# STUDENTS' USES AND ATTITUDES TOWARDS MULTIPLE LANGUAGES IN TIMOR-LESTE 

## THESIS

Presented in partial fulfillment of the requirement for the degree Doctor of Education in School of Education Flinders University, South Australia

## By

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#### Abstract

"Students' uses and attitudes towards multiple languages in Timor-Leste"


Timor-Leste is a multilingual country. The country's constitution established two co-official languages: a vernacular language Tetum, and a foreign colonialist language Portuguese. English and Indonesian are also used and are considered working languages. Language policy has experienced many changes since independence reflecting the changes in political landscape and a gap between the policy planning and the grassroots language practices.

In the life of a language, attitude to that language is important in the restoration, preservation, decay or extinction of that language. If a community is grossly unfavorable to a bilingual or multilingual education policy, language policy implementation is unlikely to be successful (Baker, 1992). This has implications for education and the policies related to language of instruction and language learning. The status, value and importance of a language are most often and most easily measured by attitudes to that language (Baker, 1992). Hence the current study aimed to investigate the perceptions of students towards the languages of their educational experience in order to develop a student experience view on the current policy for languages in Timor-Leste

The aim of this study is to investigate the language use, preferences and attitudes of students towards multiple languages in Timor-Leste, with the focus on high school and university students who have been exposed to at least four languages during their formal education years. The study employed a mixed-method research design with questionnaire and structured interviews.

Findings of the study show that students in Timor-Leste are multilingual with the knowledge of more than four languages, consisting of at least two mother tongues or local dialects and at least two international languages. Most of the students had positive attitudes towards the languages in the education system with Tetum being most favoured followed by English, Portuguese and Indonesian. Although Portuguese has been in the education system for more than 12 years, students report that their level of proficiency is still below Tetum and Indonesian, which, curiously, is not taught in the school system. Students also attributed different
motivations for learning the languages. Portuguese was extrinsically motivated (Ryan \& Deci, 2000), due to its status as the official language of instruction in education. For English and Indonesian, the motivation was more intrinsic (Deci, 1985). In the case of English, its role as a global communication language was the main motivator, while the motivation for learning Indonesian was more related to popular culture, for acceptance in social interactions and because of the influence of the media. This study has also provided evidence that in the case of TimorLeste informal learning not only complements the formal learning at school but also plays an important role in language learning (Rogers, 2004).

Furthermore the study showed that the current policy is not achieving the intended aims of literacy in Portuguese and Tetum. Students reported literate in Tetum but not in Portuguese. In addition, students felt that they were not sufficiently proficient in the working languages of English and Indonesian. Hence, there is a mismatch in the current situation between policy and practice, and between the languages valued by students and those prescribed for education.

Several implications for language learning and language policy in Timor-Leste emerged from the study. And these together with possible directions for future research are discussed.

## Dedication

This thesis foremost is dedicated to all fallen heroes of Timor-Leste. We owe our freedom and independence to you, and for that I bow my head in

## One minute of silence

Be silent mountains
valleys and springs
rivers and streams
stony ways

Be silent
birds of the air and waves of the sea winds that blow
be silent
canes and bamboo
brushes and eucalypts
palms and grasses

Be silent
your silence, our silence
For one minute
It is a time for silence
For the silenced time
For the life times lost
For the lives given.

Francisco Borja da Costa, a young Timorese poet
Killed 7 December 1975

This thesis is also dedicated to:
The Lord Jesus Christ
Who has given me strength and blessing
The Virgin Mary
Who has always been there whenever I needed, thank you mother

My wife Claudina and my daughter Natasha
Thank you so much for your support and for simply being there during the good and bad times. Your smiles and laughter have kept me going this far. I could not have completed this thesis without your support. I love you to so much. Thank you Mami for being my best friend and partner. This thesis is also for you.

Natasha, remember when I took you to one of my meetings with my supervisors and you stayed very quiet and well behaved the whole time, and just as we left you said to me, "Papi I don't mean to be rude, but it was really boring and I kind of hate it"? This is for you too my dear, thank you for supporting your dad I love you my daughter, you are my bestie forever.

