to put everyone at ease.
3. I find my English classes threatening.
4. There is a relaxed atmosphere in the English class.
5. I enjoy participating in group activities in class.
6. I get nervous when I have to speak in my English class. (Dörnyei)
7. I feel comfortable in my English class. (Dörnyei modified)
8. I am not allowed to make any language errors in my work.
9. My English lecturer encourages me to express myself in English.
10. If I make more effort, I am sure I will be able to master English. (Dörnyei)
11. I am sure I have a good ability to learn English. (Dörnyei)
12. Practising speaking English with my friends gives me confidence to express myself in English.
13. I am confident I will be able to use English very well if I continue studying English. (Balli-M modified)
14. I do not feel confident when asked to speak in my English class. (Gardner modified)

Domain 3: Learner-specific motivational components (need for achievement/effort)

(Dörnyei's promote learner autonomy)

1. The English lecturer is the person who is most responsible for the effectiveness of the English course.
2. My English lecturer always welcomes inputs from learners.
3. My English lecturer encourages me to think independently.
4. I make a point of trying to understand new English words I come across every day. (Gardner modified)
5. I love to try my best when doing an English task. (Dörnyei modified)
6. I do only the minimum English work that I have to. (Dörnyei modified)
7. I tend to give up easily when I don't understand the work. (Gardner modified)
8. I really work hard to learn English. (Gardner)

Domain 4: Course-specific motivational components

(Dörnyei's task presentation; personalizing the learning process)

1. The clear learning outcomes keep me motivated.
2. English class activities accommodate a wide range of individuals' abilities.
3. The teaching pace is too fast.
4. I enjoy the course content.
5. I find the content of the course not relevant to my needs.
6. Practical tasks make learning enjoyable.
7. The course design motivates me to learn English
8. I find the skills developed in the course relevant to my needs.
9. I find that I can relate to the topics discussed in class.
10. The course help me to learn other important things not related to language skills.

Domain 5: Integrative and instrumental motivational components

(Dörnyei's goal-orientedness)

1. Studying English is important because it will help me to understand English people better. (Gardner modified)
2. It is important for me to know English in order to be more like an English person. (Dörnyei modified)
3. It is important for me to know English because one day I want to become part of an English community.
4. I want to learn English so well that it will feel natural to me when I use English. (Gardner modified)
5. Studying English is important to me because I think it will someday be useful in getting a good job. (Dörnyei)
6. If I am fluent in English people will respect me more. (Dörnyei modified)
7. I would like to learn English so that I can study successfully (BALLI-M)
8. I have to learn English because without passing the English course I cannot get my degree. (Dörnyei)
9. I do not need to be good in English to get a job one day.

LANGUAGE LEARNING BELIEFS STATEMENTS (Taken from BALLI-M)

1. The most important part of learning another language is learning its vocabulary
2. I believe that some people have a special ability for learning English.
3. You shouldn't say anything in English until you can say it correctly.
4. The most important part of learning another language is learning its grammar.
5. It is easier for children than for adults to learn English as another language.
6. Guessing the meaning of the word from context helps to improve one's vocabulary.
7. Learning English is different from learning other academic subjects.
8. The most important part of learning English is learning how to translate from my home language into English.
9. Women are better than men at learning languages.
10. If students of English are allowed to make mistakes in spoken English, it will be difficult for them to speak correctly later on.
11. I find it important to create opportunities for myself to use English outside of class.
12. The most important part of learning English is to become fluent in communicating.
13. English is one of the most difficult languages to learn for someone who does not have it as a first language.
14. I like to rehearse in my mind what I want to say in English before I say it.
15. I like to have the lecturer correct every error I make, so that I don't learn bad habits.
16. Memorising the rules will help me to improve my English.

Table 3.2: Learning situation questionnaire statements based on Dörnyei's Ten Commandments for motivating language learners, Gardner's motivation battery and Horwitz's BALLI as modified by Lepota, Weideman and Mhlongo

The researcher's decision to include as many statements as possible was to ensure that the questionnaire would still contain sufficient statements to address the objectives of the study after the completion of an item analysis and also to attain high reliability of the data produced (Paltridge and Phakiti 2010:28).

The questionnaire for the current study makes use of quantitative closed-ended questions as well as qualitative open-ended questions. In the quantitative part of the questionnaire, "respondents were asked to choose from a range of predetermined responses" (O'Leary 2014:213). The advantage associated with these types of items is that they are easy to code and to analyse statistically (O'Leary 2014:213). Although closed-ended questions can produce valid and reliable data, Gilbert and Stoneman (2016:248) state that to ensure the validity and reliability of the items "the response categories need to include every possible potential response". This resulted in 5 response options, which are: strongly disagree, disagree, neutral, agree, and strongly agree. The qualitative part of the questionnaire consists of open-ended questions. Open-ended questions give students an opportunity "to provide a written response that is not limited by closed-response categories" (Gilbert and Stoneman 2016:247). These questions will help fill the gaps or provide additional information that may not have been covered by the closed-ended questions.

The pilot questionnaire consisted of a pool of 73 items including biographical information. Statements on language learning beliefs were taken from the survey BALLI-M used by Lepota and Weideman (2002) in their pilot study "Our ways of

learning language”. Some motivation statements were borrowed from Gardner’s (2004) Attitude/Motivation Test Battery (AMTB). Others were taken from various versions of Dörnyei’s previous questionnaires (Clement, Dörnyei and Noels 1994, Dörnyei 2008). The decision to use statements adapted from earlier instruments is they have “been through extensive piloting and therefore have a certain ‘track record’” (Dörnyei and Csizer 2011:77). That is, they are likely to produce valid and reliable data. In line with the guidelines proposed by Dörnyei and Csizer (2012:78) for writing good items, the questionnaire items were kept short and simple, and natural language was used. Ambiguous or loaded words and sentences were avoided, negative constructions were kept to a minimum, and double-barrel questions were also avoided.

As far as the design of the questionnaire is concerned, Dörnyei and Csizer (2012:78) state that designing an attractive and professional questionnaire plays an important role in motivating participants “to produce reliable and valid data”. A failure to do this can lead to at least two complications: one is that participants may not respond to all the questions, and another that potential mistakes can arise as a result of employing a cramped, cluttered and messy survey instrument (O’Leary 2014:215).

Below is the layout that was used for BALLMI-M:

To what extent do you agree or disagree with the following statements?		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.		A	B	C	D	E
2.		A	B	C	D	E
3.		A	B	C	D	E
4.		A	B	C	D	E
5.		A	B	C	D	E

Table 3.3: Survey questionnaire layout

3.5.1.2 Piloting and refinement of the questionnaire

3.5.1.2.1 Piloting of the questionnaire

Piloting refers to “administering the instrument to a sample of participants who are similar to the target group of people for whom it has been designed” (Dörnyei and Csizer 2012:79). It is important to note that, even though a number of previously validated statements were borrowed, they still need to be piloted. There are several important reasons associated with the piloting of a questionnaire. Piloting helps a researcher to (a) refine “the final version of the questionnaire [and] to eliminate ambiguous, too difficult/easy, or irrelevant items; (b) to ensure that the instructions and the wording of the items are clear; (c) to ‘finalize the layout’, (d) to ensure that there are no glitches with the administration procedures; (e) to ‘dry run the analysis in order to see whether the expected findings will potentially emerge from the data’”; (f) to ensure that the questionnaire will be completed within the desired or set time; and (g) to validate the readiness of the questionnaire (Dörnyei and Csizer 2011:79).

The pilot study was conducted in September 2016 and was aimed at determining whether the questionnaire items really measured what they are intended to measure, that is, “the underlying construct or the scale’s internal consistency” (Pallant 2010:97). To do this, a reliability analysis was performed. The demographic items were, however, not included for this purpose. Moreover, twenty-five of the completed questionnaires were discarded as they were too incomplete. In the first reliability analysis all the language learning beliefs as well as motivation items were included. The reliability indexes were then calculated for the motivation scale and

language learning beliefs scale separately. The results of the analysis revealed a Cronbach reliability index of 0.872 for the combined scale.

3.5.1.2.2 The refinement of the questionnaire

Following the thorough analysis of the pilot results, the statements that did not correlate well with the rest of the scale were removed and some items were reworded and reclassified as LLBs, leaving 36 motivation statements and 18 LLBs for the refined questionnaire. The reliability of the refined instrument would be determined again after administering the survey questionnaire to the actual cohort of Education students who would be participating in the full study.

In the table below, the amendments to the initial questionnaire' statements and the reasons which led to these changes are outlined.

<p>Items which were removed from motivation scale owing to low correlation with scale as a whole, but retained in questionnaire as indication of language learning beliefs</p> <ul style="list-style-type: none">• I believe that some people have a special ability for learning English.• It is easier for children than for adults to learn English as another language.• English is one of the most difficult languages to learn for someone who does not have it as a first language.
<p>Items which were not included in motivation scale as they do not measure motivation but language learning beliefs</p> <ul style="list-style-type: none">• The most important part of learning another language is learning its vocabulary.• You shouldn't say anything in English until you can say it correctly.• The most important part of learning another language is learning its grammar.• Guessing the meaning of the word from context helps to improve one's vocabulary.• Learning English is different from learning other academic subjects.• The most important part of learning English is learning how to translate from my home language into English.

<ul style="list-style-type: none"> • Women are better than men at learning languages. • The most important part of learning English is to become fluent in communicating. • I like to rehearse in my mind what I want to say in English before I say it. • I like to have the lecturer correct every error I make, so that I don't learn bad habits.
<p>Items which were rephrased so that “strongly agree” corresponds with high motivation</p> <ul style="list-style-type: none"> • I am the person who is most responsible for my progress in this English course. (Original: The English lecturer is the person who is most responsible for the effectiveness of the English course.)
<p>Items which were rephrased to supplement questions on language learning beliefs</p> <ul style="list-style-type: none"> • I need to spend time memorizing the meanings of new words. • I should rely on my lecturer to explain the work to me. • Regularly repeating the work will help me to improve my English.
<p>Items which were removed from motivation scale and questionnaire as they did not perform well in the pilot</p> <ul style="list-style-type: none"> • I am afraid that other students will laugh at me when I speak English. • I find my English classes threatening. • The teaching pace is too fast. • I am unmotivated to participate in English class activities if my lecturer has not prepared well for the class. • I find the content of the course not relevant to my needs. • I do only the minimum English work that I have to. • I would prefer to have a different English lecturer. • I am not allowed to make any language errors in my work. • I tend to give up easily when I don't understand the work. • My English lecturer never humiliates me in class. • I do not need to be good in English to get a job one day. • My English lecturer makes me feel stupid. • I do not feel confident when asked to speak in my English class.

Table 3.4: The refinement of the pilot questionnaire statements

These amendments are reflected in the final survey questionnaire which is attached as Annexure A. The results analysis reports depicting the reliability of the unrefined

motivation scales, LLBs scales and BALLMI-M generated by SPSS are attached as Annexure B, C and D.

3.5.2 Testing the academic literacy levels of students

As mentioned, the TAL, piloted in a different study as the Test of Advanced Language Ability (TALA), will be used to measure students' language proficiency levels. TAL is a language proficiency testing instrument designed by the Inter-institutional Centre for Language Development and Assessment (ICELDA 2017) to assess academic literacy and English proficiency of Grade 12 learners. It came about as a result of numerous efforts by the Council for Quality Assurance in General and Further Education, Umalusi, to ensure that all Home Language examination papers are of a comparable standard and that they measure the same constructs (Weideman, Du Plessis and Steyn 2017:1). In line with the national curriculum specifications, the test consists of the following components and specifications:

Subtest and task type	Construct component(s) measured	Marks
Scrambled text	Cohesion and grammar; understanding relations between different parts of a text; sequence and order	5
Vocabulary knowledge	Vocabulary comprehension	10
Interpreting graphs and visual information	Understanding text type (genre); interpreting graphic and visual information; making distinctions; basic numerical computation	8
Text comprehension	Understanding metaphor and idiom; distinguishing between essential and non-essential information; classifying, categorising and handling data that make comparisons; extrapolating; synthesizing	25
Grammar and text relations	Vocabulary comprehension; textuality (cohesion and grammar); understanding text type (genre); communicative function	12

Table 3.5: TAL subtests, components and allocation of marks (Weideman, Du Plessis and Steyn 2017:15)

Although the test was initially designed in English, it has also been translated into an Afrikaans version referred to as the Toets van Gevorderde Taalvermoë (TOGTAV version 1) (Weideman, Du Plessis and Steyn 2017:15). Both the English and Afrikaans versions have proven to be highly reliable (Weideman, Du Plessis and Steyn 2017:15). Reliability is one of the essential elements of responsible language testing as it has the potential to enhance the credibility of the results obtained (Du Plessis 2014:13). The table below provides a summary of the reliability of different measures of TAL in terms of an alpha value (α) expressed on a scale of zero to one (Van Dyk 2005:45): “The closer the value is to +1.0, the more reliable the test is” (Van Dyk 2005:45).

Version of test	Reliability (alpha)
TALA first pilot (187 items; n = 1244)	0.958
TOGTAV 1 first pilot (196 items; n = 368)	0.955
TOGTAV 2 first pilot (187 items; n = 357)	0.944
TALA (reduced 60-item version; n = 1244)	0.900
TOGTAV 2 (reduced 60-item version; n = 357)	0.831

Table 3.6: Reliability indices (Cronbach alpha) of various TALA/TOGTAV pilots (Weideman, Du Plessis and Steyn 2017:16)

Students were asked to complete the refined TALA test – referred to as TAL in the current study – on two occasions: first, at the beginning of the course and then again towards the completion of the course. In that way, we will be able to compare students’ levels of motivation and any changes in their levels of language proficiency. Besides the two instruments mentioned above, other assessments tools

such as course test marks and overall performance of students will also be taken into account.

3.6 Data analysis

The data obtained from the investigation will be analysed in two ways. First, and with the help of Professor Schall from the Statistical Consultation Unit at the University of the Free State, the survey questionnaire will be analysed using SAS and SPSS statistics software.

IBM® SPSS® statistics software (SPSS) is a software package that performs a wide variety of statistical tests. It can be used to produce graphs and perform statistical analyses ranging from calculating simple percentages to very sophisticated analysis. (Jensen and Laurie 2016:301)

According to Dörnyei and Csizer (2012) there are three steps involved in the analysis of data. The first step is the preparation of the raw data for processing. In other words, this involves converting the respondents' responses from the questionnaire into manageable data "appropriate for statistical analysis" (Dörnyei and Csizer 2012:83). It includes coding questionnaire data into numbers, inputting data into the SPSS software program, data cleaning to ensure that any mistakes are corrected before the analysis of data begins, and, if necessary, data manipulation which involves fixing and making changes to the data before the analyses so as to ensure the statistical procedure can run smoothly (Dörnyei and Csizer 2012:84).

The second step involves reducing the number of variables in the questionnaires. This involves merging items into broader and more manageable sections (Dörnyei and Csizer 2012:84). This is usually achieved in two ways. One is by performing a factor analysis which reduces “the number of variables into small underlying dimensions referred to as factors or components” (Dörnyei and Csizer 2012:84). The other is reliability analysis. Reliability means “a quality criterion that refers to the extent to which the measures [one] uses, and the data [one] collects, provide consistent results” (Jensen and Laurie 2016:143). Reliability analysis enables one to perform an internal consistency check of the multi-item scales which results in reliability coefficients such as that normally referred to as “Cronbach Alpha”. Furthermore, reliability analysis is able to give hints on whether the exclusion of some item(s) would improve “the scale’s internal reliability” (Dörnyei and Csizer 2012:84). The Cronbach Alpha coefficient ranges between 0 and +1. Coefficients exceeding 0.7 upon analysis means that there is a higher (and therefore good) measure of consistency, whereas ones contributing to an index of below 0.6 indicate that items may have to be excluded (Dörnyei and Csizer 2012:84).

The final step is analysing the data through statistical procedures that yield both descriptive statistics and inferential statistics. Descriptive statistics rely much on the analysis of one variable at a time and “present quantitative descriptions in a manageable and intelligible form” (O’Leary 2014:281). Inferential statistics on the other hand “draw conclusions that extend beyond [one’s] immediate data or sample” (O’Leary 2014:285). Through inferential statistics one is able to determine whether

the obtained results can be generalised to a larger population; if they are, “we can say that [one’s] results are statistically ‘significant’” and more general conclusions can be drawn from the study (Dörnyei and Csizer 2012:85).

In addition to survey questionnaire analysis, multiple correlation analysis will also be done. Mackey and Gass (2005:284), as well as Welman, Kruger and Mitchell (2005:234) define correlation analysis as an attempt “to determine the relationship between or among variables”. For the current study, an attempt will be made to investigate how students’ language learning beliefs, their motivation to master English, and their overall course performance are related, by using multiple correlation analysis. The final outcome of the analysis will determine whether there is a “high coefficient [among variables], that is, a strong relationship, a coefficient of 0 which suggests no relationship among the variables or a negative correlation coefficient which suggests an inverse relationship” (Dörnyei 2007:223). In conclusion, the data analysis process can be summarised by the diagram on the next page.

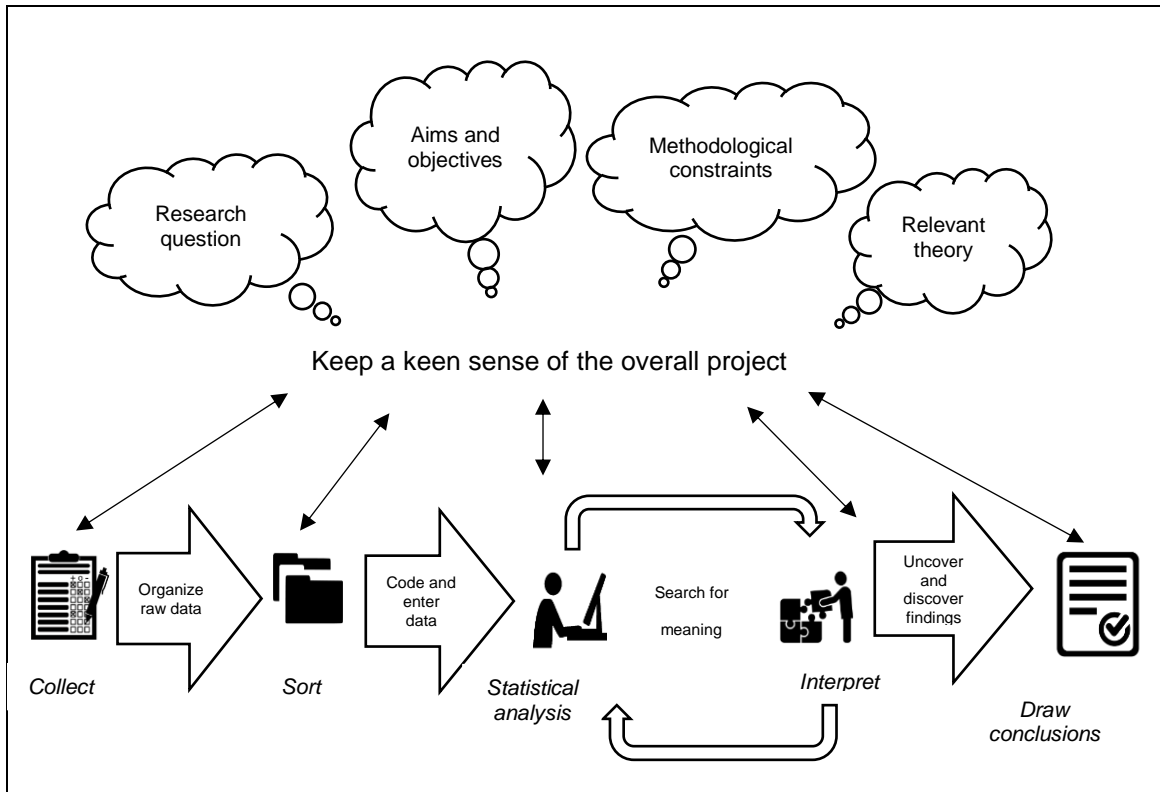


Figure 3.2: The process of reflective analysis (O’Leary 2014:275)

O’Leary (2014:275) states that the process of data analysis is much more than inputting numbers into a computer. It is a complex and comprehensive process that requires one to stay very close to data - from the start of data collection “right through to the drawing of final conclusions”. It is a process that requires one to follow all the steps discussed above while keeping in mind the aims and objectives of the study, the research question, the theoretical underpinnings of the research, and the methodological constraints (O’Leary 2014:275) that are encountered.

3.7 Ethical considerations

As part of the university’s ethical standards for research projects, I am aware that I need to adhere to all ethical considerations such as protecting participants’ identities

and interests, treating confidentially information they have furnished me and reporting the results accurately (De Reuck 2014:47). Students were asked to complete an informed consent form which accompanied the survey questionnaire. The necessary procedures for obtaining ethical clearance were followed and the ethical clearance number, UFS-HSD2016/1564, was issued by the Ethics Board of the University of the Free State' Faculty of Education chaired by Dr. M.M. Nkoane.

In the next chapter, the results of applying the many and diverse methodologies outlined in this chapter will be presented.

CHAPTER 4

RESULTS OF THE ACADEMIC LITERACY TESTING AND FINDINGS OF THE SURVEY

4.1 Introduction

This chapter analyses and interprets the results of Test of Academic Literacy (TAL) pre- and post-test, and also those of the survey questionnaire. The previous chapter anticipated that data will be analysed descriptively by scrutinising the results obtained through the administration of TAL and survey questionnaire at different stages, separately. The second phase of the analysis will involve inferential statistical analyses which will entail correlation of all the data collected at different stages. From these analyses conclusions may be drawn, while maintaining a keen awareness of the overall project, that is, to augment, as one proceeds, the descriptive and inferential data with reflective analyses. These several methods also enable a researcher to see which test items are performing well and which are not, that is, their productivity (Du Plessis 2012:72). For analyses of the TAL, Iteman 4.3 classical item and test analysis software was mainly used. Iteman may be described as a program “designed to provide detailed item and test analyses reports using classical test theory (CTT)”, and to do so for the purpose of evaluating “the quality of test items by examining their psychometric characteristics” (Guyer and Thompson 2013:1).

In the following section, the brief analyses and interpretation of the TAL pre-test results are presented.

4.2 TAL

As discussed in section 3.5.2, TAL was originally developed for use at Grade 12 level as part of an Umalusi project into the standard of the Home Languages, and was referred to as TALA (Test of Advanced Language Ability). The decision to rename it TAL for use in the current study was based on the consideration that it tests more than language ability. For example, it has a section on graphic and numerical ability which is a component of academic literacy. The preference of TAL over Test of Academic Literacy Levels (TALL) which has already been validated in full, was based on the argument that TAL would be more suitable because Education students are predominantly second (and even third) language speakers of English, and as a result TALL may have been too difficult for them. A further reason for using TAL relates to the fact that there is a strong emphasis on vocabulary and the ability to understand different text types. In this sense, the constructs of TAL are closely aligned with the objectives and content of the ENGE 1608 course.

4.2.1 TAL pre-test results

The TAL pre-test was administered at the beginning of the academic year 2017. The aim was to gather data relating to students' language proficiency and literacy levels. This data will be correlated with the data gathered through the final test at the end of the course, ENGE 1608, to see if their proficiency levels had improved. Further correlations, with other data as set out in Chapter 5, will also be done. According to the outcomes articulated for the language course:

after participation in lectures and class activities and the successful completion of [ENGE 1608] course, students should be able to: analyse key grammatical and lexical features of texts; use English to express opinions, paraphrase, compare academic texts and summarise information; display sufficient language proficiency to understand and produce spoken and written information in different formats and contexts; and assess their own progress and take the necessary steps to ensure improvement within the structured academic environment of the initial years of study. (UFS 2017)

In the following section, the details of the specifications of the test, summary statistics and the reliability of the pre-test are discussed. For a complete report of TAL pre-test results, see Annexure E, attached.

4.2.1.1 Population and specifications

For the current study, 422 students at the Bloemfontein campus took the test. The test consisted of 60 multiple choice items which were divided into five domains, namely Scrambled text (5 marks), Vocabulary knowledge (10 marks), Interpreting graphs and visual information (8 marks), Text comprehension (25 marks) and Grammar and text relations (12 marks).

4.2.1.2 Summary statistics

The summary statistics shown in Table 4.2 contain essential information about the quality and reliability of a test. These statistics also enable a researcher to make conclusions about the overall performance of students in each test domain by, for example, comparing the minimum scores with the maximum scores, etc. However,

before discussing these in depth, the reliability of TAL is discussed first in the section to follow.

Reliability refers to the consistency of a test, i.e. it is a measure indicating to the test designer or test user whether a test can produce consistent results on several occasions. “The more consistent the results given by repeated measurements, the higher the reliability of the measurement procedure” (Carmines and Zeller 1979:12). Four types of methods can be used to determine the reliability of a particular test, namely the test-retest method, the alternative-form method, the split-halves method, and the internal consistency method (Carmines and Zeller 1979:37). For the current study, the split-halves method was used. This means that “the total set of items [was] divided into halves and the scores on the halves [were] correlated to obtain an estimate of reliability” (Carmines and Zeller 1979:41). To give an indication of consistency, an index of reliability, the most well-known of which is Cronbach’s alpha, has been calculated. These kinds of indices conventionally measure and express reliability as a number between 0 (zero, for low) and 1, for high reliability. The closer to 1 the reliability of a test is, the more consistently it measures. In this administration, TAL has proven to be very reliable, with a Cronbach alpha of 0.829.²

² Further details concerning the reliability of TAL are discussed in Myburgh’s (2015) study.

Score	Alpha	SEM	Split-Half (Random)	Split-Half (First-Last)	Split-Half (Odd-Even)	S-B Random	S-B First- Last	S-B Odd- Even
Scored items	0.829	3.410	0.627	0.639	0.707	0.771	0.780	0.828
Scrambled	0.569	0.932	0.186	0.263	0.445	0.314	0.416	0.616
Vocabulary	0.487	1.336	0.342	0.286	0.331	0.510	0.445	0.497
Graphs	0.264	1.267	0.096	0.177	0.126	0.175	0.300	0.224
Text comprehension	0.730	2.189	0.573	0.559	0.533	0.728	0.718	0.695
Grammar and text relations	0.709	1.449	0.602	0.383	0.669	0.751	0.553	0.802

Table 4.1: Summary of Cronbach alpha values for TAL pre-test

As mentioned previously, other indicative measures of the reliability and quality of a test include the P-values (also known as the facility values), as well the mean Rpbis or discrimination values, that will be discussed briefly in the next section.

In terms of the mean P-values (facility values), which indicate the percentage of students who answered a particular item correctly (Thompson 2017:2), and the item(s) that students or test-takers experienced as difficult (Faculty Innovation Center 2017), students seemed to battle most with the sections on graphs and numerical literacy and grammar and text relations, as these had the lowest mean facility values. As illustrated in the table on the next page, the average for the grammar and text relations was 4.2 out of 12, which is around 35%. The questions on graphs, which consisted of 8 items, had an average of 2.5, which is roughly 31%.

Score	Items	Mean	SD	Min Score	Max Score	Mean P	Mean Rpbis
All items	60	25.562	8.236	7	57	0.426	0.247
Scored Items	60	25.562	8.236	7	57	0.426	0.247
Scrambled	5	2.168	1.418	0	5	0.434	0.242
Vocabulary	10	5.775	1.865	1	10	0.577	0.199
Graphs	8	2.540	1.477	0	7	0.318	0.159
Text comprehension	25	10.877	4.214	1	24	0.435	0.273
Grammar and text relations	12	4.201	2.689	0	12	0.350	0.292

Table 4.2: Summary statistics of the TAL pre-test according to content domain

The mean Rpbis discrimination values which indicate “how well a test item can distinguish between strong and weak test takers” (Du Plessis 2012:81) presented in Table 4.2, show that each of the subtests had an average above 0.15, the lower limit for acceptably discriminating components. Thus on the whole the subtests discriminated well between students of differing ability, which is an indication of the quality of the test.

4.2.2 TAL post-test results

The TAL post-test was carried out towards the end of the academic year 2017, in October. As mentioned in section 4.2.1, this test was aimed at assessing the improvement, if any, of the students’ language proficiency and literacy levels by correlating the pre-test and post-test scores. The discussion of the correlation of these tests’ scores, and other students’ assessments’ scores will, however, be discussed in detail in chapter 5. This section is dedicated mainly to discussing the consistency of TAL to produce similar results (reliability), and the results of the t-test which enable

a researcher to assess the impact of the course intervention or the improvement in the test scores prior to and after the intervention.

4.2.2.1 Summary statistics

The increase, as shown in the table below, of the mean Rpbis discrimination values from 0.247 to 0.27 further indicates that TAL is a highly reliable test of language ability. It is also an indication that TAL is able to discriminate well between students who are performing poorly and exceptionally in the ENGE 1608 course.

Score	Items	Mean	SD	Min Score	Max Score	Mean P	Mean Rpbis
All items	60	28.50	8.71	6	53	0.47	0.27
Scored Items	60	28.50	8.71	6	53	0.47	0.27
Scrambled text	5	2.50	1.55	0	5	0.50	0.24
Vocabulary	10	6.20	2.03	0	10	0.62	0.25
Graphs & visual info	8	2.79	1.64	0	8	0.35	0.21
Text comprehension	25	11.77	4.41	0	24	0.47	0.29
Grammar and text relations	12	5.23	2.62	0	12	0.44	0.28

Table 4.3: Iteman summary statistics of the TAL post-test according to content domain

The table on the next page also shows an increase of the Cronbach alpha, from 0.829 to 0.85, which again demonstrates the quality of the test and its reliability as an instrument suitable for measuring and predicting language proficiency and academic literacy³ irrespective of the racial diversity of the studied group.

³ The complete Iteman report of the TAL post-test is attached as Annexure F.

Score	Alpha	SEM	Split-Half (Random)	Split-Half (First-Last)	Split-Half (Odd-Even)	S-B Random	S-B First- Last	S-B Odd- Even
Scored items	0.85	3.39	0.74	0.61	0.75	0.85	0.76	0.86
Scrambled text	0.69	0.86	0.56	0.32	0.61	0.72	0.48	0.76
Vocabulary	0.59	1.30	0.43	0.40	0.41	0.60	0.57	0.58
Graphs & visual info	0.41	1.26	0.23	0.21	0.23	0.38	0.34	0.37
Text comprehension	0.76	2.17	0.62	0.64	0.60	0.77	0.78	0.75
Grammar and text relations	0.68	1.48	0.51	0.37	0.69	0.68	0.54	0.81

Table 4.4: Summary of Cronbach alpha values for TAL post-test

To verify further the reliability of the test, the TiaPlus software which is “a package for Test and Item Analysis (TIA for short)” (Cito 2013), was also used. The Cronbach alpha remained unchanged at 0.85, as shown in the table below, again indicating the reliability of TAL to produce consistent results on different occasions.

```

-----
SubGroup number      : 0                SubTest number      : 0
Number of persons in test : 414          Number of selected items : 60
Minimum test score    : 0                Maximum test score   : 60
Average test score   : 28.50         Standard deviation    : 8.70
Average P-value      : 47.49         Std. Error of Measurement : 2.45
Average Rit          : 0.32
Coefficient Alpha     : 0.85
GLB                  : 0.94
Items used in GLB proc : 60
Cut-off score        : 19.5
SE Coeff. Alpha      : 0.01
Asymptotic GLB coef : 0.92
Percentage failing    : 14.98

Misclassifications:
      Alpha based                                GLB based
-----
-Rxx' case Percentage : 10.3          Percentage          : 7.4
      Number           : 43                Number              : 31
-Rxt case  Percentage : 7.4            Percentage          : 5.3
      Number           : 31                Number              : 22
-----
90% Confidence limits for Coefficient Alpha: (0.83 =< 0.85 =< 0.86)
-----
Estimated Coefficient Alpha if this test had a standard
norm length of 40 items: 0.79 (Spearman-Brown)
-----

```

Table 4.5: TiaPlus test specifications and summary of Cronbach alpha values for TAL post-test

In conclusion, the t-test results of the pre- and the post-test should be considered. A paired samples t-test was used to compare the mean scores obtained by the ENGE 1608 students on two separate occasions, i.e. before and after the literacy intervention. In this case, the comparison yielded two important findings. Firstly, that there was a significant difference in the scores before and after the intervention: $t = -8.922$, $p < .0005$ (two-tailed). As indicated in table 4.6 below, on average, the post-test scores ($M = 28.736$, $SD = 8.620$) were 3 points higher than the pre-test scores ($M = 25.455$, $SD = 8.459$). However, we cannot conclude that the language course caused this improvement in scores. Many other factors may well have had an influence. At the same time, the significance is a first potential indication that the intervention may be related to the improvement.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	25.4553	235	8.45912	.55181
	Post-test	28.7362	235	8.62010	.56231

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test – Post-test	-3.28085	5.63697	.36772	-4.00531	-2.55639	-8.922	234	.000

Table 4.6: Paired samples test of TAL pre- and post-test

In the following section, the results and analysis of the BALLMI-M are presented.

4.3 Survey on motivation and language learning beliefs (BALLMI-M)

This section presents the results of the survey questionnaire administered at the end of the first term in 2017. The final survey questionnaire consisted of 36 motivation statements and 18 language learning beliefs (LLBs), as well as two qualitative open ended questions. The qualitative part of the survey was meant to identify other LLBs and motivational aspects that might not have been identified by the closed-ended questions. The reliability of the refined questionnaire is first provided, before turning to a series of descriptive statistics calculated on the basis of survey responses.

4.3.1 The reliability of the BALLMI-M questionnaire

The administration of the BALLMI-M survey amongst the 2017 cohort of Foundation and Intermediate Phase Education students showed a significant improvement with the Cronbach reliability index moving from 0.872 to 0.93 for the motivation scale, which is an indication of a “very good internal consistency reliability” (Pallant 2010:100). Although the LLB scale had a lower reliability of 0.699, this is still acceptable for a scale with few items. Below are tables showing the reliability analysis of the refined motivation for language learning scale used in BALLMI-M in the March 2017 study.

Case Processing Summary			
		N	%
Cases	Valid	242	88.3
	Excluded ^a	32	11.7
	Total	274	100.0

a. Listwise deletion based on all variables in the procedure.

Table 4.7: Case processing summary BALLMI-M motivation scale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.927	.932	36

Table 4.8: Reliability statistics BALLMI-M motivation scale

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.277	-.115	.649	.764	-5.618	.016	36

Table 4.9: Summary item statistics BALLMI-M motivation scale

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
139.35	336.088	18.333	36

Table 4.10: Scale statistics BALLMI-M motivation scale

Item-Total Statistics					
Abbreviated statements	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S8 Lecturer's passion for English inspires	135.37	312.482	.594	.618	.924
S10 Clear learning outcomes motivate	135.49	318.351	.524	.441	.925
S12 Studying important to understand	135.42	323.713	.285	.361	.928
S13 The better the lecturer's English	135.38	313.581	.574	.571	.925
S14 Lecturer puts everyone at ease	135.61	313.351	.584	.490	.924
S16 Lecturer welcomes input from learners	135.08	321.636	.476	.451	.926
S17 Class activities accommodate	135.36	321.682	.469	.428	.926
S18 Important to be more like the English	136.75	324.030	.240	.386	.929

S20 Look forward to class	135.71	311.292	.621	.676	.924
S21 Lecturer encourages independent think.	135.50	315.031	.626	.555	.924
S22 Important to know English	136.21	318.870	.348	.348	.928
S24 Relaxed atmosphere in the class	135.71	318.640	.469	.483	.926
S25 Try to understand new words every day	135.36	325.251	.333	.304	.927
S26 Enjoy course content	135.62	310.883	.697	.663	.923
S28 Learn English so that it feels natural	135.07	318.842	.477	.391	.926
S29 Enjoy participating in class activities	136.20	320.054	.327	.343	.928
S30 Try best when doing English task	135.00	319.784	.583	.531	.925
S32 Learning English to get a good job	134.84	323.464	.481	.438	.926
S33 Can always ask lecturer for help	135.14	319.311	.488	.494	.926
S34 Feel comfortable in English class	135.31	314.563	.591	.616	.924
S36 Practical tasks make learning enjoyable	135.32	323.091	.393	.337	.926
S37 If fluent in English more respect	136.59	325.887	.196	.224	.930
S38 If continue studying English confident	135.11	316.348	.618	.560	.924
S40 Creating opportunities outside class	135.35	316.793	.566	.441	.925
S41 Course design motivates learning	135.77	311.556	.695	.637	.923
S43 English necessary to study successfully	135.21	317.476	.554	.507	.925
S44 Lecturer encourages expressing	135.60	315.711	.581	.489	.925
S46 Like lecturer a lot	135.29	315.163	.564	.496	.925
S47 If more effort made, English mastered	134.90	319.799	.590	.510	.925
S49 Work really hard to learn English	135.59	315.853	.600	.537	.924
S50 Have a good ability to learn English	135.07	323.564	.437	.407	.926
S52 Skills developed in course are relevant	135.64	317.676	.575	.484	.925
S53 Have to pass English to get degree	135.36	323.700	.325	.274	.927
S56 Can relate to topics discussed in class	135.53	318.034	.611	.567	.925
S58 Course helps learn other things	135.64	316.349	.549	.494	.925
S59 Lecturer makes positive comments	135.22	318.222	.600	.521	.925

Table 4.11: Item-total statistics BALLMI-M motivation scale

The reliability of the LLBs scale used in BALLMI-M in the March 2017 study, which was also calculated separately, is outlined in the tables below.

Case Processing Summary			
		N	%
Cases	Valid	242	88.3
	Excluded ^a	32	11.7
	Total	274	100.0

a. Listwise deletion based on all variables in the procedure.

Table 4.12: Case processing summary BALLMI-M LLBs scale

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.699	.710	18

Table 4.13: Reliability statistics BALLMI-M LLBs scale

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum/Minimum	Variance	N of Items
Inter-Item Correlations	.120	-.117	.431	.548	-3.691	.010	18

Table 4.14: Summary item statistics BALLMI-M LLBs scale

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
63.19	55.679	7.462	18

Table 4.15: Scale statistics BALLMI-M LLBs scale

Item-Total Statistics					
Abbreviated statement	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
S7 Some have special ability to learn	59.60	50.947	.237	.122	.692
S9 I am most responsible for learning	58.83	53.577	.122	.123	.701
S11 Vocabulary most important part	58.99	50.871	.332	.246	.683
S15 Only speak if correct	61.31	52.313	.160	.161	.700
S19 Grammar most important part	59.30	50.127	.354	.249	.680
S23 Children learn English easier	59.48	50.889	.220	.074	.694
S27 Spend time memorizing meanings	59.74	49.206	.415	.241	.674
S31 Guessing meaning of words	59.56	50.081	.246	.111	.692
S35 Learning English is different	59.55	51.045	.237	.099	.692
S39 Translating from HL to English	59.47	49.520	.354	.228	.680
S42 Women are better	61.14	51.842	.171	.160	.699
S45 Learners should rely on lecturer	60.54	52.366	.109	.151	.708
S48 Fluency in communicating	59.50	49.396	.391	.219	.676
S51 English one of most difficult	60.28	49.705	.272	.128	.689
S54 Rehearse in mind what to say	59.54	47.893	.402	.290	.673
S55 Practising English with friends	59.10	49.841	.396	.350	.677
S57 Like lecturer to correct every error	59.40	49.794	.346	.297	.681
S60 Regular repetition of work	58.84	50.349	.420	.354	.677

Table 4.16: Item-total statistics BALLMI-M LLBs scale

Lastly, the reliability of the combined and refined BALLMI-M administered to Foundation and Intermediate Phase Education students in March 2017 is shown in the tables below.

Case Processing Summary			
		N	%
Cases	Valid	219	79.9
	Excluded ^a	55	20.1
	Total	274	100.0
a. Listwise deletion based on all variables in the procedure.			

Table 4.17: Case processing summary refined BALLMI-M

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.927	.933	54

Table 4.18: Reliability statistics refined BALLMI-M

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.204	-.208	.647	.855	-3.117	.021	54

Table 4.19: Summary item statistics refined BALLMI-M

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
202.66	568.225	23.837	54

Table 4.20: Scale statistics refined BALLMI-M

In conclusion, these statistics reveal that the BALLMI-M questionnaire as a whole is a highly reliable instrument and is undoubtedly suitable for the purposes for which it was designed. Although some questionnaire statements have a lower item-total correlation than others, removing any of these would not have any major effect on the reliability of the instrument, as Tables 4.12 and 4.17 show.

4.3.2 Descriptive statistics of the student population

A comprehensive table containing the biographical details of students is presented on the next page. A total number of 274 students completed the questionnaire. Of these 274 students, 79.8% were females and 20.2% were males. The group consisted

of diverse races with black students (59.2%) being the majority, followed by white students (26.6%). Coloured students made up 13.5% and other race(s) formed 0.7%. This was predominantly a group of fairly young individuals between the ages 18-23, which is 87.5% of the survey sample. Most of them (95.1%) are non-native speakers of English, and what is worth noting is that 81% of these students studied English at the primary and secondary level as a First Additional Language. This further justifies the use of TAL instead of TALL, as discussed in section 4.2.

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Male	54	19.7	20.2	20.2
	2 Female	213	77.7	79.8	100.0
	Total	267	97.4	100.0	
Missing	System	7	2.6		
Total		274	100.0		

Race					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 Black	158	57.7	59.2	59.2
	3 Coloured	36	13.1	13.5	72.7
	5 White	71	25.9	26.6	99.3
	6 Other	2	.7	.7	100.0
	Total	267	97.4	100.0	
Missing	System	7	2.6		
Total		274	100.0		

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Younger than 18	4	1.5	1.5	1.5
	2 18-20	172	62.8	64.9	66.4

	3 21-23	60	21.9	22.6	89.1
	4 24-27	16	5.8	6.0	95.1
	5 28 or older	13	4.7	4.9	100.0
	Total	265	96.7	100.0	
Missing	System	9	3.3		
Total		274	100.0		

Home Language

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 English	13	4.7	4.9	4.9
	2 Afrikaans	100	36.5	37.6	42.5
	3 IsiZulu	24	8.8	9.0	51.5
	4 SeSotho	69	25.2	25.9	77.4
	5 IsiXhosa	20	7.3	7.5	85.0
	6 Setswana	20	7.3	7.5	92.5
	7 Sepedi	9	3.3	3.4	95.9
	8 Other	11	4.0	4.1	100.0
	Total	266	97.1	100.0	
Missing	System	8	2.9		
Total		274	100.0		

Level of English at primary school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Home Language level	50	18.2	19.0	19.0
	2 First Additional Language level	213	77.7	81.0	100.0
	Total	263	96.0	100.0	
Missing	System	11	4.0		
Total		274	100.0		

Level of English at secondary school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Home Language level	48	17.5	18.3	18.3

	2 First Additional Language Level	214	78.1	81.7	100.0
	Total	262	95.6	100.0	
Missing	System	12	4.4		
Total		274	100.0		

Table 4.21: Biographical details of student population

4.3.3 The LLBs of students

As articulated previously, one of the objectives of the current study is to identify the common LLBs amongst students in order to determine whether these LLBs have the potential of affecting students' levels of motivation to learn English and thus their proficiency.

To identify the strong or common LLBs of students in the current study, their LLBs were calculated by merging the valid percentages of 'agree' with 'strongly agree' scales, and those of 'disagree' with 'strongly disagree' scales. This resulted in three major scales, namely disagree and strongly disagree, agree and strongly agree, and neutral. Thereafter, students' common or strong LLBs identified in the SPSS report containing descriptive statistics of responses to closed-ended statements were contrasted with those identified from the comments provided to open-ended questions.

In chapter two, it was observed that the poor performance in English by learners who are non-native speakers of English or second language learners is a result of lack of vocabulary in the target language and the inability to form simple sentences which

are grammatically correct. There is also a view that these learners tend to be too dependent on a teacher to make progress and that they expect error correction in order to improve their English. Therefore, it is not surprising that the majority of students cited vocabulary acquisition, the learning of grammar and their preference for error correction as the important aspects in learning a language. However, the LLBs of students seem to be conflicting. For example, their views concerning the learning of grammar as disclosed in their responses to the open-ended questions show no congruence to their responses to the closed-ended statements covering the topic of grammar. Furthermore, 88% of students cited learner autonomy as one of the essential qualities of successful language learners, which is positive. However, 47% of these students also agreed with the statement that “learners should rely on the lecturer to explain the work”, which is the opposite of learner autonomy.

An overwhelming 77% of students disagreed/strongly disagreed that one should “only speak if one can use English correctly” (statement 15), and in statement 48, 62.8% of students thought that “the most important part of learning English is to become fluent in communicating”. However, these two statements seem to run counter to statement 57 in which 65% of students cited the importance of having the lecturer “correct every error to avoid learning bad habits”. Some researchers believe that correcting every error a student makes can obstruct the language learning process, particularly fluency. In particular, Gumbaridze (2012:1661) notes:

Still, instant and intrusive correction can often be inappropriate since it can have harmful and negative effects on students’ will to activate L2. It can interfere with students’ attempt to talk freely and directly that may result in

the learner inhibition. It is obvious that all human beings are to some extent inhibited, but those who are shy and have low self-esteem can fail to overcome their speaking problems. They simply may lose the will to experiment with the language.

Huang (2009:86) also holds a similar opinion. Around 62.9% of the students thought that rehearsing what you want to say first before speaking is important. However, this contradicts statement 55 (practising speaking English with my friends gives me confidence to express myself in English). In the context of the current argument, 'practising speaking English' would mean that students get plenty of opportunities to make and correct their language mistakes, which in turn helps them develop fluency in communicating. Rehearsals, on the other hand, may deny them these opportunities and as a result they may take longer to acquire fluency. Another remarkable 89.1% of students agreed/ strongly agreed with statement 60 (Regular repetition of work improves English). Repetition is mostly associated with the audio-lingual approach which is mainly concerned with language structure (Weideman 2002:20). This approach views language as nothing but structure (Weideman 2002:20). The approach's obsession with language structure can discourage students from 'practising speaking English' as they are more likely to be concerned about getting the structure correct first before expressing themselves.

The belief that some people have a special ability to learn English, a view shared by at least 59% of the students, can potentially have detrimental effects on learners' progress, as well as on their motivational levels as well. It is also a worrying factor that 61% of students think that "children tend to learn English easier than adults" as

this may mean that the majority of them “[began] language learning with fairly negative expectations of their own ultimate success” (Horwitz 1988:283).

Abbreviated LLBs	Disagree/ strongly disagree	Neutral	Agree/ strongly agree
7. Some have special ability to learn English	14.7	26.8	58.5
9. I am most responsible for learning	2.6	9.5	87.9
11. Vocabulary is the most important part of language learning	5.5	9.5	85
15. Only speak if can use English correctly	77.3	14.2	8.4
19. Grammar most important part of language learning	6.3	23.1	70.7
23. Children learn English easier than adults do	15.8	23.2	61.1
27. Spend time memorizing meanings of new words	16.5	30.4	53.1
31. Guessing meaning of words from context to improve vocabulary	17.9	22.3	59.8
35. Learning English is different from learning other subjects	13.9	23.4	62.6
39. Translating from HL to English most important in learning English	13.5	26.7	59.7
42. Women are better language learners than men	67.1	23	9.9
45. Learners should rely on lecturer to explain work	46.5	30.5	23
48. Fluency in communicating most important in language learning	9.5	27.6	62.8
51. English one of most difficult languages to learn if not first language	38	31	31
54. Rehearse in mind what to say before speaking	17.4	19.6	62.9
55. Practising English with friends gives confidence to express in English	5.2	16.2	78.6
57. Like lecturer to correct every error to avoid learning bad habits	8.8	26.1	65
60. Regular repetition of work improves English	2.2	8.2	89.1

Table 4.22: LLBs expressed as a valid percentage according to responses to closed-ended questionnaire statements

Results of several studies on LLBs, such as that of Horwitz (1987), Lepota and Weideman (2002), Boakye (2007), and Griffiths (2008) show that most learners’ LLBs are universal. That is, learners almost always cite grammar, vocabulary

acquisition, practising or the use of a target language, etc., as the most important aspects in learning a language. However, although there are common identifiable LLBs from language learners globally, and although there is a generally accepted view of the role of LLBs in language learning, the influence of some LLBs is still questionable. That is, a learner's positive view(s) on the importance of learning grammar or error correction, for example, do not necessarily mean that the learner will succeed in learning a language. Conversely, a learner studying English as a pre-requisite course at a university who does not believe that the learning of grammar is important can still succeed as a result of his or her motivation. In other words, there has to be something that propels or encourages the learner to want to learn the language, which in turn will result in devising strategies to ensure the successful learning of the target language. Briefly, it is generally agreed that for successful language learning to occur, a learner needs to be motivated and to be autonomous. This claim is also supported by Sykes's (2015) "characteristics of the hypothetical Good Language Learner" set out below. According to him:

1. The Good Language Learner possesses a strong reason for learning the second language [motivation];
2. The Good Language Learner is actively involved in language learning [learner-autonomy];
3. The Good Language Learner develops an understanding of language as a system;
4. The Good Language Learner develops an understanding of language as communication; and
5. The Good Language Learner constantly revises his or her understanding and use of the second language. (Sykes 2015:718-719)

Furthermore, Najeeb (2013:1238), notes that “most learners and teachers feel that language learning consumes a considerable amount of time. [Therefore], learners have to work within and beyond the class room to develop their language skills”. Onozawa (2010:129), also observes that, “with regard to the relevance of autonomy to motivation, some researchers consider that motivation reinforces autonomy”. Lastly, Sykes (2015:713), states that when “learners accept responsibility for their language learning and actively engage in language learning activities, they have a much greater chance of success in second language acquisition”.

In the following section, a discussion of the nature of students’ motivation and its effects on the language learning process is presented.

4.3.4 Students responses to open-ended questions

The qualitative open-ended questions were analysed manually by studying all the students’ responses and categorising the most common ones. Out of 274 students who took part in the survey, 269 managed to complete the survey questions while two questionnaires were left blank and three others were partially completed.

The first question required students to articulate their views on what they think or believe has contributed to their English proficiency, and their responses are outlined in the table on the next page.

QUESTION 1: WHAT WOULD YOU SAY HAS HELPED YOU TO DEVELOP YOUR LEVEL OF ENGLISH PROFICIENCY?	
Students' responses	Total number of responses
1. Being around English speaking people/ speaking English with my classmates, friends etc.	92
2. Reading novels, magazines, newspapers, articles etc.	80
3. Homework and class activities.	58
4. Developing vocabulary	53
5. Attending classes and participating or asking questions in class.	39
6. Learning grammar	24
7. My lecturer's teaching style.	23
8. My high school English Teachers.	21
9. English/ academic literacy course	13
10. Repetition/ reflection on the work done in class.	12
11. Watching and listening to English TV and radio programmes.	8
12. Going an extra mile or my commitment.	5
13. Positive feedback	2

Table 4.23: Students' views on the factors contributing to their levels of English proficiency (N=274)

The majority of students who responded to the open-ended questions (34%), believe that being around native speakers of English or other individuals such as friends and family members who devote much of their time to speaking in English has helped them to develop their levels of English proficiency. However, there is also a large number of students who indicated other factors as the major contributors to their levels of English proficiency. About 29% indicated reading for pleasure, that is, the reading of novels, newspapers, etc.; which is followed by 21 % of students who said that the completion of homework and class activities has been a major contributor. Nineteen percent (19%) of students alluded to the time they spend developing their

vocabulary and 14% thought that attending, participating and asking questions in class had contributed to their levels of English proficiency. These views are indicative of learner autonomy, and they correspond with the findings of the survey on LLBs 9 and 55 presented in section 4.3.3.

The last question required students to state which skills they believe still need more development and the kind of assistance they think can help to address the shortages or inadequacy of those skills. Their responses are presented in the following table.

QUESTION 2.1: WHICH SKILLS DO YOU THINK NEED MORE DEVELOPMENT?	
Students' responses	Total number of responses
1. Grammar	86
2. Fluency/ speaking	73
3. Vocabulary	48
4. Writing skills	46
5. Reading skills	14
6. Idioms	1
QUESTION 2.2: WHAT KIND OF ASSISTANCE DO YOU THINK CAN HELP YOU TO IMPROVE THOSE SKILLS?	
Students' responses	Total number of responses
7. Practising or speaking English with other people	34
8. Class activities/ exercises	34
9. Reading books, newspapers, magazines, etc.	30
10. Class/ group discussions/ participating in class	26
11. My lecturer can assist	22
12. Developing vocabulary	22
13. Reading and/ or writing practice	21
14. Learning grammar	16
15. Motivation/ gaining confidence	7
16. Learning on my own/ putting in more effort	6
17. Feedback	5

18. Repeating the work/ reflection	3
19. Tutorials	3
20. Write site (CTL)	2
21. Note-taking	1
22. Lecturer-student interaction	1
23. Teaching of idioms	1
24. Parents	1
25. Academic literacy course	1

Table 4.24: Students’ views on the skills that need development and the intervention(s)

In this section of the survey, the need to work on grammar (32%) received the most responses, followed by speaking skills or fluency (27%), lack of vocabulary (18%), inadequate writing skills (17%) and reading skills (5%). Thirteen percent (13%) of students are of the view that these shortfalls could be addressed by focussing mainly on practising or using the language with other people. The other 13% identified the completion of class activities, while 10% think that class or group discussions and participating in class can be helpful. Some students (constituting 8% of the group) identified reading for pleasure as helpful. The other 8% believe that refining their English vocabulary can improve their proficiency, and 6% believe that the explicit learning of grammar can help them.

It is also important to note that although descriptive statistics of closed-ended motivation statements show that students were highly motivated during the completion of the survey, very few students cited motivation in the open-ended responses as an important factor that has helped them to develop their level of English

proficiency, or as one of the things that can assist them to develop their poor English skills. The implication of this will also be discussed in the last chapter.

4.3.5 The motivation of students

The students' responses to motivation statements as illustrated in Table 4.25 show that many of them were highly motivated. They responded positively to all the statements except to statement 18, "it is important for me to know English in order to be more like an English person", and statement 37, "if I am fluent in English people will respect me more". These statements are burdened by the students' perception of cultural identity. In light of Coetzee-Van Rooy's findings in her 2002 study that language learners associated positively with their own cultural groups and showed no intention of adopting the identity of native users of the target language English, this is not surprising. That is, the negative responses to these two integrative statements align with the findings of Coetzee-Van Rooy's 2002 study. According to these findings, integrativeness is not the primary predictor of English second language acquisition in South Africa:

[In South Africa,] English operates as a lingua franca and this provides a mainly pragmatic motivation to learn it as a second language. Secondly, the target language group (English first language speakers in South Africa) is a small group with fairly exclusive group boundaries. Thirdly, lack of contact between learners of English as a second language and first language speakers of English is a concern for researchers of English second language learning. Integration with the South African English first language group is, therefore, not a prime reason for learning English in South Africa, and successfully mastering English is not enough reason to be accepted as part of the English-speaking community in South Africa. (Coetzee-Van Rooy 2002:76-77)

As mentioned, the table below illustrates the frequency of students' responses indicated as percentages. The same procedure used to calculate the common LLBs of students was applied.

Motivation statements	Disagree/ strongly disagree	Neutral	Agree/ strongly agree
32. Studying English is important to me because I think it will someday be useful in getting a good job.	2.2	6.6	91.2
30. I love to try my best when doing an English task.	2.2	8.1	89.8
47. If I make more effort, I am sure I will be able to master English.	1.1	9.2	89.7
50. I am sure I have a good ability to learn English.	2.2	9.3	88.5
16. My English lecturer always welcomes inputs from learners.	4.1	11.4	84.5
38. I am confident I will be able to use English very well if I continue studying English.	2.9	13.2	83.9
28. I want to learn English so well that it will feel natural to me when I use English.	6.6	10.3	83
59. My English lecturer makes positive comments when giving feedback.	1.8	15.8	82.3
43. I would like to learn English so that I can study successfully.	5.1	13.9	81
33. When I have a problem understanding something in my English class, I can always ask my lecturer for help.	3.7	15.8	80.6
17. English class activities accommodate a wide range of individuals abilities.	4	18.4	77.5
18. It is important for me to know English in order to be more like an English person.	77.2	23.2	24.3
36. Practical tasks make learning enjoyable.	4.7	19.3	75.9
13. The better the kind of English used by my lecturer, the more motivated I am to learn English.	7.7	16.9	75.4
40. I find it important to create opportunities for myself to use English outside of class.	6.6	18.3	75.1
46. I really like my English lecturer.	5.2	19.2	75.6
25. I make a point of trying to understand new English words I come across every day.	3	22.3	74.9
34. I feel comfortable in my English class.	5.5	20.1	74.3
8. My lecturer's passion for English inspires me to learn English	8.5	17.6	73.9
12. Studying English is important because it will help me to understand English people better.	10.6	16.4	73

53. I have to learn English because without passing the English course I cannot get my degree.	7.5	21.9	70.7
44. My English lecturer encourages me to think independently.	6.6	23.5	69.9
10. The clear learning outcomes keep me motivated.	5.1	25.1	69.7
56. I find that I can relate to the topics discussed in class.	4	27.2	68.7
14. My English lecturer helps to put everyone at ease.	10.8	23.3	66
26. I enjoy the course content.	8.8	27.5	63.7
58. The course helps me to learn other important things not related to language skills.	10.7	25.7	63.6
49. I really work hard to learn English.	7.3	29.4	63.3
52. I find the skills developed in the course relevant to my needs.	5.9	31.1	63
44. My English lecturer encourages me to express myself in English.	8.5	30.5	61
20. I look forward to going to class because my English lecturer has a dynamic teaching style.	12.9	29.3	57.9
24. There is a relaxed atmosphere in the English class.	11	31.8	57.3
41. The course design motivates me to learn English.	9.8	34.7	55.5
37. If I am fluent in English people will respect me more.	44.7	28.9	26.3
22. It is important for me to know English because one day I want to become part of an English community.	32.1	27.4	40.5
29. I enjoy participating in group activities in class.	27.4	32.2	40.4

Table 4.25: Language learning motivation expressed as a valid percentage according to responses to closed-ended questionnaire statements

In terms of the distribution of scores, the negative skewness of the histogram on the next page is a further indication of students' favourable responses to a number of motivation statements.⁴

⁴ "Negative skewness values indicate a clustering of scores at the high end (right-hand side of a graph)" (Pallant 2010:57).