## My Mom and Dad

As a son I could not have asked for a better parents.
Your love, affection, support and blessing have made me who I am today.
I kept thinking how at least I could repay you
Hopefully this can put a smile on your faces I love you Mom and Dad.

Ba Apa and Ama
Obrigado barak ba ajuda e suporta durante tinan tolu ne ba hau e Alau.
Thank you for your love and support...

My brothers and sisters
Thank you nonoi Lita, big bro Nata and ikulai Rui and tiu Paul
Thank you for your understanding, support and love.
Man Nina, man Ni, Asao, Adi, Adoko \& Apenu, Isa
Thank you for your support and encouraging words.

To the big family of Klibur Mata Dalan, Institute of Business (IOB) and Escola Tecnica Informatica (ETI).

Yes... I have done it, now back to work.

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## Declaration

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Adelaide, 15 September 2015

Pedro Miguel de Fatima Goncalves Barreto Ximenes

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## Chapter I

## An Introduction to the study

### 1.1. Introduction

Timor-Leste is a multilingual country with more than 16 vernacular, local languages with active speakers. These languages have been declared national languages, with the emphasis on preservation and development as a national and cultural heritage. The National Constitution (2002) conferred co-official status to Portuguese and a mother tongue Tetum, while English and Indonesian were allocated the special status of working languages. The decision to adopt a multilingual policy was based mainly on Timor-Leste's political circumstances, its colonial history and the vernacular language landscape. Tetum was originally a local language, which came to symbolise national identity during the Indonesian occupation, especially after the Indonesian colonizers banned the use of Portuguese. With 24 years of Indonesian occupation and almost 450 years of Portuguese colonisation, the two exogenous languages of Portuguese and Indonesian have well-established roots in Timor-Leste. English came later, in 1999, during the period of the extensive international presence of the UN mission. A growing number of people are now able to speak English, as it is now seen as the language of international education, tourism, trade, and employment.

Since Timor-Leste celebrated its independence in 2002, its education system has undergone substantial changes and development. Among the many logistical and educational challenges facing education planners, perhaps the most acute and controversial is the teaching of languages in the curriculum and the selection of the medium of instruction. At the beginning, the policy on medium of instruction focused exclusively on the rapid reintroduction of Portuguese in a submersionschooling model (characterised by the use of the second language of Portuguese as the language of instruction in education, with the whole learning process taking place solely in a second language that is not familiar to students). Portuguese became the sole language of instruction from Grades 1-6 of primary education (Taylor-Leech, 2013). However, some difficulties arose from this model, mainly because few teachers spoke the language, let alone wrote it. This fact forced the

Ministry of Education to relax its policy and allow teachers to use Tetum as the medium of instruction in the first two years of schooling, i.e., for Grades 1 and 2 in primary school, with Portuguese still used as the official medium of instruction (the immersion model). The most recent policy embraces bilingual and even sometimes trilingual approaches to education where the mother tongue is used as the medium of instruction in the first years of basic education while Portuguese is taught as a subject. The shift to the Portuguese as the medium of instruction then takes place in fourth to ninth Grades and the mother tongue remains as a subject. English is then introduced as a subject in the later Grades 9 to 12 . This inconsistency of language policy and mismatch between language planning and grassroots language practice have been partly blamed for the poor literacy rate. The adult literacy rate is only 58.3 per cent with the literacy rate in Portuguese remaining low at only 39 per cent based on the 2010 census, which is only a slight improvement from the 2004 census. The voices of the main stakeholders i.e. teachers and students have been ignored throughout the policy planning stages.

In the life of a language, attitudes towards that language are important in the processes of language restoration, preservation, deterioration or extinction. If a community or section of that community is wholly against a bilingual or multilingual education policy, implementation of such a policy is unlikely to be successful (Baker, 1992). This has implications for education. The status, value and importance of a language are most often and most easily measured by attitudes to that language (Baker, 1992). The voice of students, the most important group of the community, has been ignored in language planning in Timor-Leste. This research aims to understand the attitudes of students toward the multiple languages used in Timor-Leste's education system with the intention of making a useful contribution to future language planning in Timor-Leste.