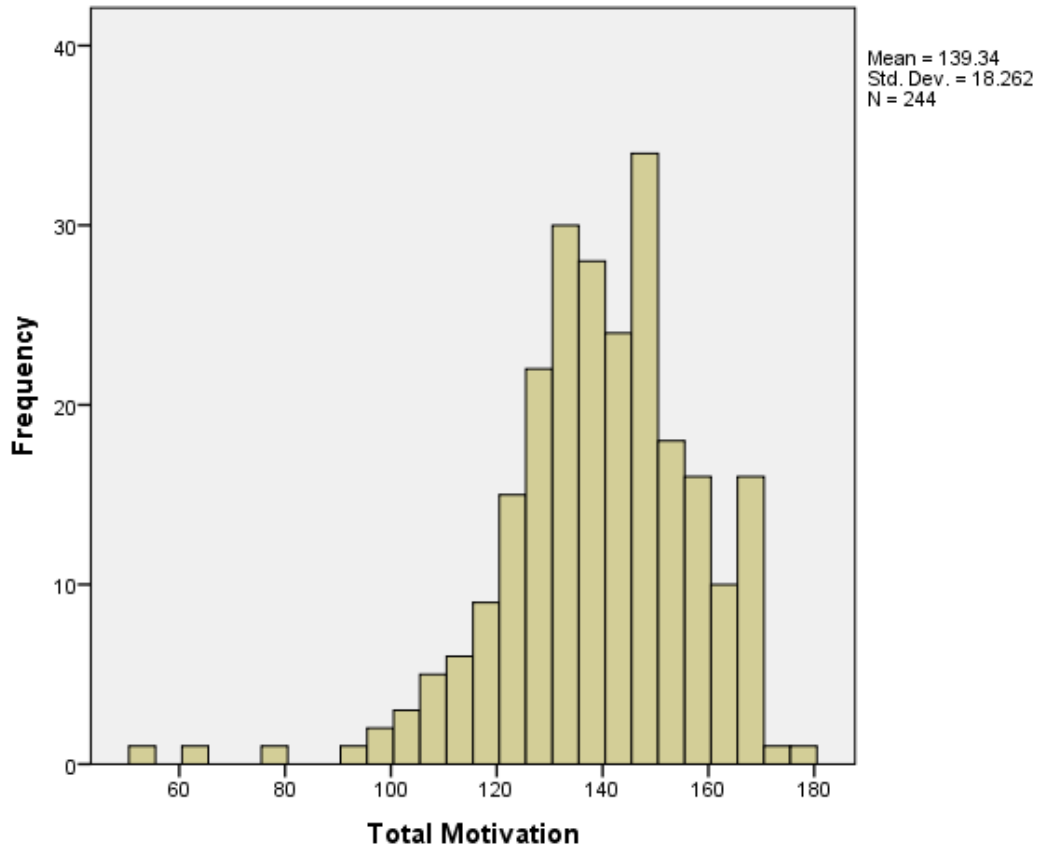


Figure 4.1: Histogram of total motivation

Furthermore, the Normal Q-Q Plot on the next page supports the previous premise. In usual cases, “a reasonably straight line suggests a normal distribution [and] there should be no real clustering of points, with most collecting around the zero line” (Pallant 2010:63). In the current study, few outliers are observed.

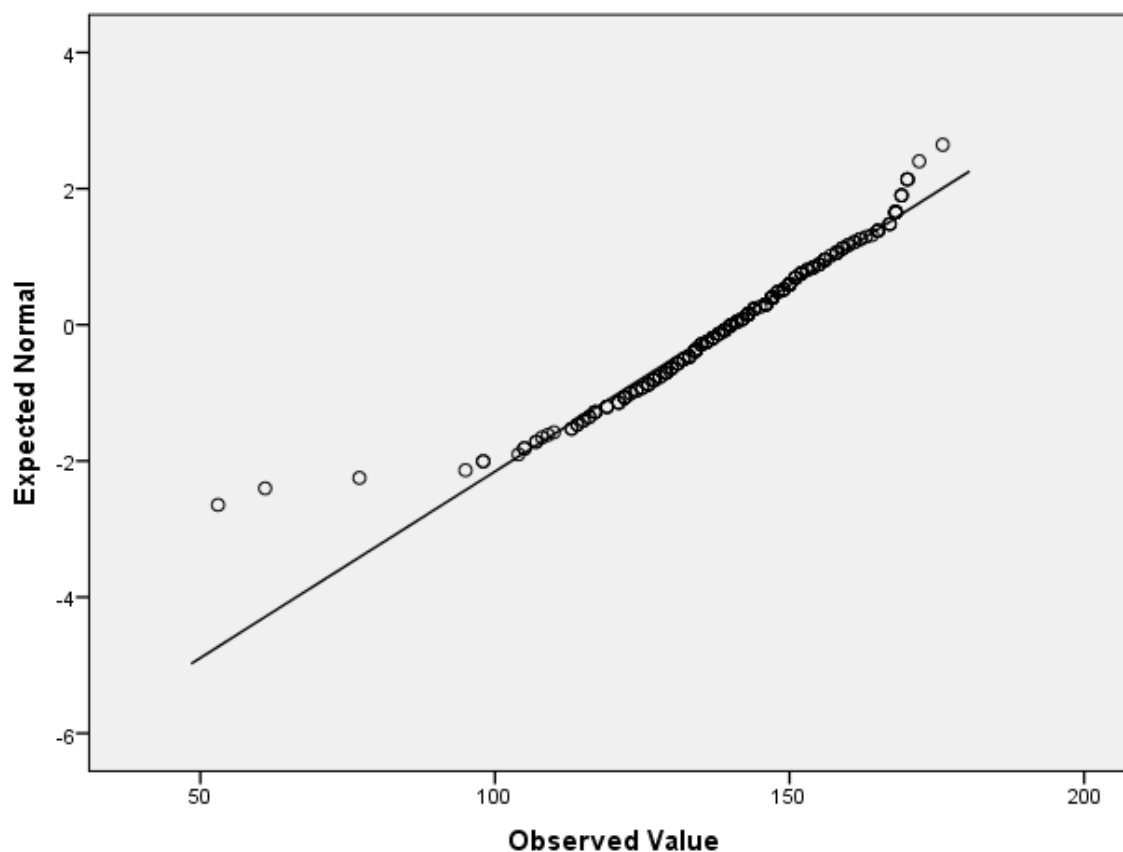


Figure 4.2: Normal Q-Q Plot of total motivation

In conclusion, although it is difficult to determine the precise nature of students' motivation, a closer scrutiny of the scores in Table 4.25 on page 111 reveals that there is a variety of factors that motivated students to learn English. These include the course and lecturer-specific motivational components, the integrative and instrumental aspects, self-confidence and self-efficacy aspects, and others.

In the next chapter, the nature of the interdependency relationship between the students' LLBs and their motivation as postulated in chapter two is analysed through the correlation of course assessment results with the students' responses to the survey statements.

CHAPTER 5

CORRELATION OF STUDENTS' MOTIVATION, LANGUAGE LEARNING BELIEFS AND COURSE ASSESSMENT SCORES

5.1 Introduction

In chapter two, a model of language mastery was proposed. According to this model, language learning motivation is a by-product of certain language learning beliefs (LLBs) held by students which eventually facilitate the mastery of the target language. However, as discussed in section 4.3.3, the opposite may actually be the case. Therefore, in an attempt to verify this premise, a statistical correlation of students' motivation scores, language learning beliefs and the scores of other assessments was performed.

The Statistical Analysis System (SAS) (2016) software package was used to correlate the scores of the pre- and post-test (TAL), formative and summative course assessments, the motivation score obtained through the survey questionnaire, and responses to a selection of LLBs. Because the responses to the LLBs were so eclectic, on the advice of the Statistical Consultation Unit at the UFS, only the data of certain LLB statements were correlated. The course assessments included a class test, class assignments 1, 2 and 3, mid-year test parts 1 and 2, summative test parts 1, 2 and 3, writing tasks and portfolio work. Descriptive statistics will be provided first, before proceeding with the correlation of data.

5.2 Interpretation of descriptive statistics

In this section, two sets of data that were utilised to correlate the different variables are analysed. Firstly, the set of data containing the descriptive statistics of TAL, academic marks and motivation is tabled and interpreted. This is followed by the descriptive statistics of certain LLBs. In both sets of data, the race/s classified as ‘other’ and the age group of <18 years was or were not taken into account because there were few students in these categories. The total sample size (N) reported also varies slightly due to some missing data.

5.2.1 Descriptive statistics of course results and motivation scores according to gender, race and age

This section shows the means obtained for the TAL pre- and post-test, formative and summative assessments, the final course mark which consists of all the respective course assessments, and the motivation scale. These are indicated using gender, race and age of students. The detailed discussion on the relationship between motivation, the TAL scores and final course mark will, however, be dealt with in section 5.3.1.

		Gender		Race				Age				
		Male	Female	Black	Coloured	White	Other	<18	18-20	21-23	24-27	28+
TAL Pre-test	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	41.5	43.0	37.4	41.8	53.3	50.0	41.1	44.6	39.7	36.2	36.2
TAL Post-test	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	47.1	48.3	43.4	46.2	57.9	50.0	49.4	50.1	44.8	39.5	42.1
Class test	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	42.1	43.3	37.8	41.7	53.7	50.0	41.3	45.0	40.2	36.7	36.0

Mid-year 1	N	43	184	130	28	67	2	3	154	47	11	12
	Mean	61.7	67.0	64.7	64.2	69.3	69.0	65.3	67.6	63.0	63.0	60.6
Mid-year 2	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	59.2	63.9	60.4	62.7	68.1	66.0	64.0	63.6	62.3	58.5	62.8
Summ test 1	N	43	184	129	29	67	2	3	154	47	11	12
	Mean	53.9	56.2	49.8	58.0	66.2	61.5	50.3	58.7	51.8	47.2	43.0
Summ test 2	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	56.0	57.7	53.6	58.4	64.4	58.0	62.0	58.7	55.4	50.5	53.2
Summ test 3	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	61.0	62.2	57.4	60.3	71.7	64.0	65.3	64.1	58.6	52.0	56.3
Class test 1	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	66.4	71.1	66.8	73.7	75.1	73.0	74.7	71.4	68.2	67.6	62.8
Class test 2	N	40	171	119	24	66	2	3	145	43	8	12
	Mean	66.3	68.1	64.7	63.2	75.1	63.3	63.3	67.7	68.4	77.9	60.3
Class test 3	N	44	181	128	28	67	2	3	153	46	11	12
	Mean	73.4	74.1	74.8	68.9	74.9	61.3	77.5	73.2	76.2	75.5	73.3
Writing	N	41	177	125	26	65	2	3	147	45	11	12
	Mean	51.1	50.8	46.9	54.6	56.7	55.0	54.0	51.5	52.0	46.5	41.0
Portfolio mark	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	53.8	62.6	59.4	57.8	65.2	57.5	56.8	61.6	58.8	61.8	60.6
Final course marks	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	55.2	58.9	54.7	57.0	65.4	60.0	58.7	59.4	56.4	53.4	53.2
Motivatio n score	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	137. 6	139. 5	143. 9	132. 5	132. 3	158. 0	141. 0	138. 2	140. 1	146. 5	141. 3

Table 5.1: Mean values per assessment opportunity according to gender, race and age

The general improvement of the TAL scores observed in the different categories in Table 5.1 is possibly due to the intervention (ENGE 1608) or some association between the course intervention and other variables such as motivation. With regards

to gender, the male group showed the most improvement (from a mean score of 41.5% to 47.1%). In the race category, the improvement of Black students' TAL scores surpasses that of other races. In terms of age, students who are 28+ years had the most improved scores in their TAL test: their mean score went up 5.9% points, from 36.2% to 42.1%. This is in line with the general wisdom among experienced academics that maturity greatly facilitates academic performance. In respect of the remaining course assessments, the female group scored higher marks, with the exception of the writing tasks. This also corresponds with the observed improvement in their TAL scores and their motivation score. In the race category, White students outperformed other races despite the fact that their TAL scores were not the most improved and that they were the least motivated group. A possible explanation for this occurrence is that socio-economic factors such as the quality of education received, financial status of families, nutrition, opportunities to explore, the level of literacy and others often favour or give students who are from well-off families an advantage to do well academically compared to students from poor families. It may perhaps also have to do with the individual characteristics of the particular group of white students in this study. The main point is that without further investigation, we do not yet know how to explain this. The second highest score, that of Coloured students, whose motivation resembles that of White students, may perhaps also be related to their socio-economic status. Black students, on the other hand, obtained the lowest course mark irrespective of their high motivation score. Lastly, the age group of 18-20 years achieved the highest means in both the pre- and post-test (44.6% and 50.1%) despite having lower motivation than the remaining age groups.

Presumably, in addition to the ENGE 1608 intervention, other factors may be responsible for the observed improvement in TAL scores of this particular group.

The effects of motivation on either the TAL scores or the final course marks will be discussed in detail in section 5.3, where the correlation results will be presented.

In the following section, the descriptive statistics of the responses to LLBs by gender, race and age group are reported and interpreted.

5.2.2 Descriptive statistics of language learning beliefs according to gender, race and age

The documenting of students' LLBs by gender, race, and age group was necessary in order to answer the following question: who possesses healthy or unproductive LLBs? It is to be hoped that the findings emanating from this question will assist the researcher to find an answer to the following research question pertaining to LLBs and English mastery: What are the effects of LLBs in the language learning motivation of students and on the mastery of English in this academic environment?

In an attempt to answer the former question, pertaining to the possession of productive or unproductive LLBs, the mean values and frequencies of certain LLBs, which are almost always perceived as impeding in language learning, namely LLB 7 (I believe that some people have a special ability for learning English); LLB 23 (It is easier for children than for adults to learn English as another language); LLB 42 (Women are better than men at learning languages); LLB 45 (I should rely on my lecturer to explain the work to me); and LLB 57 (I like to have the lecturer correct

every error I make, so that I don't learn bad habits) were analysed. The mean values (indicating the strength of the viewpoints of the participants) in the table below derive from the scale used in the survey questionnaire: mean value 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree. The agree/strongly agree pole of the scale was used as an indicator of unproductive LLBs.

		Gender		Race			Age					
		Male	Female	Black	Coloured	White	Other	<18	18-20	21-23	24-27	28+
LLB 7	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	3.6	3.6	3.5	3.2	3.8	4.5	3.0	3.6	3.4	3.9	3.7
LLB 23	N	43	183	128	29	67	2	3	153	47	11	12
	Mean	3.6	3.7	3.7	3.7	3.7	4.0	3.7	3.8	3.8	3.9	2.8
LLB 42	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	1.8	2.2	2.1	2.2	2.1	1.5	1.3	2.1	2.1	2.5	2.3
LLB 45	N	40	175	119	28	66	2	3	146	43	11	12
	Mean	2.6	2.7	2.2	3.1	3.3	3.0	1.3	2.8	2.6	2.5	1.8
LLB 57	N	44	184	130	29	67	2	3	155	47	11	12
	Mean	3.7	3.8	4.0	3.5	3.6	3.0	4.7	3.7	3.7	4.5	3.9

Table 5.2: Mean values of selected LLB responses according to gender, race and age

The female group seems to possess slightly stronger views in support of the mentioned LLBs, with the exception ironically of LLB 42 (Women are better than men at learning languages). The age group between 24 and 27 years also demonstrated strong viewpoints in agreement with certain LLBs. With regards to race, racial groups responded differently to each of the presented LLBs. Their views are easier to interpret when presented as response percentages as in the table

presented below. In the following table the agree/strongly agree pole of the scale was again used to separate productive LLBs from unproductive ones. A high percentage of “agree/strongly agree” responses to the mentioned LLBs would suggest LLBs that may impede language learning.

	Gender		Race				Age				
	Male	Female	Black	Coloured	White	Other	<18	18-20	21-23	24-27	28+
LLB 7	55.6	59.2	58.8	67.1	33.3	100.0	33.3	58.1	53.2	75.0	75.0
LLB 23	56.8	63.9	63.6	61.2	30.0	50.0	66.7	65.4	59.6	58.3	33.3
LLB 42	8.9	10.3	10.7	9.0	10.0	0.0	0.0	8.4	10.6	16.7	25.0
LLB 45	20.0	25.7	15.1	39.4	31.0	0.0	0.0	28.8	18.6	16.7	8.3
LLB 57	62.2	66.9	74.0	52.2	63.3	50.0	100.0	62.6	63.8	100.0	75.0

Table 5.3: Frequency of students’ responses per gender, race and age expressed as a percentage indicating positive and strong agreement with the selected LLBs

In general, more female students agreed/strongly agreed with the selected LLBs than their male peers did. This is indicated by the high percentages of their responses to the LLBs presented: 63.6% in response to LLB23 (It is easier for children than for adults to learn English as another language), for example, or 25.7% in their response to LLB45 (I should rely on my lecturer to explain work to me). With regard to race, a larger number of Black students seem to possess unproductive LLBs than in the case of the other groups of students. Many of these students responded positively and in strong agreement with LLB 23 (It is easier for children than for adults to learn English as another language) (63.6%) and LLB57 (I like to have the lecturer correct every error I make, so that I don’t learn bad habits) (74.0%). Lastly, students between the age 24 and 27 are seemingly the majority that possess unproductive LLBs as far

as language learning is concerned. In the case of LLB 57, 100% of these students (24-27 years) agreed that lecturers should correct all their errors. There were also 75% who thought that some people have a special ability for learning English.

In the next section, the potential effects of LLBs and language learning motivation on the mastery of English is discussed.

5.3 Correlation outcomes

In this section, the relationship between pre- and post TAL scores, the course assessment results, and responses to certain LLBs, as well as the motivation scores, is investigated. This part of the study involved correlating different sets of variables. The potential predictors of academic achievement (TAL pre-test, gender, age, motivation and LLBs) were correlated with course assessments, namely the post-test, class test, mid-year tests and summative tests, class assignments, writing activities, portfolio work and the final course mark. Although LLBs were correlated with course assessments, due to the eclectic nature of students' LLBs and the difficulty of calculating a composite score, the correlation between the motivation scores of students and their LLBs was not possible. Furthermore, the relationship between LLBs and the final course marks was not strong. Consequently, only the significant and large correlations are reported in the tables on the next page. However, the complete table consisting of all the variables correlated is attached as annexure G.

5.3.1 Univariate correlations

In Table 5.5 and 5.6 the strength of the correlation between the concerned variables and the “direction of the linear relationship between [the] variables” (Pallant 2010:128) are taken into consideration. Apart from showing the Pearson correlation coefficients between the motivation scores and assessment data, only the correlations between 0.50 and 1.0, and with a significance level of no more than 0.05 were analysed. The following guidelines were used to determine the strength of correlations.

Small	r=.10 to .29
Medium	r=.30 to .49
Large	r=.50 to 1.0

Table 5.4: Strength of correlation coefficients (Pallant 2010:134)

Of all the 22 potential predictors of academic achievement (see annexure G), it is the TAL pre-test which seems to be the best predictor of academic success. Motivation on the other hand, although statistically significant, is marked by inverse or negative correlations. What this suggests is that high motivation of some students did not lead to or result in an improvement in their TAL post-test scores or final course marks.

	Post-test	Final course mark
Pre-test	0.78229 <.0001 235	0.75883 <.0001 235
Motivation score	-0.19503 0.0027 235	-0.12875 0.0487 235

Table 5.5: Univariate analysis of the TAL pre-test, motivation score, post-test and final course mark

The other factor that one needs to take cognisance of is that the underfunding of primary and secondary schools, lack of resources, poorly trained teachers, etc. are likely to have a long-term effect on the quality of results achieved by learners at the end of their school years. What this implies is that a large number of them, mostly black learners, commence their higher education two steps behind or more disadvantaged than those who are, say, from former Model C schools. In order to probe the relationship between race (independent variable) and course performance in more detail, a one-way analysis of variance (ANOVA) was carried out using the general linear model (GLM) procedure. Although all the statistics in Table 5.6 on the following page are essential, the focus was on the F statistic and the p value.

The F values or means indicate whether an independent variable has any effect on the dependent variables (Cunningham and Aldrich 2012:121). Any F value close to 1 indicates that the variables are not jointly significant and thus no significant effect of an independent variable on dependent variables can be traced. That is, the higher the F value, the greater the correlation between the independent and dependent variable. Furthermore:

The F -value [is used] to calculate the p -value, which [one uses] to make a decision about the statistical significance of the terms and model. The p -value is a probability that measures the evidence against the null hypothesis. Lower probabilities [i.e., below 0.05] provide stronger evidence against the null hypothesis. A sufficiently large F -value indicates that the term or model is significant. (Minitab: 2018)

In the current study, only the F values of 2.50 and above, and the p value below 0.05 were considered to have a significant effect or to be significant. The results for the current study are tabled below.

Dependent variables	DF	Sum of squares	Mean Squares	F Value	Pr> F
Post-test	3	9502.68165	3167.56055	18.91	<.0001
Class test	3	11634.66965	3878.22322	25.92	<.0001
Mid-year test 1	3	1181.35131	393.78377	2.76	0.0432
Mid-year test 2	3	2772.30674	924.10225	5.58	0.0010
Summative test 1	3	12272.31906	4090.77302	22.62	<.0001
Summative test 2	3	5173.42290	1724.47430	13.87	<.0001
Summative test 3	3	9223.81111	3074.60370	15.34	<.0001
Class assignment 1	3	3554.16880	1184.72293	7.97	<.0001
Class assignment 2	3	5357.45066	1785.81689	6.85	0.0002
Class assignment 3	3	1057.70414	352.56805	1.77	0.1540
Writing	3	4543.06667	1514.35556	6.83	0.0002
Portfolio	3	1863.51024	621.17008	2.47	0.0626
Final course mark	3	5217.10986	1739.03662	18.58	<.0001

Table 5.6: One-way ANOVA of race and academic performance on various measures

There was a significant effect of race on academic performance in the case of all of the respective dependent variables tabled above with the exception of class assignment 3 ($F=1.77$, p 0.1540) as well as the portfolio ($F=2.47$, p 0.0626). This could be related to the fact that students marked class assignment 3 themselves and could have received help from other persons when completing their portfolio tasks. In this sense the test results are more reliable measures. The complete analysis of the

one-way ANOVA of race with all of the dependent variables in Table 5.6 can be accessed in annexure H.

In conclusion, Table 5.5 on page 122 shows that the Pearson correlation coefficients were the highest for the TAL in respect of all measures of academic performance, including the final course mark, and Table 5.6 shows that virtually all the measures of academic performance were dependent on the variable of race. Accordingly, a preliminary conclusion is that the TAL pre-test and race have the largest predictive capability in respect of academic achievement in comparison to motivation, LLBs and other variables. A final or more definite conclusion can, however, only be reached once the multivariate analysis in the next section has been discussed.

5.3.2 Multivariate correlations

This section discusses the results of the multivariate analysis of variance (MANOVA). The one-way ANOVA procedure carried out in section 5.3.1 involved correlating a single dependent variable (academic performance indicator) with an independent variable (race) in order to determine the strength of the two given variables and the direction of the relationship. In the case of MANOVA, which is “an extension of analysis of variance” (Pallant 2010:283), there are multiple independent and dependent variables (Sharma 1996:342). In the current study, the MANOVA analysis is used to determine which of the independent variables can best predict the performance of students in the English course.

Indicators of academic achievement as dependent variables (TAL post-test, class test, mid-year test 1 and 2, summative test 1, 2 and 3, class assignment 1, 2 and 3, portfolio mark, writing, and final course mark) were regressed against the independent variables, namely TAL pre-test, gender, race, age, motivation score, as well as the LLBs. Two types of regression procedures or analysis were used for this. Firstly, in the multiple-regression (full model), the regression model was fitted with all the mentioned independent variables and these were correlated with the dependent variables. As in the univariate correlations, all the correlation steps involved calculating the *F* statistics as well as the *p* values. With reference to section 5.3.1, the *F*-values indicate the ability of the independent variables to predict the performance of students in their course assessments outlined in the table below. The *p* values, on the other hand, indicate whether the observed *F* values occurred by chance or not (George and Mallery 1995:98). A summary of the results is presented in the table below. However, the complete multiple-regression (full model) analysis is attached as annexure I.

Dependent variables	DF	Sum of squares	Mean Squares	R-Squares	F Value	Pr> F
Post-test	28	30711.717192	1096.84707	0.689	14.15	<.0001
Class test	28	42246.51831	1508.80423	0.992	893.09	<.0001
Mid-year test 1	28	13151.42049	469.69395	0.440	5.01	<.0001
Mid-year test 2	28	16741.13617	597.89772	0.466	5.58	<.0001
Summative test 1	28	29369.85901	1048.92354	0.602	9.64	<.0001
Summative test 2	28	14014.64304	500.52297	0.464	5.56	<.0001
Summative test 3	28	34634.82732	1236.95812	0.677	13.34	<.0001
Class assignment 1	28	11762.59668	420.09274	0.350	3.44	<.0001
Class assignment 2	28	20163.20513	720.11447	0.392	3.75	<.0001
Class assignment 3	28	7720.01066	275.71467	0.186	1.45	0.0799

Writing	28	14085.48130	503.05290	0.312	2.74	<.0001
Portfolio	28	12431.35530	443.97698	0.236	1.97	0.0044
Final course mark	28	15679.15532	559.96983	0.655	12.16	<.0001

Table 5.7: Full model multivariate analysis of predictor effects of independent variables on dependent academic performance variables

As observed in Table 5.7, all of the independent variables had a statistically significant predictive ability of some sort on the academic performance indicators of students except in the case of class assignment 3 ($F = 1.45$, $p = 0.0799$), possibly for reasons already referred to previously. Nevertheless, these results do not show which independent variables have the greatest predictive ability in terms of the performance of students. It is for this reason that the second procedure was done.

That second procedure is the General Linear Model (GLM) select procedure. It involves fitting all the variables into the regression model, followed by a stepwise model selection using the Schwarz Bayesian Information Criterion (SBC) as a model selection criterion. The final selected model is the ‘best’ subset as prescribed by the SBC of the available independent variables for predicting the relevant indicator of academic achievement. In this case, four dependent variables representing different kinds of knowledge and ability, namely TAL post-test, final course mark, writing and the portfolio project, were used. The t values and probabilities in the tables on the subsequent pages indicate whether the “regression coefficients for each variable are greater than zero” and have predictive power (Foster 2001: 216). The larger the size of t (either positive or negative), the greater the evidence of the correlation (either positive or negative) between the independent variables and the specific

course assessment (dependent variable). Any t values close to 0 would, in this case, indicate that there is an indistinguishable correlation between or among the concerned independent and dependent variables (Minitab 2018). The full multiple regression (model section) procedure leading to the parameter estimates in the tables below can be accessed in annexure J.

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	24.739988	3.301937	7.49	<.0001
Pre_test	1	0.772317	0.042872	18.01	<.0001
LLB15	1	-1.407430	0.586659	-2.40	0.0173
LLB54	1	-1.948721	0.536590	-3.63	0.0004

Table 5.8: The predictor effects of independent variables on the TAL post-test performance

Table 5.8 shows that LLB15 (You shouldn't say anything in English until you can say it correctly) and LLB 54 (I like to rehearse in my mind what I want to say in English before I say it) were related inversely to performance in the post-test. That is, based on the survey scale used (1-5), disagreement with these two LLB statements was found to be related to higher post-test scores. These responses can be perceived in a positive light in that the belief that one should not speak until one gets the form correct (LLB15) can limit one's opportunity to practise verbal communication which students singled out in section 4.3.4 as the factor that has helped them to develop their level of English proficiency.

Rehearsing (*in English*) what one wants to say before saying it (LLB54) can yield positive learning outcomes. However, in some cases such a statement may be “interpreted by respondents as ‘I like to translate in my mind...’ (Lepota and Weideman 2002:215), which “quite apart from being erroneous, is almost certainly in conflict with the teacher’s style in an instructional environment that encourages fluency” (Lepota and Weideman 2002:215). This conflict between the learner’s and teacher’s LLB can hamper language learning. Furthermore, students’ uncertainty about the language form (rehearsed) can often lead to self-doubt and subsequently an unwillingness to participate in the classroom and a reluctance to express oneself freely. Lastly, rehearsing requires students to have “time to consciously think about and use the rules available to them in their learned system [articulately]” (Gass *et al* 2013:130) which can affect the fluency and thus the mastery of English.

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	39.040415	2.466438	15.83	<.0001
Pre_test	1	0.549690	0.034258	16.05	<.0001
LLB54	1	-1.209120	0.429238	-2.82	0.0053

Table 5.9: The predictor effects of independent variables on the final course mark

In Table 5.9 the inverse relationship between LLB 54 (I like to rehearse in my mind what I want to say in English before I say it) and the final course mark is also observed. The possible explanation for this observation as well as for the outcomes in Table 5.8 is that students who believe that it is important to express themselves

freely without putting too much strain on what they want to say before saying it, or students who often interact verbally with others are more likely to succeed in learning English. This notion is also supported by Lepota and Weideman (2002:214) who note that students who are not afraid of being ridiculed and are willing to take risks, as advocated by current approaches to learning and teaching language, consequently manage to lower their anxiety and stress in the process of language learning and this results in the desired language outcomes.

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	23.199293	4.312863	5.38	<.0001
Pre_test	1	0.485799	0.068735	7.07	<.0001
LLB31	1	1.967613	0.795388	2.47	0.0142

Table 5.10: The predictor effects of independent variables on the writing task achievement

The observed correlation between the LLB31 (Guessing the meaning of the word from context helps to improve one's vocabulary), and the students' achievement in the writing task is possibly an indication that students' ability to guess the meaning of words within context improved their writing skills. Although the correlation between LLB31 with the writing task is observed, the TAL pre-test still emerged as the stronger predictor.

The results for examining the predictor effects of the several further variables are given in Table 5.11 on the next page:

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	36.879407	5.556055	6.64	<.0001
Pre_test	1	0.384800	0.072014	5.34	<.0001
Gender 1	1	-7.963040	2.630638	-3.03	0.0028
Gender 2	0	0	.	.	.
LLB57	1	2.433025	1.043891	2.33	0.0207

Table 5.11: The predictor effects of independent variables on the portfolio project performance

Apart from the TAL pre-test, two independent variables seem to have predictive ability in respect of which students are most likely to perform well in the portfolio project. To begin with gender, we note that male students have lower portfolio scores in comparison with female students. Secondly, the correlation between LLB57 (I like to have the lecturer correct every error I make, so that I don't learn bad habits) and the performance in the portfolio project suggests that students' learning styles are strongly dependent upon the lecturer (Lepota and Weideman 2002:215). Although lecturers often insist on the language proficiency development strategies that demonstrate autonomy from students when completing the tasks, the number of students who possess this trait is limited. Therefore, it is not surprising that students' success in this specific task was related to the belief that the lecturer's intervention or guidance was needed.