### 1.2. Background of the study

Timor-Leste is a multilingual country. Most inhabitants speak two or more languages. For many people, their first language is one of the regional languages, and their second is Tetum. In addition most people also speak at least one of the foreign languages in use in Timor-Leste. Although this multilingual feature can be considered a potential resource for the development of the country, at the same time it poses a great challenge for the education system, specifically in regard to
decisions about language in education policy. Language policy has suffered many changes reflecting the changes in political climate and the gap between the policy and grassroots language practices.

At the time of writing, Timor-Leste is a young country in all senses. It is the second youngest country in the $21^{\text {th }}$ century, after enduring almost 450 years of colonization period under two colonial rulers, Portugal and Indonesia. According to the 2010 census, the population is $1,066,582$ with the proportion of young people aged below 25 years accounting for almost $62 \%$, and of these, $43 \%$ are aged below 14 (C. F. Timor-Leste, 2014). The adult literacy rate is only $58.3 \%$. Almost $70 \%$ of the population live in the rural areas where access to basic social facilities like schools and health services is limited. The population is expected to double in 30 years (M. o. F. Timor-Leste, 2010). The number of 6 -year olds is predicted to increase by around $150 \%$ by 2015 (Ministry of Education, 2009, p. 26). Poverty is still a major issue as many people still live on less than $\$ 2$ a day. These circumstances, along with the additional complexity of the language policy in education, have resulted in poor educational achievement.

Study of the attitudes toward language can provide indicators of changing beliefs, preferences and desires and these indicators are very important inputs to be considered in the implementation of a language policy, as observed by Lewis (1980):

Any policy for language, especially in the system of education, has to take account of the attitude of those likely to be affected. In the long run, no policy will succeed which does not do one of three things: conform to the expressed attitudes of those involved; persuade those who express negative attitude about the rightness of the policy; or seek to remove the causes of the disagreement. In any case knowledge about attitude is fundamental to the formulation of a policy as well as to success in its implementation. (p. 262)

### 1.3. Aims of the research

The aim of this study is to investigate the uses, preferences and attitudes of students towards the multilingual policy in Timor-Leste. The focus is on high school and first year university students who have been exposed to at least four languages during their time in the schooling system. The three main objectives of
this research are:

1. To investigate students' attitudes toward the uses of multiple languages in education.
2. To explore what factors might influence student attitudes toward the uses of multiple languages in education.
3. To gain insights into students' attitudes toward multiple language uses that may inform the development of language policy in the future.

### 1.4. Research question and design

To achieve the stated objectives, the following key questions were addressed:
(1) What are the preferences for and uses of multiple languages by students in their education?
(2) What are students' attitudes toward different languages in Timor-Leste education?
(3) What socio educational factors might influence students' attitudes toward the uses of different languages in education?

This study will employ a concurrent mixed methods design in which the quantitative and qualitative data are collected at the same time and the information then integrated in the interpretation of the overall results (Creswell, 2009). The two different instruments will be used to expand and enrich the findings because this allows the use of both approaches in tandem so that the overall strength of a study is greater than either the quantitative or qualitative research alone (Creswell \& Clark, 2007). All methods have their own inherent strengths and weakness, so the use of multiple methods not only assists in data triangulation, but also helps to counteract the potential weaknesses of the individual data collection techniques, thus supporting construct validity.

As Creswell (2009) explained, in the mixed methods design the researcher may embed one smaller form of data within another larger data collection in order to analyse different questions. Following this line, the data acquired from the questionnaire and semi-structured interviews are to be used to answer research questions, as highlighted in the table below.

## Table 1. Research question and selected method

| No. | Research Question | Method |
| :--- | :--- | :--- |
| 1. | What are the preferences and uses of multiple | Quantitative and |
| languages by students in their education | qualitative |  |

### 1.5. Significance and contribution of the study

Research in the area of language and language policy in Timor-Leste is still scarce especially in the area of attitudes toward multilingual policy in Timor-Leste education that involves the range of students' views across education levels. This research therefore approached the language policy issue from the perspective of students and considered that their use of and attitudes towards languages are potentially significant inputs into the design of language-in-education policy.

There has been on-going public discussion about language, language policy and language in education policy in Timor-Leste. The public is not satisfied with the quality of current education and partly blames the current language policy. This research will try to illuminate this issue by providing an understanding from the point of view of the student, which it is hoped will provide useful inputs to the public discussion.

Since the independence of Timor-Leste the language policy in education has been marked by many changes reflecting the changes in political climate and the gap between policy planning and grassroots language practices. This research aims to provide insights which may inform policy development. It is expected that findings from this research may support future directions in language planning in the educational context.

### 1.6. Structure of thesis

This thesis consists of six chapters. Chapter I provides the introduction to the study, which includes the background of the study, the aim and objectives of the study, the research questions and the significance of the study. Chapter II reviews the existing literature and research that motivated and helped generate the research questions addressed in this thesis. It begins by exploring the theories on language attitudes and the literature on bilingual education and then explores the literature on attitudes towards the languages used in the bilingual education programs in Timor-Leste. The chapter also provides an overview of the existing ethno linguistic situation in Timor-Leste.

Chapter III describes the methodological approach adopted for the study. In order to deeply explore the phenomenon under investigation, a mixed methods approach was adopted and justification of this approach is provided.

Chapter IV provides the key findings from an analysis of the questionnaire data. It comprises descriptive statistical findings and the findings of an inferential statistical data analysis which was employed to determine whether there were any significant differences among the language attitudes of the different cohorts who took part in this study. This chapter further provides an in-depth analysis of the themes as coded from the interview data.

Chapter V includes a detailed analysis of the interviews conducted using content analysis. An interpretation of the findings of the study with reference to each of the research questions and in relation to previous relevant research completes the chapter.

Chapter VI summarizes the findings of the study by providing an interpretation of the combined analysis of the quantitative and qualitative studies, focussing on both the policy and planning, implications of the study. Recommendations for future research and practice are also provided in this final chapter.

## Chapter II

## Literature Review

### 2.1. Theories on language attitudes

Many scholars have shown that attitude toward a language is very important in the language learning process (Gardner, 1985; Ingram, 1989). If students have a positive attitude, they may be more motivated to learn a language (Edwards, 1985; Lasagabaster, 2003). Batibo (2005) emphasized that speakers tend to have different attitudes to each of the languages in their repertoire by favouring some more than others. It has been argued that these differing attitudes are related to differing orientations towards language learning and use, both in foreign (Gardner \& Lambert, 1972) and minority language learning and preservation (Baker, 1992). An attitude is defined as the disposition to approach an object, a person, an institution or an event favourably or unfavourably (Baker, 1988). Gardner (1985) said, "An individual's attitude is an evaluative reaction to some referent or attitude object, inferred on the basis of the individual's beliefs or opinions about the referent" (p. 9). Chapman and Mcknight (2002) defined attitude as general disposition - the mental "starting point" for viewing life and the people and events in it.

As a theoretical construct, attitudes are said to comprise various dimensions. The dimensions of attitudes are grounded in the area of social psychology, which have been identified by researchers as cognition, affect, and behaviour (Garrett, Coupland, \& Williams, 2003; Rosenberg \& Hovland, 1960) According to these researchers, the cognitive element of attitude concerns perceptions, concepts, and beliefs regarding the attitude object; the affective component includes feelings toward the object of the attitude. It could take the form of love or dislike of the language or anxiety over learning the language, while behaviour concerns a predisposition or intention to behave in a certain way.

Language learning, unlike any other subject, involves not only the development of cognitive ability in the target language but also of skills and behaviours which belong to the cultural framework of another community. Gardner (1985) also
pointed to motivation as arising from a particular attitude towards other ethnicities and language learning contexts. To accommodate this view, Gardner $(1985,2001)$ proposed a socio-educational model of second language acquisition. At the heart of this model is the construct of integrative motivation, which is defined as "a motivation to learn a second language because of positive feelings toward the community that speaks that language" (Gardner, 1985, pp. 82-83). This construct consists of integrativeness, attitudes toward the learning situation, and motivation. Integrativeness refers to "a genuine interest in learning the second language in order to come closer to the other language community" (Gardner, 2001, p.5), and is comprised of interest in foreign languages, attitudes towards the second language (L2) community, and integrative orientation (reasons for learning an L2 that are related to wanting to become similar to valued members of the target language community). Gardner's socio-educational model takes into account various factors such as learners' cultural beliefs, attitudes toward the learning situation, and integrativeness as well as motivation, as part of the process of second language acquisition.