5.4 Conclusion

This chapter has reported the results of the statistical analysis of different kinds of data. This analysis was aimed at verifying the proposition outlined at the inception

of the study, which claimed that students' LLBs may affect their motivation to learn English and their language competence. This testing entailed investigating the potential relationship between pre- and post TAL scores, the course assessment results, responses to certain LLBs as well as the motivation scores analysed in this chapter.

The results of the ANOVA and MANOVA analyses show that in cases where the relationship between students' motivation to learn English and their final course scores exists, it has insignificant predictive ability. Furthermore, two independent variables, namely the TAL pre-test and race, were shown to be potentially the strongest predictors of students' academic performance on the basis of the one-way ANOVA, as discussed in section 5.3.1. However, in the GLM select procedure, which involves fitting all the variables into the regression model, followed by a stepwise model selection using the Schwarz Bayesian Information Criterion (SBC), race had a lesser predictive capability when compared to other variables. A number of variables (as outlined in Tables 5.8, 5.9, 5.10 and 5.11) with varying degrees of predictive ability emerged as the strongest subsets for predicting the performance of students in respect of four diverse performance indicators (post-test score, writing score, portfolio work score, and overall course mark). However, the TAL pre-test was the common denominator in all of the subsets and therefore had the strongest predictor effect.

The implications of these findings for language learning and the conclusions reached with regard to the investigation of the current study are discussed in the next chapter.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This study has investigated the prime language learning beliefs (LLBs) expected to be held by the language students in its target group, as well as the motivation of these Foundation and Intermediate Phase Education students in learning and mastering English. Its primary purpose has been to seek answers to the following hypothetical questions: Is there a possible relationship between what students believe about language learning, which can potentially influence their levels of motivation towards the learning of English, and the outcomes(s) of that learning? To what extent do language learning beliefs and motivation to learn English serve as predictors in respect of course performance?

6.2 Review of the research findings

The quest for finding the answers to these questions entailed a rigorous investigation which has resulted in numerous outcomes. In the first part of the investigation, undertaken at the beginning of the year 2017, students were asked to complete the Beliefs About Language Learning and Motivation Inventory-Modified (BALLMI-M) survey questionnaire which was aimed at identifying their LLBs and measuring their levels of motivation. Students were also asked to take the TAL pre-test which was used to measure their ability to use English competently as an academic language. Both these data collection instruments were subjected to a reliability test,

and they proved to be highly reliable. Students were then exposed to a language intervention, the English Skills for Education course. In the final phase of the investigation, students completed the TAL post-test, which was used to measure their English competence, specifically in the mastery of academic discourse in that language, after the intervention, while also taking into account their LLBs as well as their levels of motivation.

The analysis of the findings consisted of two phases. The first phase entailed analysing the LLBs and motivation separately in order to identify the predominant LLBs and to estimate the motivation levels of students. The last phase entailed correlating dependent and independent variables to identify from among them the best predictor of students' achievement in English.

The survey questionnaire was first analysed quantitatively and qualitatively. The quantitative findings relating to the LLBs revealed that students' views about language learning are eclectic at best, but perhaps even haphazard, contradictory, and conflicting. For instance, their views concerning the use or significance of grammar expressed through the closed-ended-statements differed from those they expressed through the open-ended-responses. Furthermore, a large number of students (88%) agreed that learner autonomy was essential for successful language learning. This view, however, was in contrast with the view expressed by 47% of students who thought that depending on the lecturer had no detrimental effects on their learning. Positive views relating to the usefulness of attempting to speak English, even

imperfectly, ran counter to the responses of 65% of the students who endorsed error-correction, and 89% who endorsed regular repetition of work to improve their English. These inconsistencies in students' LLBs prompted the assumption that some LLBs may not be sufficient to fuel the demanding process of language learning, or that learner autonomy and motivation may be the factors most responsible for successful language learning.

The second phase of the study constituted two types of correlations, namely an analysis of variance (ANOVA) and a multivariate analysis of the same sort (MANOVA). The primary objective of these correlations was to study the potential effects of LLBs on the motivation of students in mastering English and their course performance. Owing to the contradictory beliefs of students, which rendered the correlation of LLBs against language learning motivation impossible, other potential language performance predictors were also taken into consideration. The General Linear Model (GLM) procedure was used to select the best predictors of students' course performance using four dependent variables that represented a variety of students' knowledge and abilities. These variables were the TAL post-test, the final course mark, the writing achievement and the portfolio project. At the end of the procedure, a handful of predictors emerged. These include the TAL pre-test, LLB15 (You shouldn't say anything in English until you can say it correctly) and LLB 54 (I like to rehearse in my mind what I want to say in English before I say it) in respect of the post-test; the TAL pre-test and LLB54 (I like to rehearse in my mind what I want to say in English before I say it) with regard to the final course mark; the TAL

pre-test and LLB31 (Guessing the meaning of the word from context helps to improve one's vocabulary) in terms of the writing task; and the TAL pre-test, male gender and LLB57 (I like to have the lecturer correct every error I make, so that I don't learn bad habits) as far as the portfolio project was concerned. The TAL pre-test was identified as the best predictor of students' performance and mastery in English, and consequently their mastery of English in their university studies.

6.3 Implications of the research findings

Although it was not possible to correlate LLBs and the motivation score due to the inconsistency of students' LLBs, I think it is safe to say that there is no momentous relationship between what students believe about language learning and their levels of motivation towards the learning of English, and the outcomes(s) of that learning. This is due to the fact that the majority of students were highly motivated, as remarked in section 4.3.5, despite the inconsistency or the eclectic nature of their LLBs.

Some LLBs were able to predict the performance of students in some tasks. However, their predictive abilities were not as strong as that of the TAL pre-test. This serves as an indication that possessing constructive LLBs, i.e., views on language learning that are indicative of autonomous and learner-driven orientations to mastering English, does not necessarily guarantee mastery of English at a more advanced level.

The inverse relationship between the students' motivation and their performance in English echoes the findings from Coetzee-Van Rooy's (2006:447) study in which it was found that "the notion of integrativeness is untenable for second-language learners in world Englishes context". The desire to assimilate and adopt the identity of native users of English evident in the findings of studies conducted elsewhere is not the primary reason for learning English in South Africa, at least for the majority of students. The learning of English for these learners and students is extrinsically motivated. They are more concerned about attaining short-term goals or rewards such as passing a grade, obtaining just high enough an English score for university admission, passing the year-course, etc. These may be the reasons why few students cited motivation in the open-ended responses (illustrated in section 4.34) as being important. It may also be the reason for their disengagement or passivity in the learning room, regardless of many opportunities created by teachers and lecturers for paired oral work/discussions, comments and questions or their awareness of the importance relating to the practice of spoken language.

6.4 Recommendations

The findings of the current study suggest a number of issues that language educators and researchers need to take into consideration. Firstly, the failure to show a substantial improvement in the mastery of English by the highly motivated students and students possessing productive LLBs is an indication that we can no longer rely completely on the motivation and the LLBs of students to predict language learning success or proficiency. This indispensable finding suggests that the most reliable

instrument for predicting and measuring students' language proficiency or success that language researchers may utilize in future are tests such as TAL. Secondly, it is a fair conclusion that motivation and constructive LLBs are not sufficient to improve the proficiency of students in English. Finally, these findings verify yet again the assumptions made in the first chapter that the deteriorating standard of education in South Africa and the low literacy levels attained at primary and secondary school level, particularly in the case of learners who are from previously disadvantaged schools, can have long-lasting negative effects on their future education. It might be that the definition of motivation utilised in this study should also be re-examined, since there is no trace of a correlation between this and final mark, but that would be a task to be undertaken in further investigations.

Henceforth, as opposed to prioritising research on strategies to increase the motivation levels of students or aligning their LLBs to those of a teacher or a lecturer, which has proven in the past to be a daunting task, we should perhaps examine more closely the factors that inhibit mastery of English in multilingual and multicultural contexts such as ours. We also need to ensure that our course delivery methods or instructional approaches address the identified challenges. The answers may lie in the following needs identified by Karaoglu (2008):

Learners need quality instruction, input, interaction, and opportunities for meaningful output, not only to make progress but also to maintain motivation for language learning. A good teacher, then, must tap into the sources of intrinsic motivation and find ways to connect them with external [or extrinsic] motivational factors that can be brought to a classroom setting. This is especially significant when English is not seen as important to the

students' immediate needs, other than to pass exams. Because learners have different purposes for studying a language, it is important for [language] instructors to identify students' purposes and needs [in order] to develop proper [instructional strategies].

In an attempt to assist language educators to nurture their students' language skills, the current study proposes that language educators re-evaluate the type and quality of instruction used. They need to reassess the quality and quantity of the input provided, how they facilitate students' interaction in the target language, and how they create opportunities for meaningful output when presenting or delivering the course content. This is important because whichever instructional strategy the educator adopts will not only have an impact on the learning outcomes but also on the approach to language teaching undertaken by the pre-service educators in future. These recommendations are informed by the interactive hypotheses summarized below:

The comprehensible input hypothesis refers to a “bit of language that is heard/read and that is slightly ahead of a learner's current state of grammatical knowledge” (Gass *et al* 2013:131). It evolved around the idea that:

A language containing structures a learner already knows essentially serves no purpose in acquisition. Similarly, language containing structures way ahead of a learner's current knowledge is not useful. Krashen defined a learner's current state of knowledge as i and the next stage as $i + 1$. Thus the input a learner is exposed to must be at the $i + 1$ level in order for it to be of use in terms of acquisition. (Gass *et al* 2013: 130-131)

The interaction hypothesis proposed by Long and investigated by Pica (Ellis 1991:2)

advances the idea that:

Language acquisition requires or greatly benefits from interaction, communication and especially negotiation of meaning, which happens when interlocutors attempt to overcome problems in conveying their meaning, resulting in both additional input and useful feedback on the learner's own production. (Richards and Schmidt 2010:290)

According to this hypotheses, the comprehensible input is necessary for L2 acquisition. It also upholds the view that modifications to the interactional structure of conversations which take place in the process of negotiating a communication problem help to make input comprehensible to an L2 learner.⁵

The comprehensible output hypothesis, the third hypothesis of relevance to the current discussion, promotes the idea that:

Successful second language acquisition requires not only comprehensible input, but also comprehensible output, language produced by the learner that can be understood by other speakers of the language. It has been argued that when learners have to make efforts to ensure that their messages are communicated (pushed output) this puts them in a better position to notice the gap between their productions and those of proficient speakers, fostering acquisition. (Richards and Schmidt 2010:416)

In reference to the hypothesis discussed, practical observations at the ENGE1608 classes have also revealed that students are exposed to ample English; however, due

⁵ For a critical evaluation of the hypothesis see, Ellis 1991:1-46.

to their varying proficiency levels, it is not always comprehensible. In this case, students should perhaps be given more opportunities to interact in order to facilitate the comprehensibility of the input received, and also complete tasks that require output (e.g. paraphrasing tasks, oral presentations, etc.). This procedure can also be carried out at schools where the similar predicaments are observed. Furthermore, though the current study's recommendations relate mainly to the instructional strategies, one cannot ignore the administrative challenges that also hinder some of the practices recommended. One of these challenges which needs serious attention is the limited resources and limited staff needed. The large number of students allocated per educator, for instance, may constrain the interactions in the lecture room, and limit the opportunities needed to facilitate comprehensible input and output.

With regards to the implementation of the proposed recommendations, in addition to the day-to-day techniques employed by the language educators, varying approaches such as the ones outlined below can be utilized to enable 'comprehensible' input, sufficient interaction and meaningful output.

Communicative Language Teaching (CLT), which has received fair justification over the past decades as one of the few theoretically defensible language teaching approaches has great potential to provide comprehensible input, facilitate learners' interaction in the classroom, as well as create the conditions for meaningful output in the form of oral and written work. In a recent review of where we stand with what he calls "communication-oriented language teaching", Littlewood (2014), one of the

first promoters of CLT, suggests exactly this. This approach is also embodied in the curricula for language teaching at schools, where many of the students whose mastery of English was investigated in this study will go to teach; according to this policy, CLT suggests that “a learner has a great deal of exposure [or input] to the target language and many opportunities to practise or produce the language by communicating for social or practical purposes” (DBE 2011:9). It generally employs a number of techniques such as role-play, games, discussions, and the popular information gap or information exchange, all of which facilitate greater interaction among learners and create opportunities for more language output by them (Weideman 2002:29). Some of these techniques may not work in the lecture-room contexts and may be more suitable for use at a school level, but may be feasible in a tutorial or practical class where students can get to know their fellow students and interact in small groups.

The success of these techniques rests heavily on the use of authentic materials, as the activities are aimed at facilitating language use and competence outside the classroom (Weideman 2002:31; for more detailed discussions, see Weideman 2002:29-45; 2003c:29-32).

It is important to note that although CLT “was widely promoted as suitable for all contexts, many questions have since been raised about what it really means and what versions of it (if any) are suited to specific learning situations” (Littlewood 2012:349). CLT is, therefore, no means to an end. There may well be other

approaches that can assist to provide rich input, encourage sufficient interaction, and elicit meaningful output. In his discussion about the future of communication-oriented language teaching, Littlewood (2012:349), also notes that the developments in CLT over the last two decades have seen a number of other approaches to teaching language (some communicative) emerge. These include Task-Based Language Teaching (1987), Content-Based Instruction (CBI) (1989), and the Cooperative Language Learning in 1993. A selected few of these approaches, capable of enforcing comprehensible input, encouraging interaction and stimulating meaningful output are discussed briefly below.

CBI is perceived as an effective and realistic teaching method in terms of which language and content learning are integrated. It encompasses “the traditional teaching methods such as grammar-based instruction or vocabulary development and contemporary approaches such as communicative language teaching methods and humanistic methods” (Heo 2006:25). Defined by Richards and Rodgers (2001:204), it refers to “the teaching of content or information in the language being learned with little or no direct or explicit effort to teach the language itself separately from the content being taught”. CBI has its foundation on the following theorised views about language learning: 1) the perception that language is a combination of text and discourse, 2) the view that language skills are not bits that can be taught separately but an integrated (learning) experience, and 3) the view that we use language to fulfil certain purposes, the key one being to communicate meaning (Heo 2006:25). What remarkably distinguishes CBI from the CLT is that apart from Cummins’s two-tiered

skill model and the cognitive learning theory (see Heo 2006:26-27 for a detailed description), it endorses or promotes Krashen's comprehensible input hypothesis (Heo 2006:26), recommended in the current study.

Additionally to the points mentioned above, in as much as it remains the responsibility of the language educators to develop learners' language proficiency, one cannot refute the fact that language learning is largely an accumulation of experiences which can enhance or hinder the language learning process. That is, language learning is not confined to the classroom setting or language educators. It is these considerations and others that have led to the instituting of initiatives informed by the CBI approach such as the English Across the Curriculum (EAC) advocated by the South African Department of Basic Education. EAC was introduced due to the concern that "studies so far have proved that English, which is the language of learning and teaching (LoLT) in the majority of schools in our country, is a barrier for learning and thus of learner attainment" (DBE 2013:2).

The DBE therefore embarked on the EAC in the framework, in order to assist learners who face barriers to learning when they learn content subjects through the medium of a language that is not their own. The teaching of EAC is based on the premise that every teacher is a language teacher and that the basic language skills such as listening and speaking, reading and viewing, and writing and presenting that are taught in language classrooms should also be taught in content subjects. This strategy is also aimed at improving the teaching of English as a subject, as well as English as the LoLT. Improved LoLT will enable learners to fully participate in society and the economy through equitable and meaningful access to education, as well as to support their general conceptual growth. Furthermore, improved LoLT will counter

disadvantages resulting from different kinds of mismatches between home languages and the LoLT. (DBE 2014b:4-5)

Although the implementation of EAC at schools is weak, modules such as ENGE1608 can easily absorb it by incorporating curriculum content relevant to teaching in the Foundation and Intermediate Phases and use that for developing vocabulary, mastery of grammar, etc. Regardless of the weak implementation at schools, EAC serves as evidence of the impact that CBI has had over the past years. Other relevant approach(es) include what is referred to as “Cooperative Language Learning” in which “students work together in small groups to accomplish shared learning goals” (Zhang 2009:81). Language educators can use cooperative learning to encourage learner interaction and output through activities such as group discussions, information/ knowledge exchange, etc.

To conclude, varying dynamics such as the educator’s teaching style, the resources available, the number of students in the classroom, learners’ language needs, teaching time, and a multiplicity of other factors will often determine the approach to be followed in order to put into practice the proposed recommendations in the language classroom. However, the increase in the number of teaching approaches or methods in the history of language teaching has increasingly exposed the difficulty of committing oneself to one particular approach which satisfyingly meets all the language needs of learners. Weideman (2017:124) also reminds us that:

The search for the “best method” of teaching additional languages was replaced at the end of the previous century by an emphasis on the individual

learner and the uniqueness of each classroom. Ethnographic studies were undertaken. “Beyond method” lie interests in macrostrategies for teaching language, and sensitivity to context, to local conditions, to affect, and to unequal power relations. Critical approaches to applied linguistics further sharpened awareness of political issues and concerns, especially at institutional level. Accountability for design becomes the watchdog.

It is imperative to emphasise, therefore, that the current study does not advocate the adoption of a specific language teaching method, even though it does encourage educators to use some of these approaches as means to implementing the proposed recommendations. Certainly, their implementation will depend on the multiplicity of factors unique to each classroom, and also on the formulated “plans that are locally appropriate and relevant, and unique to the circumstances of the particular context” (Weideman 2017:130). In other words, the focus on instructional strategies, more specifically, on providing input, interaction, and ensuring sensible and meaningful output, is somehow “a shift from designs directly relatable to method to a more open-ended kind of instructional design, that is at the same time more sensitive to local classroom and educational conditions”, or what may be termed a postmethod condition (Weideman 2017:130). Striving for a postmethod condition that does not abandon the necessity of theoretically justifying one’s approach, and that seeks to implement the recommended instructional strategies or macrostrategies that have been outlined here will no doubt help language educators to confront at least some of the challenges present in teaching English to Education students at tertiary level in a thoughtful and deliberate manner.

What is needed is the instructional approach that will maintain extrinsic motivation, but increase intrinsic motivation, while also positively shaping students' perceived notions (LLBs) about English or learning language for use in a specific educational setting.

6.5 Limitations of the study

It is important to note that although the study yielded valuable and possibly unique results, different from the ones anticipated initially. However, it may be premature to generalise these findings. Instead, this is an important step towards a renewed interpretation and reconceptualization or understanding of LLBs as well as the motivation for learning English, particularly in non-native English speaking countries. If this study is replicated, it can result in informing the design of further interventions relating to language pedagogy that can be beneficial to learners in countries where citizens are multilingual and where few use English as their first language, as well as in countries such as South Africa where the majority of Black students do not have access to quality education and other educational opportunities often accessed by the minority.

6.6 Possible refinements

Understanding students' levels of motivation and LLBs is important. However, it is neither sufficient to address students' poor performance in language courses effectively, nor their lack of motivation, or the way that unproductive LLBs hinder their progress. The current study has made some suggestions which may assist

teachers and lecturers to teach their course content effectively. In addition to these, it may be helpful to refocus the LLB statements of the BALLMI-M instrument to reflect language learning strategies of students rather than their perceptions of how languages are learnt. In this way, teachers may find more productive results. Furthermore, refining the open-ended questions of BALLMI-M can potentially yield better results. Questions such as “*What motivated/ motivates you to learn English?*”, or “*How do you think the course content/ instruction can be improved to accommodate a wide range of students’ abilities?*”, and other questions of this nature can produce responses that may practically assist teachers and lecturers to approach or design courses that can potentially improve the performance of students, facilitate constructive LLBs, and also further increase students’ language learning motivation.

6.7 Conclusion

This chapter has outlined the core findings of the study and proposed suggestions relevant to these findings. It is hoped that the recommendations put forward will encourage teachers, lecturers, and other language practitioners to review their approaches to language teaching. Lastly, it is also hoped that these recommendations will inspire further research in the field of language teaching and applied language studies.

BIBLIOGRAPHY

- Bachman, L.F. 2004. *Statistical analyses for language assessment*. Cambridge: Cambridge University Press.
- Bade, M. 2008. Grammar and good language learners. In C. Griffiths (ed.), *Lessons from good language learners*. Pp. 83–98. New York: Cambridge University Press.
- Boakye, N. 2007. Investigating students' beliefs about language learning. *Per Linguam* 23 (2): 1-14.
- Botha, H.L. 1987. The role of error correction in communicative language teaching. *Per Linguam* 2 (3): 46-51.
- Brown, J.D. 2001. *Using surveys in language programs*. Cambridge, UK: Cambridge University Press.
- Carmines, E.G. and Zeller, R.A. 1979. *Reliability and validity assessment*. Beverley Hills, California: Sage.
- Carroll, J. B. 1981. Twenty-five years of research in foreign language aptitude. In K. C. Diller (ed.), *Individual differences and universals in language learning aptitude*. Rowley, MA: Newbury House.
- Clement, C., Dörnyei, Z. and Noels, K.A. 1994. Motivation, self-confidence, and group cohesion in the foreign language classroom. *Language Learning* 44 (2): 417-448.
- Coetzee-Van Rooy, S. 2002. Cultural identity profiles of Afrikaans and Southern Sotho learners of English: Resource or hazard? *World Englishes* 1 (21): 63-81.

- Coetzee-Van Rooy, S. 2006. Integrativeness: untenable for world Englishes learners? *World Englishes* 25 (3/4): 437-450.
- Coetzee-Van Rooy, S. 2011. Discrepancies between perceptions of English proficiency and scores on English tests: Implications for teaching English in South Africa. *Journal for Language Teaching* 45 (2): 151-181.
- Collins Cobuild Advanced Learner's English Dictionary. 2006. 5th edition. Bishopbriggs, Glasgow: HarperCollins.
- Cito. 2013. *TiaPlus test item analysis*. Arnhem: Cito Measurement and Research Department.
- Cunningham, J.B and Aldrich, J.O. 2012. *Using SPSS: An interactive hands-on approach*. California: Sage.
- DBE (Department of Education). 1997. *Language-in-education policy 14 July 1997*. Published in terms of section 3(4) (m) of the National Education Policy Act, 1996 (Act 27 of 1996). *Government Gazette*, 18546: 19 December 1997.
- DBE (Department of Basic Education). 2011. *NCS Curriculum and Assessment Policy Statement: English Home Language (Senior Phase)*. Pretoria: Government Printing Works.
- DBE (Department of Basic Education). 2013. *Manual for teaching English across the curriculum 2013*. Pretoria: Department of Basic Education.
- DBE (Department of Basic Education). 2014a. *National policy on the conduct, administration and management of the Annual National Assessment (ANA)*. Pretoria: Department of Basic Education.
- DBE (Department of Basic Education). 2014b. *Manual for teaching English across the curriculum: Book 2*. Pretoria: Department of Basic Education.

- De Reuck, C. 2014. *UFS Postgraduate PULP*. Bloemfontein: University of the Free State.
- Dörnyei, Z. 1994. Understanding L2 motivation: On with the challenge! *The Modern Language Journal* 78 (4): 515-523.
- Dörnyei, Z. and Csizer, K. 1998. Ten commandments for motivating language learners: Results of an empirical study. *Language Teaching Research* 2 (3): 203-229.
- Dörnyei, Z. 2005. *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, New Jersey: Lawrence Erlbaum.
- Dörnyei, Z. 2006. Individual differences in second language acquisition. *AILA Review* 19: 42-68.
- Dörnyei, Z. 2007. *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. New York: Oxford University Press.
- Dörnyei, Z. 2008. *Comparative survey project in Japan, China and Iran*. Available: <https://www.zoltandornyei.co.uk/motivation-questionnaires> (Accessed 15 August 2016).
- Dörnyei, Z. 2009a. The L2 motivational self system. In Z. Dörnyei and E. Ushioda (eds.), *Motivation, language identity and the L2 self*. Pp. 9–42. Bristol: Multilingual Matters.
- Dörnyei, Z. 2009b. Motivation and the vision of knowing a second language. In B. Beaven (ed.), *IATEFL Exeter conference selections*. Pp. 16-22. Canterbury: IATEFL.
- Dörnyei, Z. and Csizer, K. 2012. How to design and analyse surveys in second language acquisition research. In A. Mackey and S.M. Gass (ed.), *Research methods in second language acquisition: A practical guide*. 1st edition. Pp. 79-94. Malden, MA: Blackwell.

- Duckworth, A.L., Peterson, C., Matthews, M.D. and Kelly D.R. 2007. Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology* 92 (6): 1087-1101.
- Du Plessis, C. 2012. The design, refinement and reception of a test of academic literacy for postgraduate students. (MA dissertation). Bloemfontein: University of the Free State.
- Du Plessis, C. 2014. Issues of validity and generalisability in the Grade 12 English Home Language examination. *Per Linguam* 30 (2): 1-19.
- Ellis, R. 1991. The interaction hypothesis: A critical evaluation. (Paper presented at the Regional Language Centre Seminar held in Singapore in April 1991.)
- Ellis, R. 2008. Learner beliefs and language learning. *Asian EFL Journal* 10 (4): 7-25.
- Faculty Innovation Center. 2017. *Interpreting test results*. Available: <http://www.facultyinnovate.utexas.edu> (Accessed 15 June 2017).
- Foster, J.J. 2001. *Data analysis using SPSS for Windows 8 to 10: A beginner's guide*. London: Sage.
- Gardner, R.C. 1979. Social psychological aspects of second language acquisition. In H. Giles and St. Clair, R. (eds.), *Language and social psychology*. Oxford: Basil Blackwell.
- Gardner, R.C. 1985. *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- Gardner R.C. and Lalonde R.N. 1985. Second language acquisition. (Paper presented at the annual convention of the American Psychological Association held in Los Angeles in August 1985).

- Gardner, R.C. and Tremblay, P.F. 1994. On motivation: measurement and conceptual considerations. *Modern Language Journal* 78: 524-527.
- Gardner, R.C. 2004. *Attitude/motivation test battery: International AMTB research project*. Available: <http://publish.uwo.ca/~gardner/docs/englishamtb.pdf> (Accessed 15 August 2016).
- Gardner, R.C. 2005. Integrative motivation and second language acquisition. (Paper presented at the Canadian Association of Applied Linguistics/Canadian Linguistics Association Joint Plenary Talk held in London, Canada in May 2005). University of Western Ontario.
- Gardner, R.C. 2007. Motivation and second language acquisition. *Porta Linguarum* 8: 9-20.
- Gardner, R.C. 2009. Gardner and Lambert (1959): Fifty years and counting. (Paper presented at the annual meetings of the Canadian Association of Applied Linguistics held in Ottawa in May 2009). University of Western Ontario.
- Gass, S., Behney, J. and Plonsky, L. 2013. *Second language acquisition: An introductory course*. New York: Routledge.
- George, D. and Mallery, P. 1995. *SPSS/PC+ step by step: A simple guide and reference*. Belmont, California: Wadsworth.
- Gilbert, N. and Stoneman, P. 2016. *Researching social life*. London: Sage.
- Griffiths, C. 2006. Strategies for successful learning in an English-speaking environment. *Journal of Asia TEFL* 3 (2): 141-163.
- Griffiths, C. (ed.). 2008. *Lessons from good language learners*. Cambridge: Cambridge University Press.

- Griffiths, C. 2008. Strategies and good language learners. In C. Griffiths (ed.), *Lessons from good language learners*. Pp. 83–98. New York: Cambridge University Press.
- Griffiths, C. and Oxford, R. 2014. Twenty-first century landscape of language learning strategies. *System*. (43): 1-10.
- Gruhn, S. 2015. The initial validation of a Test of Emergent Literacy (TEL). (MA dissertation). Groningen: Rijksuniversiteit Groningen.
- Gruhn, S. and Weideman, A. 2017. The initial validation of a Test of Emergent Literacy. *Per Linguam* 33 (1): 25-53.
- Gumbaridze, J. 2012. Error correction in EFL speaking classrooms. *Elsevier*. 70: 1661-1663.
- Guyer, R., and Thompson, N.A. 2013. *User's manual for Iteman 4.3*. Woodbury, MN: Assessment Systems Corporations.
- Hart, C. 1998. *Doing a literature review: Realising the social science research imagination*. London: Sage.
- Heo, Y.C. 2006. Content-based instruction. *Hawaii pacific University TESOL Working Papers Series* 4 (2): 25-31.
- Horwitz, E.K. 1987. Surveying student beliefs about language learning. In A. Wenden and R. Rubin (eds.), *Learner strategies in language learning*. Pp. 119–129. London: Prentice Hall International.
- Horwitz, E.K. 1998. The beliefs about language learning of beginning University foreign language students. *The Modern Language Journal*. 3 (72): 283-294.
- Horwitz, E.K. 1999. Cultural and situation influences on foreign language learners' beliefs about language learning: A review of BALLI studies. *System* 27 (4): 557-576.