### 2.2. Studies on language attitude

Dornyei and Csizér (2005) conducted a large scale longitudinal survey, which covered 13,000 students aged 13 and 14 years across Hungary in 1993, 1999 and 2004, by administering an attitude/motivation questionnaire, to gauge the changes in the population's international orientation. The questionnaire sought attitudes towards five target languages: English, German, French, Italian and Russian. The results showed that young Hungarian language learners appraise foreign languages along five dimensions: integrativeness, instrumentality, attitudes toward the L2 speakers and community, the cultural interest of the L2 community, and the community's vitality, with integrativeness as the key role in second language learning motivation, followed by instrumentality and attitudes toward the L2 community. These findings are consisten with Gardner's (2001) motivational theory that emphasised the importance of integrative motivation, which he defined as the desire to learn an L2 of a valued community so that one can communicate with members of the community and sometimes even become like them.

Based on this study, Dornyei (2009) proposed a second language acquisition
motivational theory that he called "Second Language (L2) Motivational Self System" which he claimed to be a refinement of Gardner's (2001) integrative motivation theory. Dornyei's system consists of three components: (1) Ideal L2 Self, (2) Ought-to L2 and (3) L2 Learning experience. According to Dornyei (2009), the ideal L2 self is the L2-specific facet of one's "ideal self": if the person we would like to become is a speaker of an L2, the "ideal L2 self" is a powerful motivator to learn the L2 because of the desire to reduce the discrepancy between our actual and ideal selves. The "Ought-to L2" concerns the attributes that one believes one ought to possess to meet expectations and to avoid possible negative outcomes, while L2 Learning Experience concerns "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).

Kärchner-Ober (2012) conducted a study, which investigated Malaysian multilingual university students' practical use of three languages, Bahasa Malaysia, English and German, with respect to reading, speaking and writing. This study also looked at students' motivation to learn a language, and their opinions about language learning. A structured questionnaire was used to gather data with respondents coming from three different ethnic and linguistic backgrounds existing in Malaysian higher education institutions. The results revealed some indications that their learning experiences and their own learning cultures as well as the role and status of the languages in Malaysia's society may affect the students' attitudes towards languages and language learning. The results also highlighted that learner differences (ethnicity, language repertoire) have more influence on attitudes and opinions about language learning than educational experiences of language learning of these students.

Huguet et al. (2008) conducted a study on student attitudes towards regional and foreign languages in Aragon, Spain. This study compared the attitudes of students toward three regional languages found in the Aragon curriculum system, namely Aragonese, Spanish and Catalan and two international languages, English and French. A questionnaire was devised to collect data from a sample of 387 students. The results showed that Spanish was the most highly valued language and the language towards which attitudes were most homogeneous compared to the other languages. Catalan was the least favoured language, which could be
explained by the fact that Spanish is the language spoken by most of population and used in the institutions of Aragon. In relation to the social and professional status of the participants, no differences were found in attitudes toward Aragonese, Spanish, Catalan and French. However English gained more favourable attitudes from the higher social class which points to the awareness of the importance of English as an international language.

Lasagabaster and Huguet (2007) carried out a large-scale survey using a questionnaire on the attitudes of pre-service teachers toward multilingual acquisition in a number of bilingual contexts in Europe, such as Ireland, Malta, Wales, Fiesland, The Basque country, Catalonia and Galicia, all of which had at least three languages in contact: the minority (first language[L1] or L2 or both), the majority (L1 or L2 or both) and the foreign language (L3). The research suggests that minority languages are associated primarily with informal domains including the family. Among the various factors posited as influencing language attitudes, the family language (i.e., the language used in the home) and the linguistic model employed in education were identified as the two most influential factors in all contexts. The researchers also proposed the inclusion of a language awareness component in teacher training courses to further boost positive attitudes towards language. They concluded from their comparative study that the widespread favourable attitudes toward minority languages reflect the changes over the last two decades in linguistic policies promoting protection and recovery of the minority language. This result may be relevant to the current language policy context in Timor-Leste in which the revival of local languages and the use of mother tongue as the medium of instruction in education has been promoted in recent times.

### 2.3. Studies on language choice and preference in Timor-Leste

The broad area of attitudes towards languages in education specifically in the Timor-Leste context is currently under researched. Some studies on the general theme of language policy, language options and preferences in Timor-Leste using several different methods have been conducted and will be discussed below. However none of these has specifically addressed the uses, preferences and attitudes of students towards the use of multiple languages in education at different levels.

A recent study relating to East Timorese students was conducted by Quinto (2015) using a semi-structured interview to explore the attitudes and motivations of ten East Timorese university students in the Philippines towards English, one of East Timor's two working languages. The results point to the participants' favourable attitude toward English because of its value as a linguistic tool, an instrument in the achievement of personal and career goals, and a utilitarian language. The study also found that that the participants are driven to learn English because of their favourable attitude and instrumental motivation towards English, that is the participants' recognition of the value of English as a useful language for competence, communication, job opportunities, and status. This study conducted in an environment supportive of English language teaching therefore not surprising students involved showed a favourable attitude. However assessing and measuring student attitude in an environment where English is not privileged like the context of Timor-Leste would provide an even stronger understanding of student belief and behaviour.

Boon (2013), using an ethnographic design, conducted a study on adult literacy education in Timor-Leste, where the focus was on the classroom interaction in a multilingual context. She showed how different languages were used by teachers and learners in different situations. Although Tetum was the language of instruction and the target language for literacy, other languages were also used in literacy classes, with different functions. She found that Portuguese is often used for meta-language, and that Indonesian is used to refer to numbers, and regional languages are used for explanations and small talk. She further stated that the extensive use of regional languages and Tetum and the limited use of Portuguese in adult literacy classes deviated from the language-in-education policies for formal education in Timor-Leste, which call for the use of the two official languages Tetum and Portuguese.

In a study of the linguistic landscape in Timor-Leste by examining the language used in public spaces with the objective of investigating language practices in Dili, Macalister (2012) found a significant dominance of English. Monolingual English signs accounted for $59.9 \%$ of the 222 signs examined, and signs on which English and another language were present, with English as the dominant language accounted for a further $15.3 \%$. The "Portuguese-dominant" category
included signs where Portuguese and another language were present with Portuguese dominant, and "Others" included signs on which three or more languages were present. This fact suggested that there is a gap between the official and the de facto language policy or between the ideology and the practice. Although the official language is Portuguese, with English and Indonesian as the working languages, based on the language used in the public space, English has emerged as what Shohamy (2006) described as the de facto language policy.

Da Conceição Savio, Kurvers, Van Engelenhoven, and Kroon (2012) conducted a quantitative study (survey) on Fataluku language and literacy uses and attitudes in Timor-Leste. This study was conducted in Lospalos region where Fataluku language was the mother tongue (L1) of the population. The results show that Fataluku (L1) was the language understood and spoken by almost everyone. Many of the participants at the same time also know Tetum and Indonesian with Portuguese as the least spoken language in Los Palos region. The result also shows that age is an important factor in language use. The younger generations who grew up during Indonesian occupation, went to Indonesian schools and learned Indonesian use more Indonesian and Tetum than the older generations who went to school before 1975. The older generations on the other hand, who grew up in Portuguese times, use slightly more Portuguese than the younger generations do. As far as literacy use is concerned, Tetum and Indonesian are the best and most often read languages and that the younger generations read Tetum and Indonesian more often, whereas the older generations read more Portuguese. In regard to the literacy attitudes, the study shows a clear preference for Tetum and Indonesian as languages of literacy, the latter especially by the younger generations. This study also provides a contradictory argument that the Los Palos region is where Tetum is underused with low proficiency (Taylor-Leech, 2009)