- Huang, Q. 2009. Accuracy & fluency – Inspiration from error-correction of Interlanguage Theory. *Asian Social Science*. 2 (5): 84-86.
- ICELDA (Inter-institutional Centre for Language Development and Assessment). 2017. Language test development research. Available: <http://icelda.sun.ac.za/> (Accessed 24 January 2017).
- Incecay, G. 2011. Pre-service teachers' language learning beliefs and effects of these beliefs on their practice teaching. *Elsevier* 15 (2011): 128-133.
- Jensen, E.A. and Laurie, C. 2016. *Doing real research: A practical guide to social research*. London: Sage.
- Johnson, R.B. and Christensen, L. 2014. *Quantitative, qualitative and mixed approaches*. 5th edition. California. Sage.
- Karaoglu, S. 2008. *Motivating language learners to succeed*. Available: [http://www.tesol.org/read-and-publish/journals/other-serial-publications/compleat-links/compleat-links-volume-5-issue-2-\(june-2008\)](http://www.tesol.org/read-and-publish/journals/other-serial-publications/compleat-links/compleat-links-volume-5-issue-2-(june-2008)) (Accessed 18 June 2018).
- Kazantseva, E.A., Valiakhmetova, E.K., Minisheva L.V., Anokhina, S.V. and Latypova, E.M. 2016. A survey-based study of motivation and attitude to learning a second language at Ufa State University of Economics and Service. *Global Media Journal* S2 (8): 9.
- Keller, J.M. 1983. Motivational design of instruction. In C.M. Reigeluth (ed.), *Instructional design theories and models*. Hillsdale, NJ: Erlbaum.
- Kuntz, P.S. 1996. Beliefs about language learning: The Horwitz model (Report). Washington: ERIC.

- Larsen-Freeman, D. 2014. Teaching grammar. In M. Celce-Marcia, D.M. Brinton and Snow, M.A. (eds.), *Teaching English as a second or foreign language*. 4th Edition. Boston, MA: National Geographic Learning.
- Lepota, B. and Weideman, A. 2002. Our ways of learning language. *Journal for Language Teaching* 3&4 (36): 206-219.
- Little, D. and Singleton, D. 1990. Cognitive style and learning approach. In R. Duda and P. Riley (eds.), *Learning styles*. Pp. 11-19. Nancy, France: University of Nancy.
- Littlewood, W. 2004. The task-based approach: Some questions and suggestions. *ELT Journal* 4 (48): 319-326.
- Littlewood, W. 2012. Communication-oriented language teaching: Where are we now? Where do we go from here? *Cambridge Journals* 3 (47): 349-362.
- Madiba, M. 2013. Academic literacy at Foundation Phase level: An exploratory Investigation (Report). Pretoria: Umalusi.
- Mackey, A. and Gass, S. 2005. *Second language research: Methodology and design*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Mhlongo, G.J. 2014. The impact of an academic literacy intervention on the academic literacy levels of first year students: The NWU (Vaal Triangle Campus) experience. (MA dissertation). Vanderbijlpark: North-West University.
- Minitab. 2018. Interpret all statistics and graphs for two-way ANOVA. Available: <http://support.minitab.com/en-us/minitab-express/1/help-and-how-to/modeling-statistics/anova/how-to/two-way-anova/interpret-the-results/all-statistics-and-graphs/> (Accessed 5 April 2018).
- Myburgh, J. 2015. The assessment of academic literacy at pre-university level: A comparison of the utility of academic literacy tests and Grade 10 Home

- language results. (MA dissertation). Bloemfontein: University of the Free State.
- Najeeb, S.S.R. 2013. Learner autonomy in language learning. *Elsevier* 70: 1238-1242.
- Nation, P. 2005. Ten best ideas for teaching vocabulary. *The Japan Association for Language Teaching* 7 (29): 5-6.
- Ntete. S. 2001. Unathi: The case study of a South African ESL learner who excels at writing in English. *Per Linguam* 17 (2): 37-46.
- O’Leary, Z. 2014. *Doing your research project*. 2nd Edition. London: Sage.
- Onozawa, C. 2010. *Promoting autonomy in the language class – How autonomy can be applied in the language class*. Available: <http://www.kyoai.ac.jp/college/ronshuu/no-10/onozawa1.pdf> (Accessed 25 October 2017).
- Oxford, R. 1990. *Language learning strategies: What every teacher should know*. Boston, Massachusetts: Heinle and Heinle Publishers.
- Parkinson, J., Jackson, L., Kirkland, T. and Padayachee, V. 2008. Evaluating the effectiveness of an academic literacy course: Do students benefit? *Per Linguam* 24 (1): 11-29.
- Pallant, P. 2010. *SPSS survival manual: a step by step guide to data analysis using SPSS*. 4th Edition. Berkshire: Open University Press.
- Paltridge, B. and Phakiti, A. 2010. *Continuum companion to research methods in applied linguistics*. London and New York: Continuum.
- Plano Clark, V.L. and Ivankova, N.V. 2016. *Mixed methods research: A guide to the field*. London: Sage.

- Pretorius, E., Jackson, M., McKay, V., Murray, S., Spaul, N. 2016. Teaching reading (and writing) in the foundation phase: A concept note (Report). Stellenbosch: Research on socio-economic policy.
- Republic of South Africa. 1996. *Constitution of the Republic of South Africa*. Act No. 108 of 1996. Pretoria: Government Printers.
- Richards, J.C. and Rodgers, T.S. 2001. *Approaches and methods in language teaching: A description and analysis*. New York: Cambridge University Press.
- Richards, J.C. and Schmidt, R. 2010. *Longman dictionary of language teaching and applied linguistics*. 4th Edition. London: Pearson.
- Ryan, R.M. and Deci, D.L. 2000. Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology* 25: 54-67.
- Samad, A.A., Etemadzadeh A. and Far, H.R. 2012. Motivation and language proficiency: Instrumental and integrative aspects. *Procedia* 66 (1): 432-440.
- Sharma, S. 1996. *Applied multivariate techniques*. New York: John Wiley and Sons.
- Skehan, P. 2003. Task-based instruction. *Cambridge Journals* 3 (47): 349-362.
- Shoib, C. and Dörnyei, Z. 2005. Affect in lifelong learning: Exploring L2 motivation as a dynamic process. In P. Benson and Nunan, D. (ed.), *Learners' stories: Difference and diversity in language learning*. Pp. 22–36. Cambridge: Cambridge University Press.
- Spaul, N. 2015. Schooling in South Africa: How low-quality education becomes a poverty trap. *South African Child Gauge*: 34-41.
- Spaul, N., Van der Berg, S., Will, G., Gustafsson, M. and Kotze, J. 2016. *Laying firm foundations. Getting reading right*. Stellenbosch: RESEP.

- Sykes, A.B. 2015. The good language learner revised: A case study. *Journal of Language Teaching and Research* 6 (4): 713-720.
- Thompson, N. 2017. *Interpreting item statistics from classical test theory*. Available: <http://www.assess.com/interpreting-item-statistics-from-classical-test-theory/> (Accessed 20 June 2017).
- University of the Free State. 2017. *Course overviews for studies in English language and literature: undergraduate courses*. Available: <https://www.ufs.ac.za/humanities/departments-and-divisions/english-home/academic/undergraduate-majors> (Accessed 28 June 2017).
- Van Dyk, T. 2005. Towards providing effective academic literacy intervention. *Per Linguam* 21 (2): 38-51.
- Van Rooy, B. and Coetzee-Van Rooy, S. 2015. The language issue and academic performance at a South African university. *Southern African Linguistics and Applied Language Studies* 33 (1): 31-46.
- You, C.J. and Dörnyei, Z. 2014. Language learning motivation in China: Results of a large-scale stratified survey. *Applied Linguistics* 37 (4): 495-519.
- Welman, J.C., Kruger, F., and Mitchell, B. 2005. *Research methodology*. 3rd Edition. Cape Town: Oxford University Press.
- Weideman, A. 2002. *Designing language teaching – On becoming a reflective professional*. Bloemfontein: University of the Free State.
- Weideman, A. 2003a. *Academic literacy: Prepare to learn*. Pretoria: Van Schaik.
- Weideman, A. 2003b. Assessing and developing academic literacy. *Per Linguam* 19 (1&2): 55-65.
- Weideman, A. 2003c. Justifying course and task design in language teaching. *Acta Academica* 25 (3): 26-48.

- Weideman, A. 2006. Assessing academic literacy in a task-based approach. *Language matters* 37 (1): 81-101.
- Weideman, A. and van Dyk, T. (eds.). 2014. *Academic literacy: Test your competence*. Bloemfontein: Geronimo Distribution.
- Weideman, A., Du Plessis C., and Steyn, S. 2017. Diversity, variation and fairness: Equivalence in national level language assessments. *Literator* 38 (1): 1-9.
- Weideman, A. 2017. *Responsible design in applied linguistics: theory and practice*. Cham: Springer Publishing International.
- White, C. 2008. Beliefs and good language learners. In C. Griffiths (ed.), *Lessons from good language learners*. Pp. 121–130. New York: Cambridge University Press.
- Woodrow, L. 2010. Researching motivation. In B. Paltridge and Phakithi, A. (eds.), *Continuum companion to research methods in applied linguistics*. London and New York: Continuum.
- Zhang, S. 2009. The role of input, interaction and output in the development of oral fluency. *English Language Teaching Journal* 4 (2): 91-100.

ANNEXURES

Annexure A

BELIEFS ABOUT LANGUAGE LEARNING AND MOTIVATION INVENTORY-MODIFIED (BALLMI-M) SURVEY QUESTIONNAIRE

Dear student

Motivation to learn a language and beliefs about language learning may influence the progress of language learners and constitute an important area of research. The aim of the survey that follows is to investigate what motivates language learning by students, and the language learning beliefs held by them.

The findings will be used solely for research purposes and all responses and information will be handled confidentially. Please note that your honest responses are valuable and will make a meaningful contribution towards the success of the study. **Thank you in advance.**

Please complete the consent section below and also the questionnaire handed to you.

<p>I herewith agree to participate in the survey.</p> <p>Signature of participating student: _____</p> <p>Student no.: _____</p> <p>Date of survey: _____ UFS campus: _____</p>

Instructions

<p>Select the answers of your choice from the options provided. Enter each answer using a pencil on the pink optical sheet. Only one answer per question may be selected.</p>

1. Gender

Male	A
Female	B

2. Race

Asian	A
Black	B
Coloured	C
Indian	D
White	E
Other	F

3. Age

Younger than 18 years	A
18-20 years	B
21-23 years	C
24-27 years	D
28 years or older	E

4. Home language?

English	A
Afrikaans	B
IsiZulu	C
Sesotho	D
IsiXhosa	E
Setswana	F
Sepedi	G
SiSwati Tshivenda Xitsonga Chinese Ndebele Other	H

5. At what level did you learn English at primary school?

Home language	A
First additional language	B

6. At what level did you learn English at secondary school?

Home language	A
First additional language	B

To what extent do you agree or disagree with the following statements?		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7	I believe that some people have a special ability for learning English.	A	B	C	D	E
8	My lecturer's passion for English inspires me to learn English	A	B	C	D	E
9	I am the person who is most responsible for my progress in this English course.	A	B	C	D	E
10	The clear learning outcomes keep me motivated.	A	B	C	D	E
11	The most important part of learning another language is learning its vocabulary.	A	B	C	D	E
12	Studying English is important because it will help me to understand English people better.	A	B	C	D	E
13	The better the kind of English used by my lecturer, the more motivated I am to learn English.	A	B	C	D	E
14	My English lecturer helps to put everyone at ease.	A	B	C	D	E
15	You shouldn't say anything in English until you can say it correctly.	A	B	C	D	E

To what extent do you agree or disagree with the following statements?		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
16	My English lecturer always welcomes inputs from learners.	A	B	C	D	E
17	English class activities accommodate a wide range of individuals' abilities.	A	B	C	D	E
18	It is important for me to know English in order to be more like an English person.	A	B	C	D	E
19	The most important part of learning another language is learning its grammar.	A	B	C	D	E
20	I look forward to going to class because my English lecturer has a dynamic teaching style.	A	B	C	D	E
21	My English lecturer encourages me to think independently.	A	B	C	D	E
22	It is important for me to know English because one day I want to become part of an English community.	A	B	C	D	E
23	It is easier for children than for adults to learn English as another language.	A	B	C	D	E
24	There is a relaxed atmosphere in the English class.	A	B	C	D	E
25	I make a point of trying to understand new English words I come across every day.	A	B	C	D	E
26	I enjoy the course content.	A	B	C	D	E
27	I need to spend time memorizing the meanings of new words.	A	B	C	D	E
28	I want to learn English so well that it will feel natural to me when I use English.	A	B	C	D	E
29	I enjoy participating in group activities in class.	A	B	C	D	E
30	I love to try my best when doing an English task.	A	B	C	D	E
31	Guessing the meaning of the word from context helps to improve one's vocabulary.	A	B	C	D	E
32	Studying English is important to me because I think it will someday be useful in getting a good job.	A	B	C	D	E
33	When I have a problem understanding something in my English class, I can always ask my lecturer for help.	A	B	C	D	E
34	I feel comfortable in my English class.	A	B	C	D	E
35	Learning English is different from learning other academic subjects.	A	B	C	D	E
36	Practical tasks make learning enjoyable.	A	B	C	D	E
37	If I am fluent in English people will respect me more.	A	B	C	D	E
38	I am confident I will be able to use English very well if I continue studying English.	A	B	C	D	E
39	The most important part of learning English is learning how to translate from my home language into English.	A	B	C	D	E
40	I find it important to create opportunities for myself to use English outside of class.	A	B	C	D	E
41	The course design motivates me to learn English.	A	B	C	D	E
42	Women are better than men at learning languages.	A	B	C	D	E
43	I would like to learn English so that I can study successfully.	A	B	C	D	E
44	My English lecturer encourages me to express myself in English.	A	B	C	D	E

45	I should rely on my lecturer to explain the work to me.	A	B	C	D	E
To what extent do you agree or disagree with the following statements?		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
46	I really like my English lecturer.	A	B	C	D	E
47	If I make more effort, I am sure I will be able to master English.	A	B	C	D	E
48	The most important part of learning English is to become fluent in communicating.	A	B	C	D	E
49	I really work hard to learn English.	A	B	C	D	E
50	I am sure I have a good ability to learn English.	A	B	C	D	E
51	English is one of the most difficult languages to learn for someone who does not have it as a first language.	A	B	C	D	E
52	I find the skills developed in the course relevant to my needs.	A	B	C	D	E
53	I have to learn English because without passing the English course I cannot get my degree.	A	B	C	D	E
54	I like to rehearse in my mind what I want to say in English before I say it.	A	B	C	D	E
55	Practising speaking English with my friends gives me confidence to express myself in English.	A	B	C	D	E
56	I find that I can relate to the topics discussed in class.	A	B	C	D	E
57	I like to have the lecturer correct every error I make, so that I don't learn bad habits.	A	B	C	D	E
58	The course helps me to learn other important things not related to language skills.	A	B	C	D	E
59	My English lecturer makes positive comments when giving feedback.	A	B	C	D	E
60	Regularly repeating the work will help me to improve my English.	A	B	C	D	E

61. What would you say has helped you to develop your level of English proficiency?

62. Which English skills do you think need more development and what kind of assistance do you think can help you to improve those skills?

Annexure B

ENGE1608 CLASS PILOT SURVEY REPORT OF UNREFINED MOTIVATION SCALE

Reliability of unrefined motivation scale of BALLMI-M used in the pilot study on 8 September 2016, UFS (Bloemfontein)

Case Processing Summary			
		N	%
Cases	Valid	151	81.2
	Excluded ^a	35	18.8
	Total	186	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.874	.899	51

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
195.57	299.393	17.303	51

Item Statistics			
	Mean	Std. Deviation	N
Q8	3.93	.950	151
RQ9	3.65	1.196	151
RQ10	2.42	1.009	151
Q11	3.83	.820	151
Q12	3.81	1.057	151
Q14	4.09	.778	151
Q15	4.01	.663	151
Q16	4.38	.701	151
Q17	3.87	.754	151
Q18	2.85	1.185	151
Q20	3.79	.838	151
RQ21	4.21	.919	151
Q22	3.83	.806	151
RQ23	3.47	1.057	151
Q24	3.24	1.182	151
RQ26	2.86	1.260	151
Q27	4.09	.702	151
Q28	4.05	.764	151
Q29	3.81	.763	151
Q30	4.32	.760	151
Q32	3.22	1.058	151
Q33	3.05	1.229	151
Q34	4.22	.701	151
RQ35	3.83	.998	151
Q36	4.45	.789	151
Q38	4.15	.823	151
Q40	4.14	.817	151
RQ42	3.57	1.017	151
Q44	3.92	.837	151

Q46	2.74	1.214	151
RQ48	4.26	.905	151
RQ49	3.50	1.131	151
RQ50	3.59	1.139	151
Q51	3.66	.872	151
Q52	4.08	.853	151
Q54	3.87	.814	151
Q55	4.26	.781	151
Q56	4.35	.732	151
Q57	3.88	.816	151
Q58	4.20	.673	151
Q59	3.90	.772	151
Q60	3.89	1.027	151
Q62	4.24	1.100	151
Q63	4.23	.750	151
Q64	3.81	.852	151
RQ65	3.64	1.048	151
RQ67	4.66	.610	151
Q68	4.26	.763	151
Q69	3.76	.838	151
Q71	4.19	.734	151
RQ72	3.54	1.031	151

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.148	-.290	.591	.880	-2.039	.023	51

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q8	191.64	285.020	.420	.870
RQ9	191.92	296.220	.042	.878
RQ10	193.15	302.677	-.123	.880
Q11	191.74	285.236	.487	.870
Q12	191.76	288.743	.266	.873
Q14	191.48	284.998	.525	.869
Q15	191.56	289.368	.425	.871
Q16	191.19	288.259	.447	.871
Q17	191.70	288.544	.401	.871
Q18	192.72	295.632	.058	.878
Q20	191.78	283.999	.521	.869
RQ21	191.36	287.980	.339	.872
Q22	191.74	285.580	.483	.870
RQ23	192.10	292.877	.149	.875
Q24	192.33	290.796	.179	.875
RQ26	192.71	297.395	.009	.879
Q27	191.48	289.251	.404	.871
Q28	191.52	286.358	.481	.870
Q29	191.76	283.863	.581	.869
Q30	191.25	284.536	.557	.869
Q32	192.35	297.336	.026	.877
Q33	192.52	293.304	.109	.877
Q34	191.35	284.683	.601	.869
RQ35	191.74	287.566	.320	.872
Q36	191.12	286.172	.472	.870
Q38	191.42	285.685	.469	.870
Q40	191.43	284.993	.498	.870
RQ42	192.00	288.453	.287	.873
Q44	191.65	287.536	.393	.871
Q46	192.83	298.317	-.009	.879
RQ48	191.31	288.362	.332	.872
RQ49	192.07	296.401	.044	.877
RQ50	191.98	287.246	.281	.873

Q51	191.91	282.426	.553	.869
Q52	191.49	283.598	.525	.869
Q54	191.70	283.451	.558	.869
Q55	191.30	287.280	.435	.871
Q56	191.22	284.545	.579	.869
Q57	191.69	284.149	.530	.869
Q58	191.37	288.462	.458	.871
Q59	191.67	285.063	.527	.869
Q60	191.68	290.954	.211	.874
Q62	191.33	288.796	.251	.873
Q63	191.34	285.881	.511	.870
Q64	191.75	285.466	.459	.870
RQ65	191.93	290.295	.224	.874
RQ67	190.91	289.511	.458	.871
Q68	191.30	285.053	.534	.869
Q69	191.81	286.170	.441	.870
Q71	191.38	284.918	.562	.869
RQ72	192.03	293.666	.132	.875

Annexure C

ENGE1608 CLASS PILOT SURVEY REPORT OF UNREFINED LLBS SCALE

Reliability of unrefined LLBs scale of BALLMI-M used in the pilot study on 8 September 2016,

UFS (Bloemfontein)

Case Processing Summary			
		N	%
Cases	Valid	171	91.9
	Excluded ^a	15	8.1
	Total	186	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.564	.584	15

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
50.15	37.255	6.104	15

Item Statistics			
	Mean	Std. Deviation	N
Q7	3.34	1.179	171
Q13	4.08	.833	171
Q19	2.12	1.199	171
Q25	3.64	.865	171
Q31	3.74	1.214	171
Q37	3.34	1.223	171
Q39	3.54	1.053	171
Q41	3.37	1.148	171
Q43	2.28	1.113	171
Q45	3.12	1.223	171
Q53	3.84	.986	171
Q61	2.70	1.188	171
Q66	3.54	1.102	171
Q70	3.81	.875	171
Q73	3.68	.937	171

Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.086	-.130	.288	.418	-2.209	.011	15

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q7	46.81	32.215	.273	.129	.534
Q13	46.07	33.666	.299	.209	.535
Q19	48.02	33.870	.140	.128	.562

Q25	46.50	34.663	.181	.168	.552
Q31	46.40	33.548	.159	.182	.558
Q37	46.81	34.663	.076	.068	.575
Q39	46.61	32.263	.325	.200	.525
Q41	46.77	31.177	.371	.216	.513
Q43	47.87	35.435	.044	.091	.578
Q45	47.02	34.529	.086	.188	.573
Q53	46.31	32.945	.295	.189	.532
Q61	47.44	33.072	.203	.160	.548
Q66	46.61	33.451	.203	.203	.548
Q70	46.33	33.929	.251	.122	.541
Q73	46.47	32.533	.360	.246	.522

Annexure D

ENGE1608 CLASS PILOT SURVEY REPORT OF UNREFINED BALLMI-M

Reliability of BALLMI-M used in the pilot study on 8 September 2016, UFS (Bloemfontein)

Case Processing Summary			
		N	%
Cases	Valid	145	78.0
	Excluded ^a	41	22.0
	Total	186	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.872	.900	67

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
249.76	430.462	20.748	67

Item Statistics			
	Mean	Std. Deviation	N
Q7	3.32	1.178	145
Q8	3.94	.963	145
Q11	3.85	.828	145
Q12	3.82	1.039	145
Q13	4.15	.730	145
Q14	4.10	.761	145
Q15	4.03	.666	145
Q16	4.39	.709	145
Q17	3.88	.763	145
Q18	2.88	1.195	145
Q19	2.10	1.151	145
Q20	3.79	.843	145
Q22	3.84	.796	145
Q24	3.23	1.190	145
Q25	3.66	.836	145
Q27	4.08	.702	145
Q28	4.04	.772	145
Q29	3.81	.766	145
Q30	4.30	.765	145
Q31	3.77	1.189	145
Q32	3.22	1.057	145
Q33	3.03	1.224	145
Q34	4.23	.714	145
Q36	4.45	.790	145
Q37	3.34	1.233	145
Q38	4.15	.828	145
Q39	3.58	1.025	145
Q40	4.14	.825	145
Q41	3.32	1.111	145
Q43	2.27	1.107	145

Q44	3.92	.834	145
Q45	3.13	1.174	145
Q46	2.77	1.218	145
Q47	3.82	.977	145
Q51	3.68	.841	145
Q52	4.09	.841	145
Q53	3.86	.986	145
Q54	3.89	.792	145
Q55	4.29	.735	145
Q56	4.34	.738	145
Q57	3.88	.815	145
Q58	4.20	.673	145
Q59	3.88	.777	145
Q60	3.90	1.012	145
Q61	2.63	1.160	145
Q62	4.25	1.077	145
Q63	4.23	.752	145
Q64	3.82	.855	145
Q66	3.52	1.100	145
Q68	4.27	.766	145
Q69	3.77	.842	145
Q70	3.81	.852	145
Q71	4.19	.736	145
Q73	3.66	.952	145
RQ9	3.66	1.197	145
RQ10	2.43	1.012	145
RQ21	4.20	.932	145
RQ23	3.48	1.068	145
RQ26	2.84	1.245	145
RQ35	3.84	.998	145
RQ48	4.30	.859	145
RQ49	3.48	1.131	145
RQ50	3.60	1.151	145
RQ65	3.64	1.065	145
RQ67	4.67	.602	145
RQ72	3.53	1.041	145
RQ42	3.59	1.018	145

Summary Item Statistics							N of Items
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	
Inter-Item Correlations	.118	-.382	.570	.952	-1.494	.023	67

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q7	246.43	419.247	.204	.872
Q8	245.81	413.264	.416	.869
Q11	245.91	414.541	.452	.869
Q12	245.94	416.142	.312	.870
Q13	245.61	418.212	.393	.870
Q14	245.66	412.714	.555	.868
Q15	245.73	418.851	.410	.870
Q16	245.37	417.763	.421	.869
Q17	245.88	416.840	.419	.869
Q18	246.88	420.910	.166	.873
Q19	247.66	427.350	.038	.875
Q20	245.97	411.999	.519	.868
Q22	245.92	414.076	.486	.868
Q24	246.52	416.501	.258	.871
Q25	246.10	418.010	.344	.870
Q27	245.68	418.804	.388	.870
Q28	245.72	414.163	.500	.868
Q29	245.95	411.935	.577	.868

Q30	245.46	413.181	.537	.868
Q31	245.99	422.305	.138	.873
Q32	246.54	427.861	.034	.874
Q33	246.73	419.198	.195	.872
Q34	245.53	412.445	.603	.868
Q36	245.31	414.591	.474	.869
Q37	246.41	425.730	.063	.875
Q38	245.61	415.324	.428	.869
Q39	246.18	422.412	.166	.872
Q40	245.61	413.266	.492	.868
Q41	246.43	416.803	.274	.871
Q43	247.49	438.988	-.210	.878
Q44	245.83	414.889	.438	.869
Q45	246.63	434.833	-.117	.877
Q46	246.99	425.403	.071	.874
Q47	245.94	411.142	.464	.868
Q51	246.08	410.701	.559	.867
Q52	245.67	411.084	.548	.868
Q53	245.90	413.574	.397	.869
Q54	245.87	411.101	.584	.867
Q55	245.47	415.390	.485	.869
Q56	245.42	412.245	.590	.868
Q57	245.88	411.243	.561	.867
Q58	245.56	417.012	.473	.869
Q59	245.88	412.512	.549	.868
Q60	245.86	418.953	.253	.871
Q61	247.12	429.859	-.015	.876
Q62	245.51	419.793	.215	.872
Q63	245.53	414.501	.503	.868
Q64	245.94	413.545	.465	.868
Q66	246.23	412.209	.382	.869
Q68	245.49	413.182	.536	.868
Q69	245.99	415.076	.428	.869
Q70	245.95	414.532	.438	.869
Q71	245.57	414.038	.530	.868
Q73	246.10	418.407	.286	.871
RQ9	246.10	430.546	-.031	.876
RQ10	247.33	436.779	-.174	.877
RQ21	245.56	419.540	.263	.871
RQ23	246.28	425.896	.078	.874
RQ26	246.92	427.479	.028	.875
RQ35	245.92	418.007	.281	.871
RQ48	245.46	420.639	.258	.871
RQ49	246.28	428.784	.009	.875
RQ50	246.16	419.509	.204	.872
RQ65	246.12	418.465	.249	.871
RQ67	245.09	419.874	.415	.870
RQ72	246.23	426.580	.065	.874
RQ42	246.17	419.852	.230	.871

Annexure E

ENGE1608 TAL PRE- TEST RESULTS



Classical Item and Test Analysis Report

User Test 1

Report created on 2017/04/17

Iteman: Software for Classical Analysis

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Introduction

This report provides the results of a classical item and test analysis by the computer program Iteman Version 4.3 (Assessment Systems Corporation, 2013) for User Test 1. The output is divided into three sections:

1. Specifications
2. Summary statistics
3. Item-by-item results.

The statistical output is also recorded in a comma-separated value (CSV) file of the same name.

Specifications

The Windows paths for the input files used in this analysis were:

C:\Users\duplessisc\Documents\Postgraduate supervision\PraysGod Mhlongo\Test of Academic Literacy TAL\Iteman data matrix plain text file.txt

C:\Users\duplessisc\Documents\Postgraduate supervision\PraysGod Mhlongo\Test of Academic Literacy TAL\Iteman control file.txt

The Windows paths for the output files produced by this analysis were:

TAL ENGE1608 Bloemfontein Campus February 2017.rtf

TAL ENGE1608 Bloemfontein Campus February 2017.csv

TAL ENGE1608 Bloemfontein Campus February 2017 Scores.csv

Table 1 presents the specifications and basic information concerning the analysis. This provides important documentation of the setup of the program for historical purposes.

Table 1: Specifications

Specification	Value	Specification	Value
Number of examinees	422	Total Items	60
Scored Items	60	Pretest Items	0
Multiple Choice Items	60	Polytomous Items	0
Number of domains	5	External scores	No
Minimum P	0.00	Maximum P	1.00
Minimum item mean	0.00	Maximum item mean	15.00
Minimum item correlation	0.00	Maximum item correlation	1.00
ITEMAN 3.0 Header	No	Exclude omits from option statistics	No
Number of ID columns	0	ID begins in column	0
Responses begin in column	1	Omit character	X
Not Admin character	N	Produce quantile tables	Yes
Correct for spuriousness	Yes	Produce quantile plots	Yes
Save data matrix	No	Include omit codes in matrix	N/A
Include Not Admin codes in matrix	N/A	Include scaled scores for	N/A
Scaling function	N/A	Scaled score setting 1	N/A
Scaled score setting 2	N/A	Dichotomous Classification	Yes
Classify based on	Total Score	Cutpoint	1.000
Low group label	Low	High group label	High
Data is delimited by	N/A	Test for DIF	No
Group status is in column	N/A	Ability levels for DIF	N/A
Group 1 code	N/A	Group 2 code	N/A
Group 1 label	N/A	Group 2 label	N/A

Summary statistics

Table 2 presents the summary statistics of the test, for all items, scored items only, and for each domain (content area). Definitions of these statistics are found in the Iteman manual.