Macpherson (2011) found a substantial degree of resistance to the language policy during his fieldwork in Timor-Leste. For example, he found that children commonly described Portuguese as "too hard" and took every opportunity to practice their English, while parents schooled in Indonesian considered Portuguese as far less useful as a trading language than Indonesian, and not as "international" as English, given the imminent arrival of the internet and opportunities offered in Australia. He further noted that school directors and
teachers expressed their feelings in Tetum and Indonesian toward the current language policy as elitist and counter-productive. He even went as far as to conclude that school inspectors, Manual Taskforce and all members of the Inspectorate assisting with drafting curriculum content worked assiduously to an unspoken and unwritten rule: replace Portuguese words with Tetum".

A qualitative study by Taylor-Leech (2007) using semi-structured interviews and focus group discussions with 78 individuals, found marked intergenerational differences in attitude toward the role of Portuguese and Tetum in East Timorese national and cultural identity. These findings were consistent with Leach (2008) longitudinal surveys on 2002 and 2007 of East Timorese tertiary student' attitudes to national identity In his 2002 survey, Leach found evidence that a younger generation of East Timorese questioned the affiliation to Portuguese in the constitution, although his later survey in 2007 indicated greater acceptance of Portuguese as the co-official language among the younger generation (Leach, 2008).

While a number of studies have considered the attitudes of young people towards language use in Timor-Leste, these have largely focussed on language policy in general and are not specific to education. Furthermore, they do not address the different levels of education and the transition that occurs between secondary schooling and tertiary education where the languages change. It is this key transition point that is the interest of this current study.

### 2.4. Bilingual education policy

Bilingual education policy is not new but it is an increasingly attractive form of education around the world. From a policy perspective, there are two key views that inform bilingual education approaches, that is maintenance philosophy (Fishman 1976) and transitional philosophy (Hornberger 1991). Transitional bilingual education aims to shift the child from the home, minority language to the dominant, majority language. The main objective of this philosophy is a cultural assimilation into the language majority. In practical term the child home language is for introductory phase, afterward the medium of the classroom instruction officially changes to the second language. Typically, this takes place by about Grade 3. Some students in such classes may not be fully proficient in the
instructional language. In this program the second language would normally be used as the medium of instruction as well as being taught as a subject. According to Baker (2011) this form of bilingual education is referred to as a weak form of bilingual education in which bilingual pupils are present but bilingualism and biliteracy is rarely the outcome. This type of bilingualism fits to a subtractive bilingualism (Lambert, 1980) where the learning of a majority second language may undermine a person's minority first language and culture.

Maintenance bilingual education attempts to foster the minority language in the child, strengthening the child's sense of cultural identity and affirming the rights of an ethnic minority group in a nation (Baker, 2006). Maintenance philosophy seeks to promote the development, enrichment, and preservation of languages in education and, therefore, promotes additive bilingualism in which the learner acquires the second language without detriment to the first. The process involves adding second language skills to the individual's repertoire in a context where both languages and cultures are valued. Baker (2011) considered this philosophy as a strong form of bilingualism in which where the use of both languages in the curriculum is fostered with full bilingualism and biliteracy being an expected outcome. This type of bilingual education also adopts an additive bilingualism approach where the addition of a second language and culture is unlikely to replace or displace the first language and culture (Lambert, 1980).

Many studies show the clear pedagogical advantages of additive bilingual over traditional programs (Baker, 2001; Cummins, 1999; 2000). Some of these advantages according to Benson (2004) can be summarized as follows: since the content area of instruction in the first language can be understood, learning does not have to be postponed until learners acquire the second language; in addition, initial literacy in the first language enables learners to make the connection between spoken and written communication, thereby developing skills on which they can build once they learn the second language, which is taught explicitly. Teachers and students can interact more naturally in the first language and negotiate meanings together. This facilitates participatory teaching and learning and has positive consequences for the affective domain (Baker, 2001).