Table 2: Summary statistics

Score	Items	Mean	SD	Min Score	Max Score	Mean P	Mean Rpbis
All items	60	25.562	8.236	7	57	0.426	0.247
Scored Items	60	25.562	8.236	7	57	0.426	0.247
Scrambled	5	2.168	1.418	0	5	0.434	0.242
Vocabulary	10	5.775	1.865	1	10	0.577	0.199
Graphs	8	2.540	1.477	0	7	0.318	0.159
Text comprehension	25	10.877	4.214	1	24	0.435	0.273
Grammar and text relations	12	4.201	2.689	0	12	0.350	0.292

Table 3 presents a reliability analysis of the tests. Alpha (also known as KR-20) is the most commonly used index of reliability, and is therefore used to calculate the standard error of measurement (SEM) on the raw score scale. Also presented are three configurations of split-half reliability, first as uncorrected correlations, and then as Spearman-Brown (S-B) corrected correlations. This is because an uncorrected split-half correlation is referenced to a "test" that only contains half as many items as the full test, and therefore underestimates reliability.

The cutscore on this exam was 1.000, producing a pass rate of 100.0%. The Livingston index of classification consistency at the cut-score was 0.983.

Table 3: Reliability

Score	Alpha	SEM	Split-Half (Random)	Split-Half (First-Last)	Split-Half (Odd-Even)	S-B Random	S-B First-Last	S-B Odd-Even
Scored items	0.829	3.410	0.627	0.639	0.707	0.771	0.780	0.828
Scrambled	0.569	0.932	0.186	0.263	0.445	0.314	0.416	0.616
Vocabulary	0.487	1.336	0.342	0.286	0.331	0.510	0.445	0.497
Graphs	0.264	1.267	0.096	0.177	0.126	0.175	0.300	0.224
Text comprehension	0.730	2.189	0.573	0.559	0.533	0.728	0.718	0.695
Grammar and text relations	0.709	1.449	0.602	0.383	0.669	0.751	0.553	0.802

Table 4 presents the item statistics and flags for the item(s) that were flagged during the analysis

Table 4: Summary Statistics for the Flagged Items

Item ID	P / Item Mean	R	Flag(s)
25	0.223	-0.022	K, LR
47	0.128	0.158	K

Figure 1 displays the distribution of the raw scores for the scored items across all domains. Table 5 displays the frequency distribution for total score shown in Figure 1.

Figure 1: Total score for the scored items

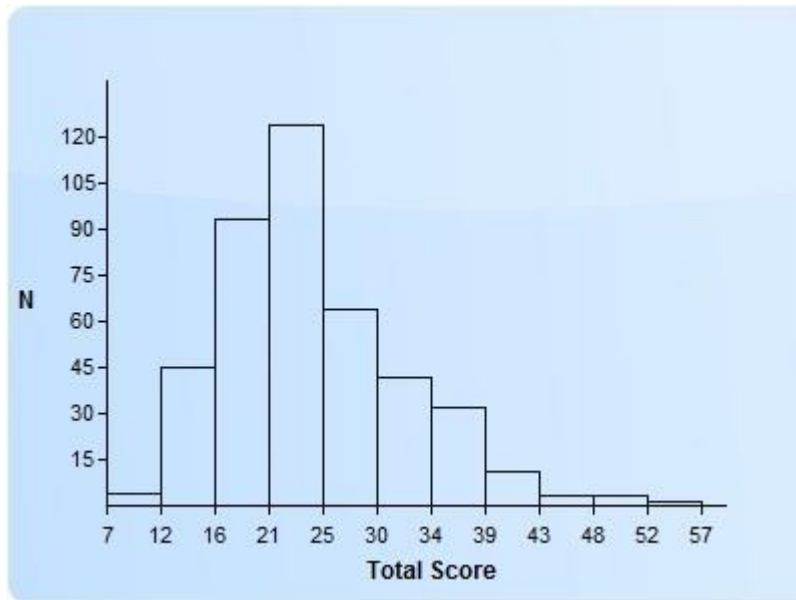


Table 5: Frequency Distribution for Total Score

Range	Frequency
6 to 11	4
12 to 16	45
17 to 21	93
22 to 26	124
27 to 31	64
32 to 36	42
37 to 41	32
42 to 46	11
47 to 51	3
52 to 56	3
57	1

Figure 2 displays the distribution of the raw scores for Scrambled.
Table 6 displays the frequency distribution of domain scores shown in Figure 2.

Figure 2: Raw scores for Scrambled

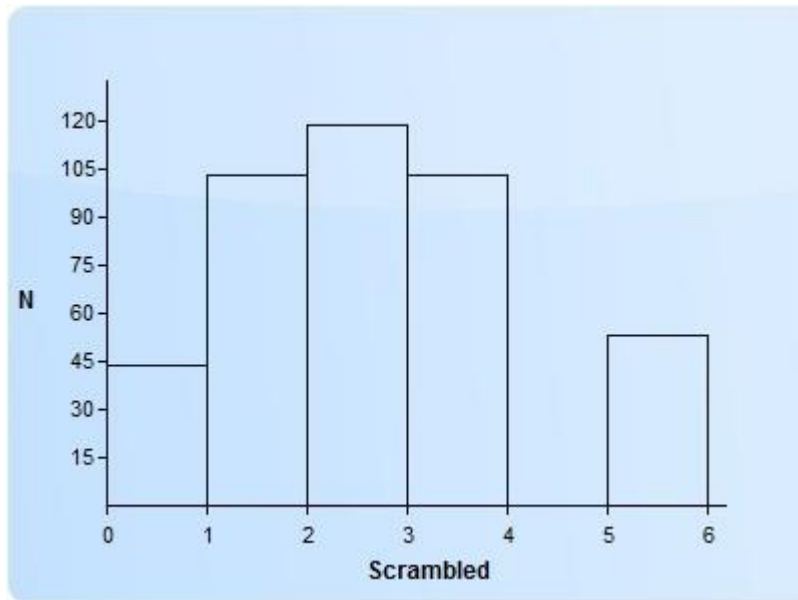


Table 6: Frequency Distribution for Scrambled

Score	Frequency
0	44
1	103
2	119
3	103
4	0
5	53

Figure 3 displays the distribution of the raw scores for Vocabulary.
 Table 7 displays the frequency distribution of domain scores shown in Figure 3.

Figure 3: Raw scores for Vocabulary

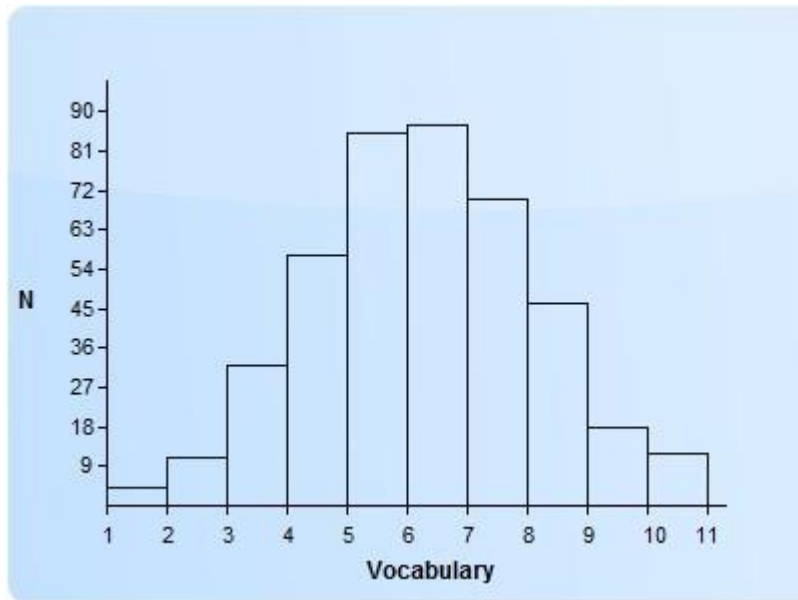


Table 7: Frequency Distribution for Vocabulary

Score	Frequency
1	4
2	11
3	32
4	57
5	85
6	87
7	70
8	46
9	18
10	12

Figure 4 displays the distribution of the raw scores for Graphs.
Table 8 displays the frequency distribution of domain scores shown in Figure 4.

Figure 4: Raw scores for Graphs

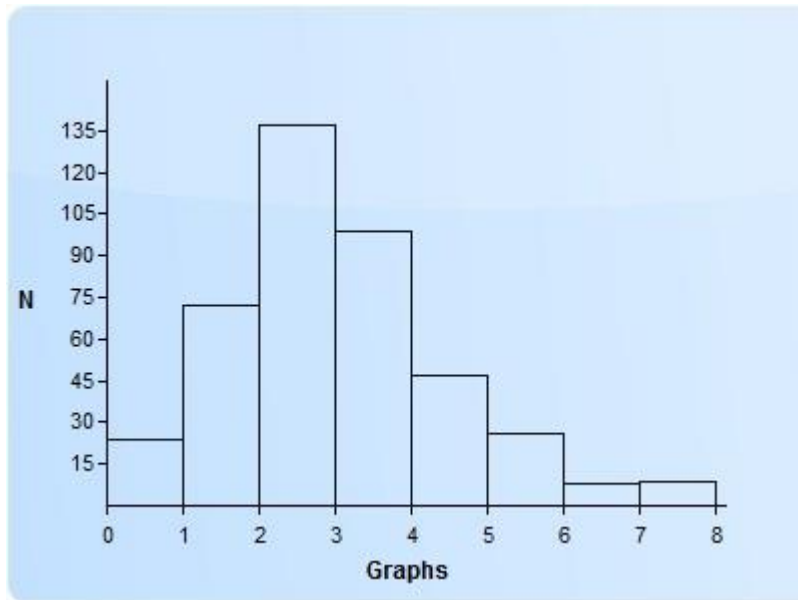


Table 8: Frequency Distribution for Graphs

Score	Frequency
0	24
1	72
2	137
3	99
4	47
5	26
6	8
7	9

Figure 5 displays the distribution of the raw scores for Text comprehension. Table 9 displays the frequency distribution of domain scores shown in Figure 5.

Figure 5: Raw scores for Text comprehension

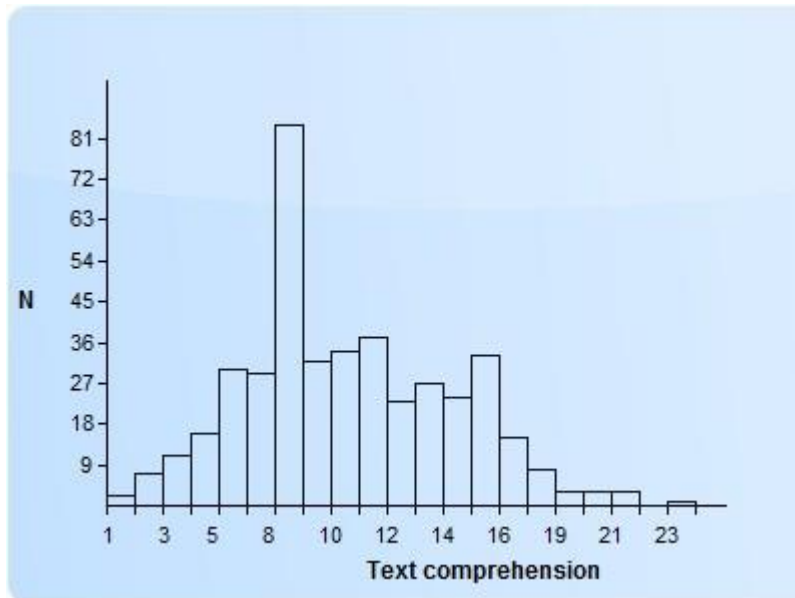


Table 9: Frequency Distribution for Text comprehension

Range	Frequency
0 to 2	2
3	7
4	11
5	16
6	30
7	29
8 to 9	84
10	32
11	34
12	37
13	23
14	27
15	24
16 to 17	33
18	15
19	8
20	3
21	3
22	3
23	0
24	1

Figure 6 displays the distribution of the raw scores for Grammar and text relations. Table 10 displays the frequency distribution of domain scores shown in Figure 6.

Figure 6: Raw scores for Grammar and text relations

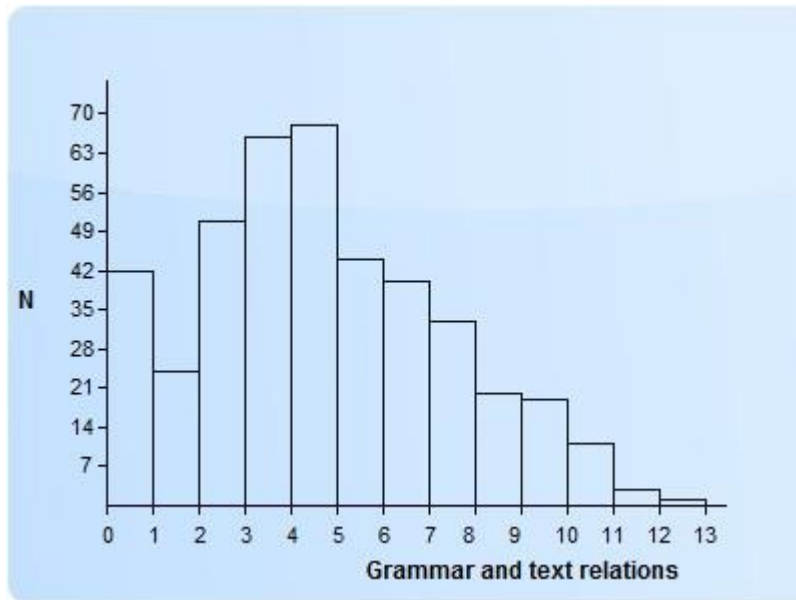


Table 10: Frequency Distribution for Grammar and text relations

Score	Frequency
0	42
1	24
2	51
3	66
4	68
5	44
6	40
7	33
8	20
9	19
10	11
11	3
12	1

Table 11 displays the correlations of domain scores.

Table 11: Correlations for Domain Scores

Domain	Scrambled	Vocabulary	Graphs	Text comprehension	Grammar and text relations
Scrambled	1.000	0.114	0.158	0.368	0.215
Vocabulary	0.114	1.000	0.204	0.449	0.256
Graphs	0.158	0.204	1.000	0.360	0.282
Text comprehension	0.368	0.449	0.360	1.000	0.459
Grammar and text relations	0.215	0.256	0.282	0.459	1.000

Figure 7 displays the distribution of the P values for the dichotomously scored items (correct/incorrect).

Table 12 displays the frequency distribution of the P values shown in Figure 7.

Figure 7: P values for the scored items

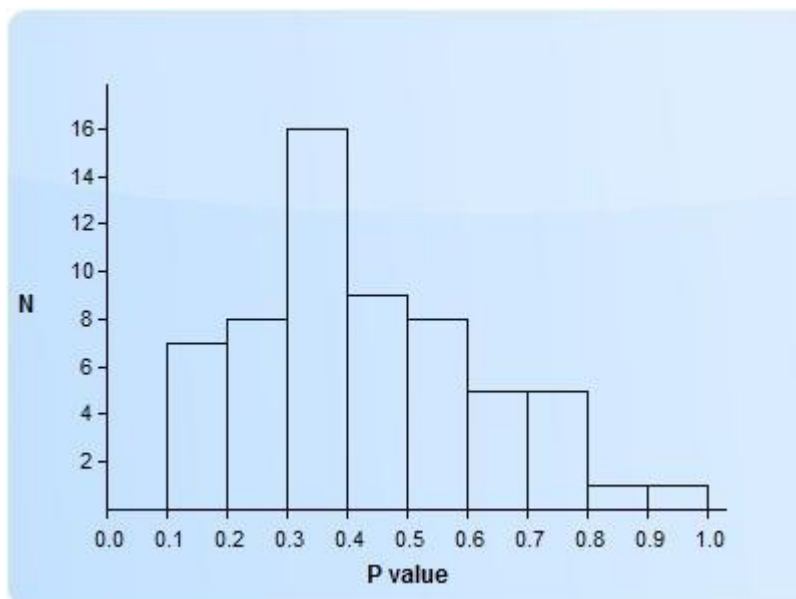


Table 12: Frequency Distribution for the P values

Score	Frequency
0.0 to 0.1	0
0.1 to 0.2	7
0.2 to 0.3	8
0.3 to 0.4	16
0.4 to 0.5	9
0.5 to 0.6	8
0.6 to 0.7	5
0.7 to 0.8	5
0.8 to 0.9	1
0.9 to 1.0	1

Figure 8 displays the distribution of the Point-Biserial Correlations for the dichotomously scored items (correct/incorrect). Table 13 displays the frequency distribution of the Point-Biserial correlations shown in Figure 8.

Figure 8: Rpbis for the scored items

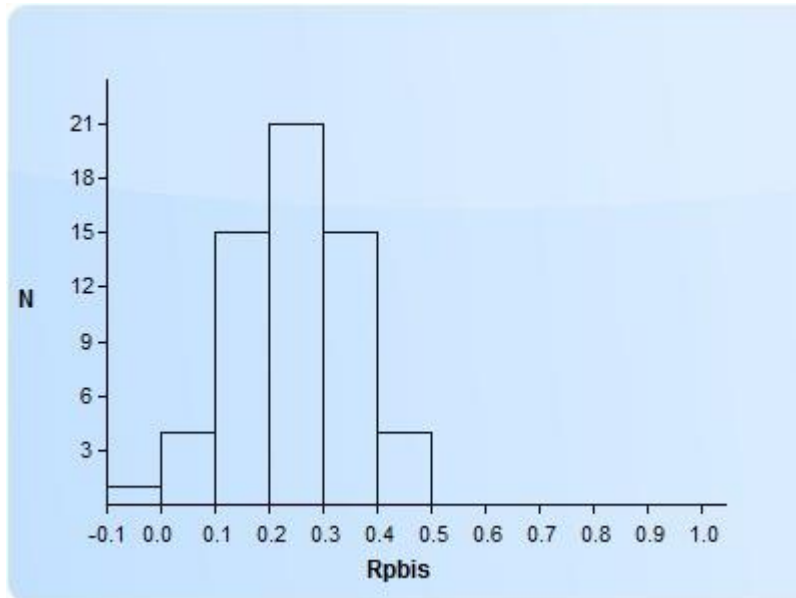


Table 13: Frequency Distribution for the Rpbis

Score	Frequency
-0.1 to 0.0	1
0.0 to 0.1	4
0.1 to 0.2	15
0.2 to 0.3	21
0.3 to 0.4	15
0.4 to 0.5	4
0.5 to 0.6	0
0.6 to 0.7	0
0.7 to 0.8	0
0.8 to 0.9	0
0.9 to 1.0	0

Figure 9 displays the scatterplot of P (difficulty) by Rpbis (discrimination) for the dichotomously scored items (correct/incorrect).

Figure 9: P by Rpbis

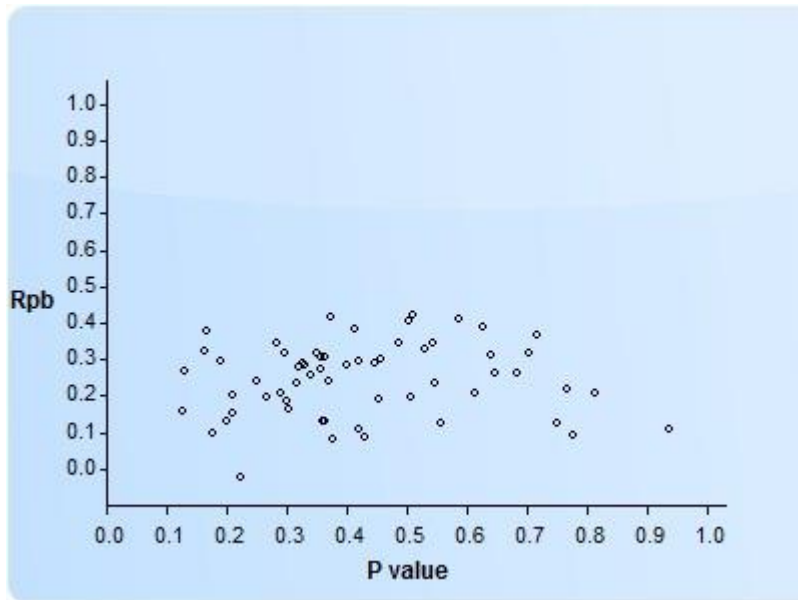
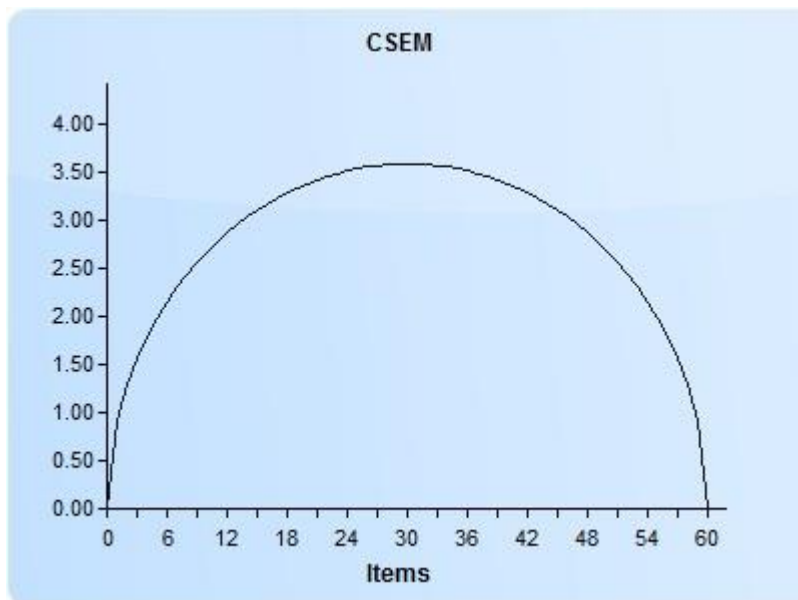


Figure 10 displays a graph of the Conditional Standard Error of Measurement (CSEM) Formula IV. The CSEM at the cutscore of 1.000 equaled 0.919.

Figure 10: CSEM



Annexure F

ENGE1608 TAL POST- TEST RESULTS



Classical Item and Test Analysis Report

TAL (Bloemfontein campus), October 2017

Report created on 2017/11/10

Iteman: Software for Classical Analysis

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Introduction

This report provides the results of a classical item and test analysis by the computer program Iteman Version 4.3 (Assessment Systems Corporation, 2013) for TAL (Bloemfontein campus), October 2017. The output is divided into three sections:

1. Specifications
2. Summary statistics
3. Item-by-item results.

The statistical output is also recorded in a comma-separated value (CSV) file of the same name.

Specifications

The Windows paths for the input files used in this analysis were:

C:\AlbertDocuments\UFS\ufs07107.txt
C:\AlbertDocuments\UFS\ufs07108.txt

The Windows paths for the output files produced by this analysis were:

C:\AlbertDocuments\UFS\ufs07110.rtf
C:\AlbertDocuments\UFS\ufs07110.csv
C:\AlbertDocuments\UFS\ufs07110 Scores.csv

Table 1 presents the specifications and basic information concerning the analysis. This provides important documentation of the setup of the program for historical purposes.

Table 1: Specifications

Specification	Value	Specification	Value
Number of examinees	414	Total Items	60
Scored Items	60	Pretest Items	0
Multiple Choice Items	60	Polytomous Items	0
Number of domains	5	External scores	No
Minimum P	0.15	Maximum P	0.84
Minimum item mean	0.00	Maximum item mean	15.00
Minimum item correlation	0.15	Maximum item correlation	1.00
ITEMAN 3.0 Header	No	Exclude omits from option statistics	No
Responses begin in column	1	Omit character	X
Not Admin character	N	Produce quantile tables	Yes
Correct for spuriousness	Yes	Produce quantile plots	Yes
Classify based on	Total Score	Cutpoint	30.000
Low group label	Low	High group label	High

Summary statistics

Table 2 presents the summary statistics of the test, for all items, scored items only, and for each domain (content area). Definitions of these statistics are found in the Iteman manual.

Table 2: Summary statistics

Score	Items	Mean	SD	Min Score	Max Score	Mean P	Mean Rpbis
All items	60	28.50	8.71	6	53	0.47	0.27
Scored Items	60	28.50	8.71	6	53	0.47	0.27
Scrambled text	5	2.50	1.55	0	5	0.50	0.24
Vocabulary	10	6.20	2.03	0	10	0.62	0.25
Graphs & visual info	8	2.79	1.64	0	8	0.35	0.21
Text comprehension	25	11.77	4.41	0	24	0.47	0.29
Grammar and text relations	12	5.23	2.62	0	12	0.44	0.28

Table 3 presents a reliability analysis of the tests. Alpha (also known as KR-20) is the most commonly used index of reliability, and is therefore used to calculate the standard error of measurement (SEM) on the raw score scale. Also presented are three configurations of split-half reliability, first as uncorrected correlations, and then as Spearman-Brown (S-B) corrected correlations. This is because an uncorrected split-half correlation is referenced to a "test" that only contains half as many items as the full test, and therefore underestimates reliability.

The cutscore on this exam was 30.000, producing a pass rate of 41.1%. The Livingston index of classification consistency at the cut-score was 0.85.

Table 3: Reliability

Score	Alpha	SEM	Split-Half (Random)	Split-Half (First-Last)	Split-Half (Odd-Even)	S-B Random	S-B First-Last	S-B Odd-Even
Scored items	0.85	3.39	0.74	0.61	0.75	0.85	0.76	0.86
Scrambled text	0.69	0.86	0.56	0.32	0.61	0.72	0.48	0.76
Vocabulary	0.59	1.30	0.43	0.40	0.41	0.60	0.57	0.58
Graphs & visual info	0.41	1.26	0.23	0.21	0.23	0.38	0.34	0.37
Text comprehension	0.76	2.17	0.62	0.64	0.60	0.77	0.78	0.75
Grammar and text relations	0.68	1.48	0.51	0.37	0.69	0.68	0.54	0.81

Table 4 presents the item statistics and flags for the item(s) that were flagged during the analysis

Table 4: Summary Statistics for the Flagged Items

Item ID	P / Item Mean	R	Flag(s)
8	0.957	0.227	HP
14	0.440	0.149	LR
21	0.319	0.080	LR
23	0.350	0.140	LR
25	0.271	0.051	K, LR
29	0.331	0.108	LR
32	0.845	0.246	HP
47	0.191	0.128	K, LR
50	0.140	0.251	LP

Figure 1 displays the distribution of the raw scores for the scored items across all domains. Table 5 displays the frequency distribution for total score shown in Figure 1.

Figure 1: Total score for the scored items

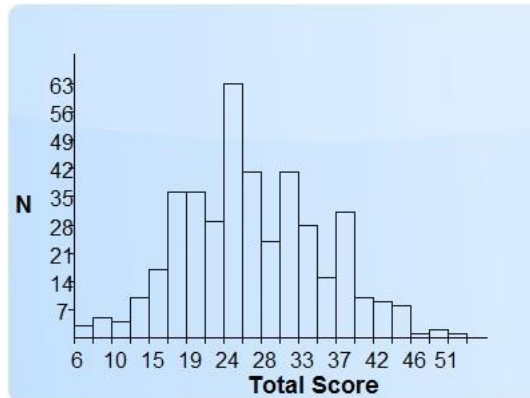


Table 5: Frequency Distribution for Total Score

Range	Frequency
5 to 8	3
9 to 10	5
11 to 13	4
14 to 15	10
16 to 17	17
18 to 20	36
21 to 22	36
23 to 24	29
25 to 27	63
28 to 29	41
30 to 31	24
32 to 34	41
35 to 36	28
37 to 38	15
39 to 41	31
42 to 43	10
44 to 45	9
46 to 48	8
49 to 50	1
51 to 52	2
53	1

Figure 2 displays the distribution of the raw scores for Scrambled text. Table 6 displays the frequency distribution of domain scores shown in Figure 2.

Figure 2: Raw scores for Scrambled text

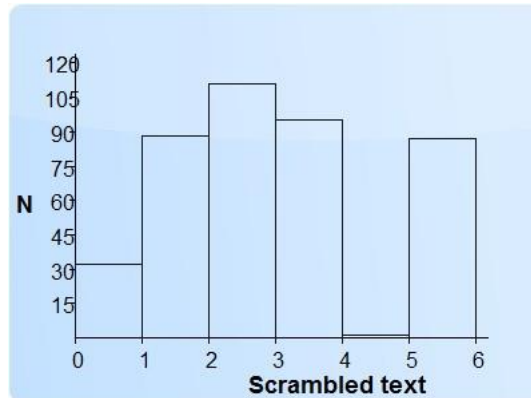


Table 6: Frequency Distribution for Scrambled text

Score	Frequency
0	32
1	88
2	111
3	95
4	1
5	87

Figure 3 displays the distribution of the raw scores for Vocabulary.
Table 7 displays the frequency distribution of domain scores shown in Figure 3.

Figure 3: Raw scores for Vocabulary

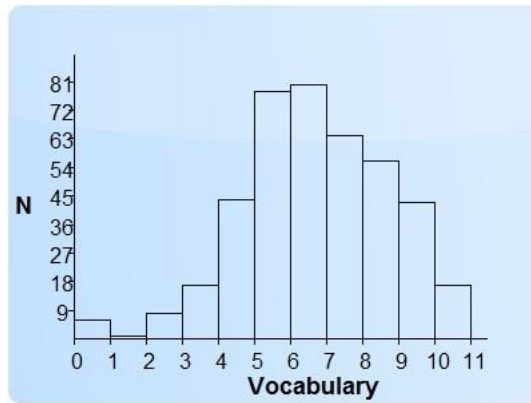


Table 7: Frequency Distribution for Vocabulary

Score	Frequency
0	6
1	1
2	8
3	17
4	44
5	78
6	80
7	64
8	56
9	43
10	17

Figure 4 displays the distribution of the raw scores for Graphs & visual info. Table 8 displays the frequency distribution of domain scores shown in Figure 4.

Figure 4: Raw scores for Graphs & visual info

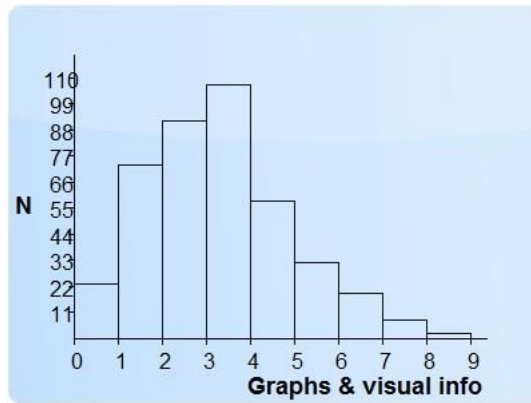


Table 8: Frequency Distribution for Graphs & visual info

Score	Frequency
0	23
1	73
2	92
3	107
4	58
5	32
6	19
7	8
8	2

Figure 5 displays the distribution of the raw scores for Text comprehension. Table 9 displays the frequency distribution of domain scores shown in Figure 5.

Figure 5: Raw scores for Text comprehension

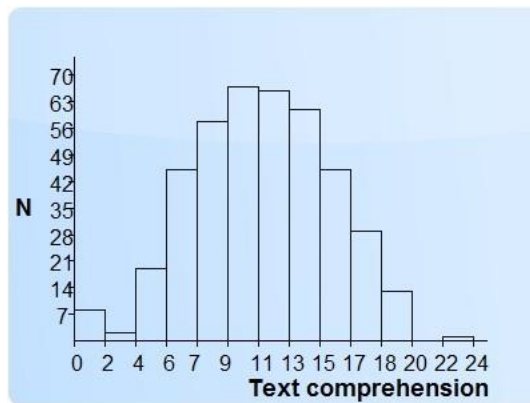


Table 9: Frequency Distribution for Text comprehension

Range	Frequency
0 to 1	8
2 to 3	2
4 to 5	19
6 to 7	45
8 to 9	58
10 to 11	67
12 to 13	66
14 to 15	61
16 to 17	45
18 to 19	29
20 to 21	13
22 to 23	0
24	1

Figure 6 displays the distribution of the raw scores for Grammar and text relations. Table 10 displays the frequency distribution of domain scores shown in Figure 6.

Figure 6: Raw scores for Grammar and text relations

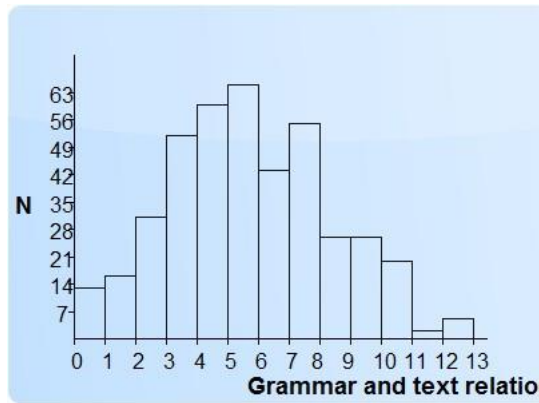


Table 10: Frequency Distribution for Grammar and text relations

Score	Frequency
0	13
1	16
2	31
3	52
4	60
5	65
6	43
7	55
8	26
9	26
10	20
11	2
12	5

Table 11 displays the correlations of domain scores.

Table 11: Correlations for Domain Scores

Domain	Scrambled text	Vocabulary	Graphs & visual info	Text comprehension	Grammar and text relations
Scrambled text	1.00	0.20	0.23	0.26	0.14
Vocabulary	0.20	1.00	0.30	0.46	0.26
Graphs & visual info	0.23	0.30	1.00	0.38	0.31
Text comprehension	0.26	0.46	0.38	1.00	0.52
Grammar and text relations	0.14	0.26	0.31	0.52	1.00

Figure 7 displays the distribution of the P values for the dichotomously scored items (correct/incorrect).

Table 12 displays the frequency distribution of the P values shown in Figure 7.

Figure 7: P values for the scored items

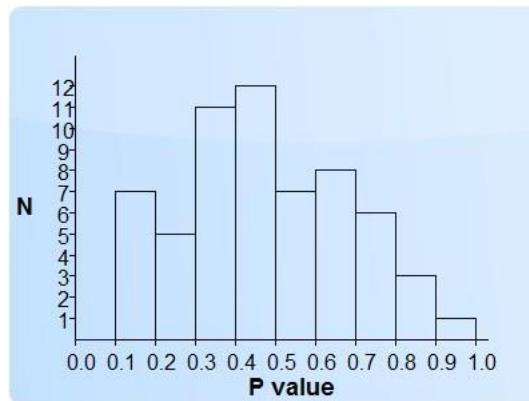


Table 12: Frequency Distribution for the P values

Score	Frequency
0.0 to 0.1	0
0.1 to 0.2	7
0.2 to 0.3	5
0.3 to 0.4	11
0.4 to 0.5	12
0.5 to 0.6	7
0.6 to 0.7	8
0.7 to 0.8	6
0.8 to 0.9	3
0.9 to 1.0	1

Figure 8 displays the distribution of the Point-Biserial Correlations for the dichotomously scored items (correct/incorrect). Table 13 displays the frequency distribution of the Point-Biserial correlations shown in Figure 8.

Figure 8: Rpbis for the scored items

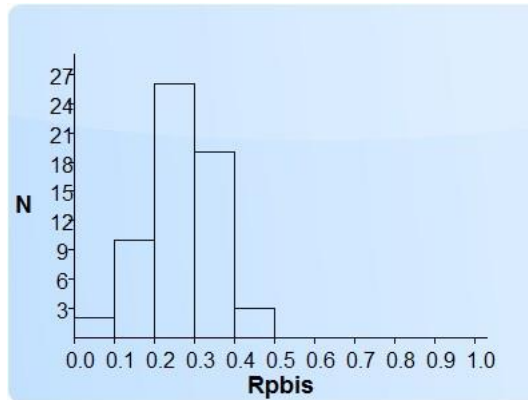


Table 13: Frequency Distribution for the Rpbis

Score	Frequency
0.0 to 0.1	2
0.1 to 0.2	10
0.2 to 0.3	26
0.3 to 0.4	19
0.4 to 0.5	3
0.5 to 0.6	0
0.6 to 0.7	0
0.7 to 0.8	0
0.8 to 0.9	0
0.9 to 1.0	0

Figure 9 displays the scatterplot of P (difficulty) by Rpbis (discrimination) for the dichotomously scored items (correct/incorrect).

Figure 9: P by Rpbis

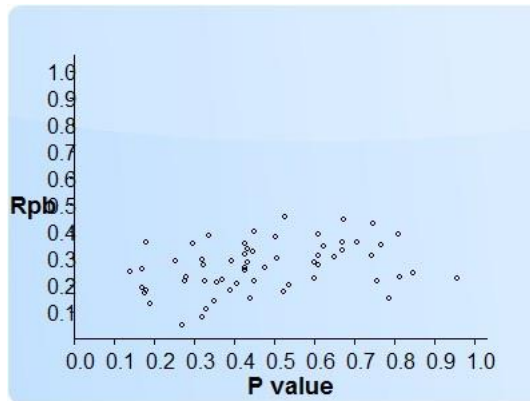
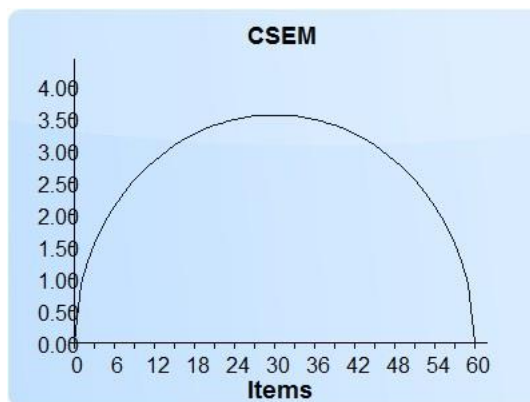


Figure 10 displays a graph of the Conditional Standard Error of Measurement (CSEM) Formula IV. The CSEM at the cutscore of 30.00 equaled 3.55.

Figure 10: CSEM



Annexure G

UNIVARIATE ANALYSIS

Univariate Analysis Correlations

The CORR Procedure

22 With Variables:	Pre_test Gender Age Motivation_Score LLB7 LLB9 LLB11 LLB15 LLB19 LLB23 LLB27 LLB31 LLB35 LLB39 LLB42 LLB45 LLB48 LLB51 LLB54 LLB55 LLB57 LLB60
7 Variables:	Post_test Class_test Mid_year_Test_Part_1 Mid_year_Test_Part_2 Summ_Test_Part_1 Summ_Test_Part_2 Summ_Test_Part_3

Pearson Correlation Coefficients Prob > r under H0: Rho=0 Number of Observations							
	Post_test	Class_test	Mid_year_Test_Part_1	Mid_year_Test_Part_2	Summ_Test_Part_1	Summ_Test_Part_2	Summ_Test_Part_3
Pre_test Pre-test	0.78229 <.0001 235	0.99594 <.0001 235	0.57027 <.0001 234	0.60647 <.0001 235	0.69328 <.0001 234	0.59710 <.0001 235	0.76352 <.0001 235
Gender	0.03438 0.6048 229	0.04810 0.4689 229	0.18340 0.0055 228	0.15338 0.0202 229	0.07302 0.2722 228	0.05490 0.4083 229	0.03482 0.6001 229
Age	-0.21165 0.0013 229	-0.20073 0.0023 229	-0.18544 0.0050 228	-0.06558 0.3231 229	-0.28836 <.0001 228	-0.18491 0.0050 229	-0.20760 0.0016 229
Motivation_Score Motivation Score	-0.19503 0.0027 235	-0.14169 0.0299 235	-0.03130 0.6338 234	-0.15238 0.0194 235	-0.15689 0.0163 234	-0.08364 0.2014 235	-0.17928 0.0059 235
LLB7	-0.05160 0.4311 235	0.00188 0.9771 235	-0.06153 0.3487 234	-0.11740 0.0724 235	-0.07190 0.2733 234	-0.11910 0.0684 235	-0.07688 0.2404 235
LLB9	0.04150 0.5267 235	0.10318 0.1147 235	0.12344 0.0594 234	0.02808 0.6685 235	0.02441 0.7103 234	0.08458 0.1964 235	0.04319 0.5100 235
LLB11	-0.03269 0.6181 235	0.05833 0.3733 235	-0.03469 0.5976 234	-0.00401 0.9512 235	-0.05600 0.3939 234	-0.08379 0.2006 235	-0.03021 0.6450 235
LLB15	-0.14417 0.0271 235	-0.08825 0.1776 235	-0.08205 0.2111 234	-0.10341 0.1139 235	-0.12415 0.0579 234	-0.05737 0.3813 235	-0.14716 0.0241 235
LLB19	-0.07523 0.2517 234	0.04766 0.4681 234	0.01190 0.8566 233	-0.03164 0.6301 234	-0.01837 0.7803 233	-0.08134 0.2151 234	-0.08110 0.2165 234
LLB23	0.00712 0.9139 233	0.08155 0.2149 233	0.02914 0.6588 232	0.00151 0.9817 233	0.04194 0.5250 232	-0.06052 0.3578 233	0.00282 0.9658 233
LLB27	-0.31437 <.0001 235	-0.25434 <.0001 235	-0.23232 0.0003 234	-0.23296 0.0003 235	-0.23134 0.0004 234	-0.29039 <.0001 235	-0.31754 <.0001 235

LLB31	-0.04198 0.5219 235	-0.05266 0.4217 235	0.00649 0.9213 234	-0.01576 0.8100 235	-0.04016 0.5410 234	-0.02617 0.6898 235	-0.02315 0.7241 235
LLB35	0.05236 0.4243 235	0.08943 0.1718 235	0.04769 0.4678 234	0.06208 0.3434 235	0.08039 0.2205 234	0.05599 0.3929 235	0.07221 0.2703 235
LLB39	-0.26925 <.0001 235	-0.18768 0.0039 235	-0.15547 0.0173 234	-0.27273 <.0001 235	-0.27004 <.0001 234	-0.20310 0.0018 235	-0.27511 <.0001 235
LLB42	0.03082 0.6383 235	0.05832 0.3735 235	0.09559 0.1449 234	0.06285 0.3374 235	-0.04187 0.5239 234	0.02954 0.6523 235	0.02670 0.6839 235
LLB45	0.10028 0.1373 221	0.10083 0.1351 221	-0.03523 0.6033 220	0.06993 0.3007 221	0.20925 0.0018 220	0.08723 0.1964 221	0.09698 0.1508 221
LLB48	-0.18348 0.0048 235	-0.15568 0.0169 235	-0.06604 0.3145 234	-0.16729 0.0102 235	-0.11303 0.0845 234	-0.16777 0.0100 235	-0.19106 0.0033 235
LLB51	-0.10423 0.1118 234	-0.04300 0.5128 234	0.05196 0.4298 233	0.00024 0.9971 234	-0.02600 0.6930 233	-0.11843 0.0706 234	-0.10024 0.1263 234
LLB54	-0.33562 <.0001 234	-0.22916 0.0004 234	-0.25377 <.0001 233	-0.21970 0.0007 234	-0.26926 <.0001 233	-0.21793 0.0008 234	-0.35903 <.0001 234
LLB55	-0.22611 0.0005 235	-0.17953 0.0058 235	-0.04928 0.4531 234	-0.18273 0.0050 235	-0.23018 0.0004 234	-0.14436 0.0269 235	-0.20892 0.0013 235
LLB57	-0.17976 0.0057 235	-0.16388 0.0119 235	-0.08310 0.2053 234	-0.14770 0.0235 235	-0.19229 0.0031 234	-0.05362 0.4132 235	-0.17740 0.0064 235
LLB60	-0.28288 <.0001 231	-0.22758 0.0005 231	-0.14421 0.0288 230	-0.25021 0.0001 231	-0.24838 0.0001 230	-0.18847 0.0040 231	-0.25714 <.0001 231

Annexure H

UNIVARIATE ANALYSIS

Univariate Analysis One-way ANOVA of Race

The GLM Procedure

Class Level Information		
Class	Levels	Values
Race	4	2 3 5 6

Data for Analysis of Post_test Class_test Mid_year_Test_Part_2 Summ_Test_Part_2 Summ_Test_Part_3 Class_1 Portfolio_mark Final_course_mark	
Number of Observations Read	235
Number of Observations Used	230

Data for Analysis of Mid_year_Test_Part_1	
Number of Observations Read	235
Number of Observations Used	229

Data for Analysis of Summ_Test_Part_1	
Number of Observations Read	235
Number of Observations Used	229

Data for Analysis of Class_2	
Number of Observations Read	235
Number of Observations Used	213

Data for Analysis of Class_3	
Number of Observations Read	235
Number of Observations Used	227

Data for Analysis of Writing	
Number of Observations Read	235
Number of Observations Used	219

Note: Variables in each group are consistent with respect to the presence or absence of missing values.

**Univariate Analysis
One-way ANOVA of Race**

The GLM Procedure

Dependent Variable: Post_test Post-test

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	9502.68165	3167.56055	18.91	<.0001
Error	226	37848.87632	167.47290		
Corrected Total	229	47351.55797			

R-Square	Coeff Var	Root MSE	Post_test Mean
0.200684	26.97291	12.94113	47.97826

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	9502.681647	3167.560549	18.91	<.0001

Dependent Variable: Class_test Class test

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	11634.66965	3878.22322	25.92	<.0001
Error	226	33818.47817	149.63928		
Corrected Total	229	45453.14783			

R-Square	Coeff Var	Root MSE	Class_test Mean
0.255971	28.48850	12.23271	42.93913

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	11634.66965	3878.22322	25.92	<.0001

Dependent Variable: Mid_year_Test_Part_2 Mid-year Test Part 2

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	2772.30674	924.10225	5.58	0.0010
Error	226	37446.28456	165.69152		
Corrected Total	229	40218.59130			

R-Square	Coeff Var	Root MSE	Mid_year_Test_Part_2 Mean
0.068931	20.47150	12.87212	62.87826

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	2772.306742	924.102247	5.58	0.0010

Dependent Variable: Summ_Test_Part_2 Summ Test Part 2

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5173.42290	1724.47430	13.87	<.0001
Error	226	28095.46405	124.31621		
Corrected Total	229	33268.88696			

R-Square	Coeff Var	Root MSE	Summ_Test_Part_2 Mean
0.155503	19.44817	11.14972	57.33043

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	5173.422903	1724.474301	13.87	<.0001

Dependent Variable: Summ_Test_Part_3 Summ Test Part 3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	9223.81111	3074.60370	15.34	<.0001
Error	226	45290.78019	200.40168		
Corrected Total	229	54514.59130			

R-Square	Coeff Var	Root MSE	Summ_Test_Part_3 Mean
0.169199	22.86165	14.15633	61.92174

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	9223.811114	3074.603705	15.34	<.0001

Dependent Variable: Class_1 Class 1

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	3554.16880	1184.72293	7.97	<.0001
Error	226	33600.97903	148.67690		
Corrected Total	229	37155.14783			

R-Square	Coeff Var	Root MSE	Class_1 Mean
0.095658	17.40389	12.19331	70.06087

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	3554.168798	1184.722933	7.97	<.0001

Dependent Variable: Portfolio_mark Portfolio mark

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1863.51024	621.17008	2.47	0.0626
Error	226	56790.18107	251.28399		
Corrected Total	229	58653.69130			

R-Square	Coeff Var	Root MSE	Portfolio_mark Mean
0.031771	26.06295	15.85194	60.82174

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	1863.510236	621.170079	2.47	0.0626

Dependent Variable: Final_course_mark Final course mark

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5217.10986	1739.03662	18.58	<.0001
Error	226	21158.26405	93.62064		
Corrected Total	229	26375.37391			

R-Square	Coeff Var	Root MSE	Final_course_mark Mean
0.197802	16.66738	9.675776	58.05217

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	5217.109859	1739.036620	18.58	<.0001

Dependent Variable: Mid_year_Test_Part_1 Mid-year Test Part 1

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1181.35131	393.78377	2.76	0.0432
Error	225	32132.89324	142.81286		
Corrected Total	228	33314.24454			

R-Square	Coeff Var	Root MSE	Mid_year_Test_Part_1 Mean
0.035461	18.14634	11.95043	65.85590

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	1181.351306	393.783769	2.76	0.0432

Dependent Variable: Summ_Test_Part_1 Summ Test Part 1

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	12272.31906	4090.77302	22.62	<.0001
Error	225	40699.42767	180.88635		
Corrected Total	228	52971.74672			

R-Square	Coeff Var	Root MSE	Summ_Test_Part_1 Mean
0.231677	24.16565	13.44940	55.65502

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	12272.31906	4090.77302	22.62	<.0001

Dependent Variable: Class_2 Class 2

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5357.45066	1785.81689	6.85	0.0002
Error	209	54473.32660	260.63793		
Corrected Total	212	59830.77726			

R-Square	Coeff Var	Root MSE	Class_2 Mean
0.089543	23.85800	16.14428	67.66823

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	5357.450657	1785.816886	6.85	0.0002

Dependent Variable: Class_3 Class 3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1057.70414	352.56805	1.77	0.1540
Error	223	44452.64828	199.33923		
Corrected Total	226	45510.35242			

R-Square	Coeff Var	Root MSE	Class_3 Mean
0.023241	19.06861	14.11875	74.04185

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	1057.704139	352.568046	1.77	0.1540

Dependent Variable: Writing

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	4543.06667	1514.35556	6.83	0.0002
Error	215	47700.98813	221.86506		
Corrected Total	218	52244.05479			

R-Square	Coeff Var	Root MSE	Writing Mean
0.086959	29.30849	14.89514	50.82192

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Race	3	4543.066669	1514.355556	6.83	0.0002

Annexure I

MULTIVARIATE ANALYSIS – MULTIPLE REGRESSION FULL MODEL

Multivariate Analysis: Multiple Regression

Full Model: All Predictors Fitted

The GLM Procedure

Class Level Information		
Class	Levels	Values
Gender	2	1 2
Race	4	2 3 5 6
Age	5	1 2 3 4 5

Data for Analysis of Post_test Class_test Mid_year_Test_Part_2 Summ_Test_Part_2 Summ_Test_Part_3 Class_1 Portfolio_mark Final_course_mark	
Number of Observations Read	235
Number of Observations Used	208

Data for Analysis of Mid_year_Test_Part_1	
Number of Observations Read	235
Number of Observations Used	207

Data for Analysis of Summ_Test_Part_1	
Number of Observations Read	235
Number of Observations Used	207

Data for Analysis of Class_2	
Number of Observations Read	235
Number of Observations Used	192

Data for Analysis of Class_3	
Number of Observations Read	235
Number of Observations Used	206

Data for Analysis of Writing	
Number of Observations Read	235
Number of Observations Used	198

Note: Variables in each group are consistent with respect to the presence or absence of missing values.

**Multivariate Analysis: Multiple Regression
Full Model: All Predictors Fitted**

The GLM Procedure

Dependent Variable: Post_test Post-test

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	30711.71792	1096.84707	14.15	<.0001
Error	179	13876.31626	77.52132		
Corrected Total	207	44588.03419			

R-Square	Coeff Var	Root MSE	Post_test Mean
0.688788	18.19233	8.804619	48.39744

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	13595.77915	13595.77915	175.38	<.0001
Gender	1	9.74854	9.74854	0.13	0.7233
Race	3	54.89937	18.29979	0.24	0.8711
Age	4	270.48890	67.62222	0.87	0.4817
Motivation_Score	1	99.93519	99.93519	1.29	0.2577
LLB7	1	37.96450	37.96450	0.49	0.4850
LLB9	1	80.48420	80.48420	1.04	0.3096
LLB11	1	14.59108	14.59108	0.19	0.6649
LLB15	1	265.83039	265.83039	3.43	0.0657
LLB19	1	22.53151	22.53151	0.29	0.5905
LLB23	1	3.04571	3.04571	0.04	0.8431
LLB27	1	37.48043	37.48043	0.48	0.4877
LLB31	1	53.79551	53.79551	0.69	0.4059
LLB35	1	0.49586	0.49586	0.01	0.9363
LLB39	1	167.89289	167.89289	2.17	0.1429
LLB42	1	9.52330	9.52330	0.12	0.7264
LLB45	1	44.92795	44.92795	0.58	0.4475
LLB48	1	5.00111	5.00111	0.06	0.7998
LLB51	1	119.12648	119.12648	1.54	0.2167
LLB54	1	450.38217	450.38217	5.81	0.0169
LLB55	1	1.00779	1.00779	0.01	0.9094
LLB57	1	1.67599	1.67599	0.02	0.8833
LLB60	1	114.64419	114.64419	1.48	0.2256

Dependent Variable: Class_test Class test

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	42246.51831	1508.80423	893.09	<.0001
Error	179	302.40477	1.68941		
Corrected Total	207	42548.92308			

R-Square	Coeff Var	Root MSE	Class_test Mean
0.992893	2.969606	1.299774	43.76923

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	25296.35469	25296.35469	14973.5	<.0001
Gender	1	2.71337	2.71337	1.61	0.2067
Race	3	3.91484	1.30495	0.77	0.5108
Age	4	11.23301	2.80825	1.66	0.1608
Motivation_Score	1	0.18891	0.18891	0.11	0.7385
LLB7	1	0.51531	0.51531	0.31	0.5814
LLB9	1	3.83735	3.83735	2.27	0.1335
LLB11	1	0.36131	0.36131	0.21	0.6443
LLB15	1	0.83541	0.83541	0.49	0.4828
LLB19	1	0.08069	0.08069	0.05	0.8273
LLB23	1	3.97319	3.97319	2.35	0.1269
LLB27	1	0.11545	0.11545	0.07	0.7941
LLB31	1	1.16623	1.16623	0.69	0.4072
LLB35	1	0.11506	0.11506	0.07	0.7944
LLB39	1	0.28419	0.28419	0.17	0.6822
LLB42	1	1.00759	1.00759	0.60	0.4410
LLB45	1	0.47636	0.47636	0.28	0.5961
LLB48	1	0.39030	0.39030	0.23	0.6314
LLB51	1	5.20178	5.20178	3.08	0.0810
LLB54	1	0.09349	0.09349	0.06	0.8143
LLB55	1	0.00028	0.00028	0.00	0.9898
LLB57	1	0.54495	0.54495	0.32	0.5708
LLB60	1	2.04540	2.04540	1.21	0.2727

Dependent Variable: Mid_year_Test_Part_2 Mid-year Test Part 2

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	16741.13617	597.89772	5.58	<.0001
Error	179	19179.78690	107.14965		
Corrected Total	207	35920.92308			

R-Square	Coeff Var	Root MSE	Mid_year_Test_Part_2 Mean
0.466055	16.36074	10.35131	63.26923

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	7648.179867	7648.179867	71.38	<.0001
Gender	1	335.724759	335.724759	3.13	0.0784
Race	3	60.837489	20.279163	0.19	0.9036
Age	4	217.248805	54.312201	0.51	0.7307
Motivation_Score	1	1.875175	1.875175	0.02	0.8949
LLB7	1	132.528207	132.528207	1.24	0.2676
LLB9	1	5.232592	5.232592	0.05	0.8254
LLB11	1	7.069580	7.069580	0.07	0.7976
LLB15	1	58.074104	58.074104	0.54	0.4626
LLB19	1	18.833683	18.833683	0.18	0.6755
LLB23	1	0.670835	0.670835	0.01	0.9370
LLB27	1	3.021084	3.021084	0.03	0.8668
LLB31	1	3.873735	3.873735	0.04	0.8494
LLB35	1	93.690539	93.690539	0.87	0.3510
LLB39	1	351.185342	351.185342	3.28	0.0719
LLB42	1	51.157010	51.157010	0.48	0.4905
LLB45	1	0.964570	0.964570	0.01	0.9245
LLB48	1	17.417485	17.417485	0.16	0.6873
LLB51	1	0.527570	0.527570	0.00	0.9441
LLB54	1	52.156781	52.156781	0.49	0.4863
LLB55	1	0.436875	0.436875	0.00	0.9492
LLB57	1	1.380143	1.380143	0.01	0.9098
LLB60	1	85.149746	85.149746	0.79	0.3739

Dependent Variable: Summ_Test_Part_2 Summ Test Part 2

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	14014.64304	500.52297	5.56	<.0001
Error	179	16128.04927	90.10083		
Corrected Total	207	30142.69231			

R-Square	Coeff Var	Root MSE	Summ_Test_Part_2 Mean
0.464943	16.44757	9.492146	57.71154

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	4151.675151	4151.675151	46.08	<.0001
Gender	1	81.617971	81.617971	0.91	0.3425
Race	3	387.536890	129.178963	1.43	0.2345
Age	4	266.436711	66.609178	0.74	0.5664
Motivation_Score	1	378.591721	378.591721	4.20	0.0418
LLB7	1	79.883401	79.883401	0.89	0.3477
LLB9	1	10.166005	10.166005	0.11	0.7373
LLB11	1	190.266114	190.266114	2.11	0.1479
LLB15	1	0.119428	0.119428	0.00	0.9710
LLB19	1	193.624335	193.624335	2.15	0.1444
LLB23	1	68.237294	68.237294	0.76	0.3853
LLB27	1	480.040936	480.040936	5.33	0.0221
LLB31	1	48.846438	48.846438	0.54	0.4625
LLB35	1	4.282554	4.282554	0.05	0.8277
LLB39	1	1.292964	1.292964	0.01	0.9048
LLB42	1	7.172550	7.172550	0.08	0.7782
LLB45	1	25.012735	25.012735	0.28	0.5989
LLB48	1	92.184159	92.184159	1.02	0.3131
LLB51	1	169.253624	169.253624	1.88	0.1722
LLB54	1	84.354179	84.354179	0.94	0.3346
LLB55	1	5.160624	5.160624	0.06	0.8111
LLB57	1	226.934266	226.934266	2.52	0.1143
LLB60	1	24.327472	24.327472	0.27	0.6040

Dependent Variable: Summ_Test_Part_3 Summ Test Part 3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	34634.82732	1236.95812	13.34	<.0001
Error	179	16592.69191	92.69660		
Corrected Total	207	51227.51923			

R-Square	Coeff Var	Root MSE	Summ_Test_Part_3 Mean
0.676098	15.47847	9.627908	62.20192

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	15468.79485	15468.79485	166.88	<.0001
Gender	1	16.14328	16.14328	0.17	0.6769
Race	3	64.29605	21.43202	0.23	0.8746
Age	4	418.82943	104.70736	1.13	0.3441
Motivation_Score	1	130.43563	130.43563	1.41	0.2371
LLB7	1	2.61762	2.61762	0.03	0.8667
LLB9	1	91.73921	91.73921	0.99	0.3212
LLB11	1	9.47202	9.47202	0.10	0.7496
LLB15	1	281.54205	281.54205	3.04	0.0831
LLB19	1	51.80357	51.80357	0.56	0.4557
LLB23	1	4.23428	4.23428	0.05	0.8310
LLB27	1	52.93455	52.93455	0.57	0.4508
LLB31	1	130.36671	130.36671	1.41	0.2372
LLB35	1	1.26431	1.26431	0.01	0.9072
LLB39	1	268.34665	268.34665	2.89	0.0906
LLB42	1	9.22127	9.22127	0.10	0.7528
LLB45	1	69.84731	69.84731	0.75	0.3865
LLB48	1	6.46124	6.46124	0.07	0.7921
LLB51	1	138.85198	138.85198	1.50	0.2226
LLB54	1	800.69958	800.69958	8.64	0.0037
LLB55	1	6.96379	6.96379	0.08	0.7843
LLB57	1	2.87501	2.87501	0.03	0.8604
LLB60	1	32.35437	32.35437	0.35	0.5554

Dependent Variable: Class_1 Class 1

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	11762.59668	420.09274	3.44	<.0001
Error	179	21842.63409	122.02589		
Corrected Total	207	33605.23077			

R-Square	Coeff Var	Root MSE	Class_1 Mean
0.350023	15.75479	11.04653	70.11538

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	3167.178289	3167.178289	25.95	<.0001
Gender	1	518.121912	518.121912	4.25	0.0408
Race	3	633.948441	211.316147	1.73	0.1621
Age	4	312.496207	78.124052	0.64	0.6345
Motivation_Score	1	4.012821	4.012821	0.03	0.8563
LLB7	1	4.583741	4.583741	0.04	0.8465
LLB9	1	4.314718	4.314718	0.04	0.8511
LLB11	1	3.850584	3.850584	0.03	0.8592
LLB15	1	0.971456	0.971456	0.01	0.9290
LLB19	1	1.171107	1.171107	0.01	0.9221
LLB23	1	116.121008	116.121008	0.95	0.3306
LLB27	1	126.952446	126.952446	1.04	0.3091
LLB31	1	54.735161	54.735161	0.45	0.5039
LLB35	1	437.639909	437.639909	3.59	0.0599
LLB39	1	49.330464	49.330464	0.40	0.5257
LLB42	1	73.087337	73.087337	0.60	0.4400
LLB45	1	49.859162	49.859162	0.41	0.5235
LLB48	1	4.728421	4.728421	0.04	0.8442
LLB51	1	39.973569	39.973569	0.33	0.5678
LLB54	1	401.501588	401.501588	3.29	0.0714
LLB55	1	4.796339	4.796339	0.04	0.8431
LLB57	1	205.085785	205.085785	1.68	0.1965
LLB60	1	86.692921	86.692921	0.71	0.4004

Dependent Variable: Portfolio_mark Portfolio mark

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	12431.35530	443.97698	1.97	0.0044
Error	179	40282.60143	225.04247		
Corrected Total	207	52713.95673			

R-Square	Coeff Var	Root MSE	Portfolio_mark Mean
0.235827	24.43648	15.00142	61.38942

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	3020.216923	3020.216923	13.42	0.0003
Gender	1	2067.887644	2067.887644	9.19	0.0028
Race	3	444.233084	148.077695	0.66	0.5789
Age	4	139.292552	34.823138	0.15	0.9607
Motivation_Score	1	17.680244	17.680244	0.08	0.7796
LLB7	1	189.282105	189.282105	0.84	0.3603
LLB9	1	48.282579	48.282579	0.21	0.6438
LLB11	1	22.295255	22.295255	0.10	0.7533
LLB15	1	0.002721	0.002721	0.00	0.9972
LLB19	1	301.590336	301.590336	1.34	0.2486
LLB23	1	523.997529	523.997529	2.33	0.1288
LLB27	1	28.724763	28.724763	0.13	0.7213
LLB31	1	219.020475	219.020475	0.97	0.3252
LLB35	1	293.486392	293.486392	1.30	0.2550
LLB39	1	16.340700	16.340700	0.07	0.7879
LLB42	1	113.036392	113.036392	0.50	0.4794
LLB45	1	200.600947	200.600947	0.89	0.3464
LLB48	1	7.164189	7.164189	0.03	0.8586
LLB51	1	241.778185	241.778185	1.07	0.3014
LLB54	1	17.893561	17.893561	0.08	0.7783
LLB55	1	346.043586	346.043586	1.54	0.2166
LLB57	1	834.427002	834.427002	3.71	0.0557
LLB60	1	2.547509	2.547509	0.01	0.9154

Dependent Variable: Final_course_mark Final course mark

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	15679.15532	559.96983	12.16	<.0001
Error	179	8240.60911	46.03692		
Corrected Total	207	23919.76442			

R-Square	Coeff Var	Root MSE	Final_course_mark Mean
0.655490	11.60505	6.785051	58.46635

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	6131.452029	6131.452029	133.19	<.0001
Gender	1	282.543584	282.543584	6.14	0.0142
Race	3	213.558854	71.186285	1.55	0.2042
Age	4	105.392662	26.348166	0.57	0.6831
Motivation_Score	1	22.866070	22.866070	0.50	0.4819
LLB7	1	65.049619	65.049619	1.41	0.2361
LLB9	1	1.146394	1.146394	0.02	0.8748
LLB11	1	28.266643	28.266643	0.61	0.4343
LLB15	1	96.243190	96.243190	2.09	0.1500
LLB19	1	46.169255	46.169255	1.00	0.3180
LLB23	1	29.541690	29.541690	0.64	0.4242
LLB27	1	22.181203	22.181203	0.48	0.4885
LLB31	1	83.284348	83.284348	1.81	0.1803
LLB35	1	84.124632	84.124632	1.83	0.1781
LLB39	1	46.827398	46.827398	1.02	0.3146
LLB42	1	5.131660	5.131660	0.11	0.7389
LLB45	1	18.154362	18.154362	0.39	0.5308
LLB48	1	1.357041	1.357041	0.03	0.8639
LLB51	1	8.980790	8.980790	0.20	0.6593
LLB54	1	188.595617	188.595617	4.10	0.0445
LLB55	1	22.766328	22.766328	0.49	0.4828
LLB57	1	82.583050	82.583050	1.79	0.1822
LLB60	1	4.860559	4.860559	0.11	0.7456

Dependent Variable: Mid_year_Test_Part_1 Mid-year Test Part 1

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	13151.43049	469.69395	5.01	<.0001
Error	178	16678.34728	93.69858		
Corrected Total	206	29829.77778			

R-Square	Coeff Var	Root MSE	Mid_year_Test_Part_1 Mean
0.440883	14.61715	9.679803	66.22222

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	5772.483343	5772.483343	61.61	<.0001
Gender	1	574.258665	574.258665	6.13	0.0142
Race	3	189.985876	63.328625	0.68	0.5679
Age	4	497.835819	124.458955	1.33	0.2612
Motivation_Score	1	81.560711	81.560711	0.87	0.3521
LLB7	1	10.244467	10.244467	0.11	0.7413
LLB9	1	14.561601	14.561601	0.16	0.6939
LLB11	1	217.053414	217.053414	2.32	0.1298
LLB15	1	106.801582	106.801582	1.14	0.2871
LLB19	1	20.561241	20.561241	0.22	0.6400
LLB23	1	4.650083	4.650083	0.05	0.8240
LLB27	1	131.647983	131.647983	1.41	0.2375
LLB31	1	6.445389	6.445389	0.07	0.7934
LLB35	1	0.407698	0.407698	0.00	0.9475
LLB39	1	75.706456	75.706456	0.81	0.3699
LLB42	1	119.743235	119.743235	1.28	0.2598
LLB45	1	192.279347	192.279347	2.05	0.1537
LLB48	1	168.120481	168.120481	1.79	0.1821
LLB51	1	134.112492	134.112492	1.43	0.2331
LLB54	1	299.967572	299.967572	3.20	0.0753
LLB55	1	76.192321	76.192321	0.81	0.3684
LLB57	1	58.738765	58.738765	0.63	0.4296
LLB60	1	1.432734	1.432734	0.02	0.9017

Dependent Variable: Summ_Test_Part_1 Summ Test Part 1

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	29369.85901	1048.92354	9.64	<.0001
Error	178	19377.79317	108.86401		
Corrected Total	206	48747.65217			

R-Square	Coeff Var	Root MSE	Summ_Test_Part_1 Mean
0.602488	18.58368	10.43379	56.14493

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	9102.880730	9102.880730	83.62	<.0001
Gender	1	242.897367	242.897367	2.23	0.1370
Race	3	326.400650	108.800217	1.00	0.3945
Age	4	949.269399	237.317350	2.18	0.0731
Motivation_Score	1	216.527910	216.527910	1.99	0.1602
LLB7	1	10.940534	10.940534	0.10	0.7516
LLB9	1	124.036091	124.036091	1.14	0.2872
LLB11	1	176.103169	176.103169	1.62	0.2051
LLB15	1	227.069407	227.069407	2.09	0.1504
LLB19	1	27.838506	27.838506	0.26	0.6137
LLB23	1	0.411626	0.411626	0.00	0.9510
LLB27	1	4.948483	4.948483	0.05	0.8314
LLB31	1	17.751680	17.751680	0.16	0.6868
LLB35	1	66.742513	66.742513	0.61	0.4347
LLB39	1	203.845613	203.845613	1.87	0.1729
LLB42	1	271.057996	271.057996	2.49	0.1164
LLB45	1	130.879911	130.879911	1.20	0.2744
LLB48	1	26.231523	26.231523	0.24	0.6241
LLB51	1	27.896826	27.896826	0.26	0.6133
LLB54	1	419.882591	419.882591	3.86	0.0511
LLB55	1	75.046729	75.046729	0.69	0.4075
LLB57	1	5.512267	5.512267	0.05	0.8222
LLB60	1	186.543868	186.543868	1.71	0.1922

Dependent Variable: Class_2 Class 2

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	20163.20513	720.11447	3.75	<.0001
Error	163	31266.42450	191.81856		
Corrected Total	191	51429.62963			

R-Square	Coeff Var	Root MSE	Class_2 Mean
0.392054	20.35081	13.84986	68.05556

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	4276.782427	4276.782427	22.30	<.0001
Gender	1	76.975765	76.975765	0.40	0.5273
Race	3	809.637759	269.879253	1.41	0.2427
Age	4	1631.592814	407.898204	2.13	0.0798
Motivation_Score	1	1732.994944	1732.994944	9.03	0.0031
LLB7	1	106.991062	106.991062	0.56	0.4562
LLB9	1	22.073532	22.073532	0.12	0.7349
LLB11	1	7.588414	7.588414	0.04	0.8426
LLB15	1	492.871037	492.871037	2.57	0.1109
LLB19	1	17.485745	17.485745	0.09	0.7631
LLB23	1	108.433870	108.433870	0.57	0.4532
LLB27	1	20.749667	20.749667	0.11	0.7427
LLB31	1	113.762915	113.762915	0.59	0.4423
LLB35	1	1417.414434	1417.414434	7.39	0.0073
LLB39	1	33.726067	33.726067	0.18	0.6755
LLB42	1	56.121049	56.121049	0.29	0.5893
LLB45	1	467.463382	467.463382	2.44	0.1204
LLB48	1	8.303095	8.303095	0.04	0.8354
LLB51	1	17.492831	17.492831	0.09	0.7630
LLB54	1	0.526338	0.526338	0.00	0.9583
LLB55	1	45.510207	45.510207	0.24	0.6268
LLB57	1	1747.727863	1747.727863	9.11	0.0029
LLB60	1	88.492831	88.492831	0.46	0.4980

Dependent Variable: Class_3 Class 3

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	7720.01066	275.71467	1.45	0.0799
Error	177	33745.91774	190.65490		
Corrected Total	205	41465.92840			

R-Square	Coeff Var	Root MSE	Class_3 Mean
0.186177	18.67939	13.80778	73.91990

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	133.851890	133.851890	0.70	0.4032
Gender	1	10.243050	10.243050	0.05	0.8170
Race	3	864.101149	288.033716	1.51	0.2134
Age	4	326.431046	81.607761	0.43	0.7883
Motivation_Score	1	647.418818	647.418818	3.40	0.0670
LLB7	1	70.325560	70.325560	0.37	0.5444
LLB9	1	521.943939	521.943939	2.74	0.0998
LLB11	1	219.855657	219.855657	1.15	0.2844
LLB15	1	377.975394	377.975394	1.98	0.1609
LLB19	1	52.797460	52.797460	0.28	0.5994
LLB23	1	26.553568	26.553568	0.14	0.7094
LLB27	1	9.340123	9.340123	0.05	0.8251
LLB31	1	14.233177	14.233177	0.07	0.7850
LLB35	1	100.957232	100.957232	0.53	0.4678
LLB39	1	8.277650	8.277650	0.04	0.8352
LLB42	1	206.423672	206.423672	1.08	0.2995
LLB45	1	2267.546570	2267.546570	11.89	0.0007
LLB48	1	192.762785	192.762785	1.01	0.3160
LLB51	1	74.694336	74.694336	0.39	0.5322
LLB54	1	24.219395	24.219395	0.13	0.7220
LLB55	1	83.902609	83.902609	0.44	0.5079
LLB57	1	439.674660	439.674660	2.31	0.1306
LLB60	1	144.087916	144.087916	0.76	0.3858

Dependent Variable: Writing

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	28	14085.48130	503.05290	2.74	<.0001
Error	169	31004.55911	183.45893		
Corrected Total	197	45090.04040			

R-Square	Coeff Var	Root MSE	Writing Mean
0.312386	26.48480	13.54470	51.14141

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pre_test	1	3782.538227	3782.538227	20.62	<.0001
Gender	1	105.986495	105.986495	0.58	0.4483
Race	3	1071.318281	357.106094	1.95	0.1240
Age	4	445.039689	111.259922	0.61	0.6585
Motivation_Score	1	9.402822	9.402822	0.05	0.8212
LLB7	1	146.864047	146.864047	0.80	0.3722
LLB9	1	51.269386	51.269386	0.28	0.5977
LLB11	1	38.165893	38.165893	0.21	0.6489
LLB15	1	30.681759	30.681759	0.17	0.6831
LLB19	1	520.153628	520.153628	2.84	0.0941
LLB23	1	145.560784	145.560784	0.79	0.3743
LLB27	1	0.972058	0.972058	0.01	0.9421
LLB31	1	950.437833	950.437833	5.18	0.0241
LLB35	1	777.798572	777.798572	4.24	0.0410
LLB39	1	91.860382	91.860382	0.50	0.4802
LLB42	1	49.429358	49.429358	0.27	0.6044
LLB45	1	283.100537	283.100537	1.54	0.2159
LLB48	1	314.477861	314.477861	1.71	0.1922
LLB51	1	135.721942	135.721942	0.74	0.3909
LLB54	1	9.090648	9.090648	0.05	0.8241
LLB55	1	116.517517	116.517517	0.64	0.4266
LLB57	1	1.073407	1.073407	0.01	0.9391
LLB60	1	10.769408	10.769408	0.06	0.8089

Annexure J

MULTIVARIATE ANALYSIS – MULTIPLE REGRESSION SELECTION MODEL

Multivariate Analysis: Multiple Regression Model Selection

The GLMSELECT Procedure

Data Set	WORK.DAT
Dependent Variable	Post_test
Selection Method	Backward
Select Criterion	SBC
Stop Criterion	SBC
Choose Criterion	SBC
Effect Hierarchy Enforced	None

Number of Observations Read	235
Number of Observations Used	208

Class Level Information		
Class	Levels	Values
Gender	2	1 2
Race	4	2 3 5 6
Age	5	1 2 3 4 5

Dimensions	
Number of Effects	24
Number of Parameters	32

Backward Selection Summary				
Step	Effect Removed	Number Effects In	Number Parm's In	SBC
0		24	29	1028.4720
1	Age	23	25	1011.1373
2	Race	22	22	995.7085
3	LLB42	21	21	990.3710
4	LLB23	20	20	985.0372
5	LLB35	19	19	979.7042
6	LLB55	18	18	974.4160
7	Gender	17	17	969.1310
8	LLB57	16	16	963.8656
9	LLB19	15	15	958.6758
10	LLB48	14	14	953.5418
11	LLB11	13	13	948.4893
12	LLB7	12	12	943.5195
13	LLB31	11	11	938.7331
14	LLB27	10	10	933.9894
15	LLB45	9	9	929.4325
16	LLB51	8	8	925.3916
17	Motivation_Score	7	7	920.9117
18	LLB9	6	6	916.3438
19	LLB60	5	5	912.7750
20	LLB39	4	4	910.6986*
* Optimal Value of Criterion				

Selection stopped at a local minimum of the SBC criterion.

Stop Details				
Candidate For	Effect	Candidate SBC		Compare SBC
Removal	LLB15	911.1481	>	910.6986

The selected model, based on SBC, is the model at Step 20.

Effects:	Intercept Pre_test LLB15 LLB54
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Note: The p-values for parameters and effects are not adjusted for the fact that the terms in the model have been selected and so are generally liberal.

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	29626	9875.43083	134.65	<.0001
Error	204	14962	73.34187		
Corrected Total	207	44588			

Root MSE	8.56399
Dependent Mean	48.39744
R-Square	0.6644
Adj R-Sq	0.6595
AIC	1107.34843
AICC	1107.64546
SBC	910.69858

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	24.739988	3.301937	7.49	<.0001
Pre_test	1	0.772317	0.042872	18.01	<.0001
LLB15	1	-1.407430	0.586659	-2.40	0.0173
LLB54	1	-1.948721	0.536590	-3.63	0.0004

Data Set	WORK.DAT
Dependent Variable	Final_course_mark
Selection Method	Backward
Select Criterion	SBC
Stop Criterion	SBC
Choose Criterion	SBC
Effect Hierarchy Enforced	None

Number of Observations Read	235
Number of Observations Used	208

Class Level Information		
Class	Levels	Values
Gender	2	1 2
Race	4	2 3 5 6
Age	5	1 2 3 4 5

Dimensions	
Number of Effects	24
Number of Parameters	32

Backward Selection Summary				
Step	Effect Removed	Number Effects In	Number Parm's In	SBC
0		24	29	920.0812
1	Age	23	25	901.3744
2	Race	22	22	890.6961
3	LLB48	21	21	885.3615
4	LLB60	20	20	880.0606
5	LLB9	19	19	874.7592
6	LLB51	18	18	869.5328
7	LLB45	17	17	864.3534
8	Motivation_Score	16	16	859.1963
9	LLB19	15	15	854.2514
10	LLB23	14	14	849.3913
11	LLB42	13	13	844.5895
12	LLB55	12	12	839.9468
13	LLB27	11	11	835.3583
14	LLB7	10	10	831.0329
15	LLB31	9	9	827.3769
16	LLB11	8	8	823.6757
17	LLB35	7	7	819.6501
18	LLB57	6	6	816.9181
19	LLB39	5	5	813.9835
20	LLB15	4	4	813.6973
21	Gender	3	3	813.6147*
* Optimal Value of Criterion				

Selection stopped at a local minimum of the SBC criterion.

Stop Details				
Candidate For	Effect	Candidate SBC		Compare SBC
Removal	LLB54	816.1763	>	813.6147

The selected model, based on SBC, is the model at Step 21.

Effects:	Intercept Pre_test LLB54
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Note: The p-values for parameters and effects are not adjusted for the fact that the terms in the model have been selected and so are generally liberal.

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	14294	7147.16819	152.22	<.0001
Error	205	9625.42804	46.95331		
Corrected Total	207	23920			

Root MSE	6.85225
Dependent Mean	58.46635
R-Square	0.5976
Adj R-Sq	0.5937
AIC	1013.60211
AICC	1013.79916
SBC	813.61473

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	39.040415	2.466438	15.83	<.0001
Pre_test	1	0.549690	0.034258	16.05	<.0001
LLB54	1	-1.209120	0.429238	-2.82	0.0053

Data Set	WORK.DAT
Dependent Variable	Writing
Selection Method	Backward
Select Criterion	SBC
Stop Criterion	SBC
Choose Criterion	SBC
Effect Hierarchy Enforced	None

Number of Observations Read	235
Number of Observations Used	198

Class Level Information		
Class	Levels	Values
Gender	2	1 2
Race	4	2 3 5 6
Age	5	1 2 3 4 5

Dimensions	
Number of Effects	24
Number of Parameters	32

Backward Selection Summary				
Step	Effect Removed	Number Effects In	Number Params In	SBC
0		24	29	1153.9770
1	Age	23	25	1135.6458
2	Race	22	22	1126.8709
3	LLB54	21	21	1121.5844
4	LLB27	20	20	1116.2986
5	LLB45	19	19	1111.0898
6	LLB15	18	18	1105.9025
7	LLB57	17	17	1100.7217
8	LLB60	16	16	1095.6234
9	LLB9	15	15	1090.5863
10	Motivation_Score	14	14	1085.6534
11	LLB51	13	13	1080.6933
12	LLB55	12	12	1075.9548
13	LLB11	11	11	1071.2352
14	Gender	10	10	1066.7530
15	LLB7	9	9	1062.2888
16	LLB23	8	8	1058.1244
17	LLB48	7	7	1053.9957
18	LLB39	6	6	1049.7348
19	LLB42	5	5	1046.0752
20	LLB35	4	4	1044.1825
21	LLB19	3	3	1041.9035*
* Optimal Value of Criterion				

Selection stopped at a local minimum of the SBC criterion.

Stop Details			
Candidate For	Effect	Candidate SBC	Compare SBC
Removal	LLB31	1042.7334	> 1041.9035

The selected model, based on SBC, is the model at Step 21.

Effects:	Intercept Pre_test LLB31
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Note: The p-values for parameters and effects are not adjusted for the fact that the terms in the model have been selected and so are generally liberal.

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	9837.93511	4918.96756	27.21	<.0001
Error	195	35252	180.78003		
Corrected Total	197	45090			

Root MSE	13.44545
Dependent Mean	51.14141
R-Square	0.2182
Adj R-Sq	0.2102
AIC	1232.03867
AICC	1232.24593
SBC	1041.90347

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	23.199293	4.312863	5.38	<.0001
Pre_test	1	0.485799	0.068735	7.07	<.0001
LLB31	1	1.967613	0.795388	2.47	0.0142

Data Set	WORK.DAT
Dependent Variable	Portfolio_mark
Selection Method	Backward
Select Criterion	SBC
Stop Criterion	SBC
Choose Criterion	SBC
Effect Hierarchy Enforced	None

Number of Observations Read	235
Number of Observations Used	208

Class Level Information		
Class	Levels	Values
Gender	2	1 2
Race	4	2 3 5 6
Age	5	1 2 3 4 5

Dimensions	
Number of Effects	24
Number of Parameters	32

Backward Selection Summary				
Step	Effect Removed	Number Effects In	Number Params In	SBC
0		24	29	1250.1451
1	Age	23	25	1229.5129
2	Race	22	22	1216.0650
3	LLB60	21	21	1210.7278
4	LLB39	20	20	1205.4089
5	LLB15	19	19	1200.0954
6	LLB48	18	18	1194.7808
7	LLB11	17	17	1189.5350
8	Motivation_Score	16	16	1184.2757
9	LLB27	15	15	1179.1529
10	LLB9	14	14	1174.2008
11	LLB54	13	13	1169.2487
12	LLB42	12	12	1164.4854
13	LLB31	11	11	1159.7231
14	LLB7	10	10	1155.2403
15	LLB45	9	9	1150.9275
16	LLB51	8	8	1146.4504
17	LLB35	7	7	1142.0475
18	LLB19	6	6	1138.6075
19	LLB55	5	5	1135.4004
20	LLB23	4	4	1133.7018*

* Optimal Value of Criterion

Selection stopped at a local minimum of the SBC criterion.

Stop Details				
Candidate For	Effect	Candidate SBC		Compare SBC
Removal	LLB57	1133.8306	>	1133.7018

The selected model, based on SBC, is the model at Step 20.

Effects:	Intercept Pre_test Gender LLB57
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Note: The p-values for parameters and effects are not adjusted for the fact that the terms in the model have been selected and so are generally liberal.

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	9001.75773	3000.58591	14.00	<.0001
Error	204	43712	214.27549		
Corrected Total	207	52714			

Root MSE	14.63815
Dependent Mean	61.38942
R-Square	0.1708
Adj R-Sq	0.1586
AIC	1330.35164
AICC	1330.64867
SBC	1133.70179

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	36.879407	5.556055	6.64	<.0001
Pre_test	1	0.384800	0.072014	5.34	<.0001
Gender 1	1	-7.963040	2.630638	-3.03	0.0028
Gender 2	0	0	.	.	.
LLB57	1	2.433025	1.043891	2.33	0.0207

Annexure K

TITLE REGISTRATION APPROVAL



9 October 2017

Dear Mr PS Mhlongo

Title Registration Approval:

Language learning beliefs and motivation of Foundation and Intermediate Phase Education students in developing mastery in English

Department: English

Student number: 2010004337

TITLE APPROVED

With reference to your title registration with the University of the Free State, I am pleased to inform you that your title has been approved by the appropriate Committee for Title Registration of the Faculty.

You may now proceed with your application for ethical clearance (if required). Once this process has been concluded, your title will be tabled for approval by the Faculty Board. The Board's approval is the final step in the title registration process.

Where ethical clearance is required, please upload this letter.

Thank you for submitting your title, and we wish you all the best with your research.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'HJ Pieterse', is written over a light blue dotted line.

Prof HJ Pieterse

Chair: Committee for Title Registration: Languages

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Annexure L

ETHICS APPROVAL

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VREYSTAAT
YUNIBESITHI YA
PREISTATA



UFS-UV
STUDENT AFFAIRS
STUDENTESAHE
DITABA TSA BAIHUTHI

RESEARCHER:

PS Mhlongo
2010004337

NAME OF STUDY:

Language learning beliefs and motivation for pre-service Foundation and Intermediate Phase educators in developing mastery in English.

NATURE OF STUDY:

Survey/ Questionnaire

TARGET POPULATION:

Students registered for the ENGE1608 module

COMMENTS:

Recommended for approval.

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SECRETARY
OFFICE OF THE DEAN
STUDENT AFFAIRS

15-03-2016

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FREISTATA



UNIVERSITY OF THE FREE STATE

UNIVERSITY OF THE FREESTATE RESEARCH ETHICS COMMITTEES

**APPROVAL FROM UFS AUTHORITIES
FOR PARTICIPATION OF STUDENTS/STAFF IN RESEARCH PROJECTS**

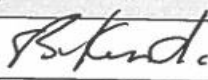

Title, Initials, Surname:	Mr P.S. Mhlongo	Staff/Student number	2010004337
Department/Institution:	English, University of the Free State		
Phone:	0788534854	E-mail address:	mlangenips@gmail.com
Supervisor(s):	Mrs CL du Plessis	Phone:	051 4013286

Protocol Title:	<i>Language learning beliefs and motivation of pre-service Foundation and Intermediate Phase educators in developing mastery in English</i>
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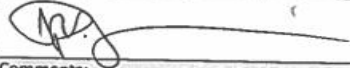
Who will be involved in the study? (tick ✓)	<input type="checkbox"/> UFS Personnel	<input checked="" type="checkbox"/> Students
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INSTRUCTIONS:

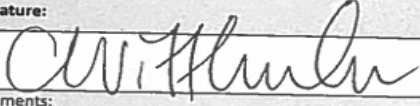
- I. Please attach the following to this form when requesting approval from the signatories:
 - a. A short summary of the study protocol;
- II. Kindly note that it is the responsibility of the researcher(s) to ensure that all relevant signatures are obtained before this signed form is attached to your Ethical Clearance Application's Document Checklist on RIMS.
- III. Please choose either section A OR B below.
- IV. Section C is mandatory for all research on campus.

A. FOR RESEARCH ON UFS STUDENTS AND/OR STAFF FROM A SPECIFIC FACULTY, BOTH THE FOLLOWING SIGNATURES MUST BE OBTAINED:		
I. DEPARTMENT HEAD (IF APPLICABLE):	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Not Approved
Signature:	Date: 29/9/2016	
		
Comments:		
II. DEAN OF FACULTY:	<input type="checkbox"/> Approved	<input type="checkbox"/> Not Approved
Signature:	Date:	
		
16/09/2016		
Comments:		

OR

B. FOR RESEARCH ON INTERFACULTY UFS STUDENTS AND/OR STAFF AND/OR STUDENTS IN UFS RESIDENCES, THE FOLLOWING SIGNATURE MUST BE OBTAINED:		
I. DEAN: STUDENT AFFAIRS	<input type="checkbox"/> Approved	<input type="checkbox"/> Not Approved
Signature:	Date:	
		
01-11-2016		
Comments:		

AND

C. ALL RESEARCH ON STUDENTS AND/OR STAFF TO BE APPROVED BY:	
I. VICE-RECTOR: RESEARCH	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved
Signature: 	Date: 07/11/2016
Comments:	

Die Universiteit van die Vrystaat
The University of the Free State
2016 -11- 07
Prof. P.C. Witthuhn
VISE-REKTOR NAVORSING
VICE RECTOR RESEARCH

Prof. Corll Witthuhn
Viserektor:Navorsing - Vice Rector:Research
Universiteit van die Vrystaat
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ABBREVIATED RESEARCH PROPOSAL

SECRETARY
OFFICE OF THE DEAN
STUDENT AFFAIRS

2016-09-09

UNIVERSITY OF THE FREE STATE

The study aims to address some of the literacy challenges in South Africa by focusing on two aspects relevant to the training of pre-service educators: the language learning beliefs held by Foundation and Intermediate Phase Education students, and the role of students' motivation in developing mastery in English. Beliefs on the teaching and learning of languages provide a framework of expectations of how learning will take place, and can either enhance or hamper progress in a language module. Motivation is another phenomenon that can influence the effectiveness of a language course. The language learning beliefs and motivation of Foundation and Intermediate Phase Education students in developing mastery in English will without a doubt have an influence on their own role as teachers who have to assist their learners to develop their language skills optimally in order to participate fully in society and engage in opportunities for further study.

Research questions

The main research questions are:

What are the language learning beliefs and motivation of Foundation and Intermediate Phase Education students? Do they serve as predictors of their performance in mastering English?

Additional questions include:

1. Are the language learning beliefs of the students aligned with current views on language and the learning of languages?
2. Are students aware of the role of motivation in learning a language?

Data collection methods

Students registered for the ENGE1608 module will be asked to complete a survey questionnaire on language learning beliefs and motivation. The survey will be a cross-sectional one administered in the first quarter of the 2017 academic year. In addition hereto, the English proficiency of the students will be measured by means of a standardised pre- and post-test, the Test of Academic Literacy Levels (TALL). Other course assessment data will also be used to correlate students' language learning beliefs and levels of motivation with their performance in the course.