Bringing the language and culture of the home into the school is important for identity and for personal as well as group empowerment (Cummins, 2000). Once
learners have basic literacy skills in the first language and communicative skills in the second, they can begin reading and writing in the second language efficiently, transferring the literacy skills they have acquired in the familiar language. Finally, students become bilingual as well as biliterate.

The principles behind this positive transfer of skills are Cummins' (1991; 1999) "interdependence theory" and the concept of "common underlying proficiency", whereby the knowledge of language and concepts learned in the first language can be accessed and used in the second language once second language oral skills are learned and no relearning is required. It is for these kinds of reasons that a multilingual policy has been adopted in Timor-Leste, however whether these advantages are fully achieved in Timor-Leste is a question that needs further investigation. This study will try to illuminate, from the point of view of students themselves, whether the use of languages and the expected result of biliteracy in Portuguese and Tetum as stipulated in the policy is indeed a reality..

### 2.5. Multilingualism in Timor-Leste

Most people in Timor-Leste are trilingual, with their first and second language being their vernacular languages and third language, Tetum. Some more educated people could be quadrilingual with their mother tongue as their first language, Tetum as the second language and one or more of the international languages, Indonesian, Portuguese or English, as their third or fourth languages.

The census of 2004 showed that $86 \%$ of the population claimed the ability to speak, read or write a variety of Tetum (Census Atlas, 2006, p.64-72). The census results also showed that for most people, Tetum is a second language. The census also revealed that $15 \%$ of East Timorese are trilingual in Portuguese, Tetum and Indonesian while $20 \%$ are quadrilingual in the official languages (Portuguese and Tetum) and the working languages (Indonesian and English). Only 26\% of Tetum users used it as their only language, with no more than $30 \%$ overall reporting that they spoke some form of Tetum as their first language (Census Atlas, 2006, p. 66 ).

Unfortunately, the 2010 census did not seek the same information regarding languages as the 2004 census, and therefore it is difficult to ascertain the development and progression of multilingualism from 2004. However, the 2010
census provided some information about vernacular languages: for example, no language is spoken by more than $37 \%$ of the population with eight (8) of 32 languages used by $80 \%$ of the language speakers. Tetum-Praca, a variety of Tetum that is spoken in Dili and the surrounding area, was the language with the greatest number of speakers at $37 \%$. More detailed information can be found in the section 2.7.

Another important piece of information that can provide an insight into multilingualism in Timor-Leste is the adult literacy rate. In the 2004 census, the adult literacy rate was defined as "the capacity to speak, read or write or any combination of the above as informed by the interviewee" (Census Atlas, 2006, p. 66). . According to this criterion, in $200486 \%$ of people over the age of 6 declared capability in Tetum, 59\% in Indonesian, 36\% in Portuguese and 21\% in English. The census also measured language use in terms of literacy, considering anyone who was not able both to read and write in any of the official and working languages to be illiterate (Census Atlas, 2006, p. 72). According to this criterion, $46 \%$ declared that they were literate in Tetum, $13 \%$ in Portuguese, $43 \%$ in Indonesian and 5\% in English. According to Taylor-Leech (2011), these criteria were confusing as well as being unlikely to reflect the actual language situation fully. For one thing, they did not clarify the extent of bi- or multiliteracy in the official or working languages.

The 2010 census defined adult literacy rate as the percentage of persons 15 years and over who are literate (can speak, read and write) in one of the four languages Tetum, Portuguese, Indonesian and English, which was 58.6\% of total population. Table 2 shows the percentage of people who claimed to be literate in the four languages listed in the constitution. Tetum is the language with the highest number of literate people with $56.1 \%$, followed by Indonesian at $45.3 \%$ and respectively Portuguese and English at $25.2 \%$ and $14.7 \%$. In general, urban people are more literate than rural people and males are slightly more literate then females. After almost eight years of massive efforts to reintroduce Portuguese to the country, the result is showing an encouraging result with the census 2010 showing an increase almost 22 \% from $17.2 \%$ in 2004 to $39.3 \%$ in 2010 (DNEMF, 2010). .

Table 2. Percentage of people literate in four languages listed in constitution

| Sexes | Total (\%) <br> Speak, read and write in Tetum | Rural (\%) |  |
| :--- | :---: | :---: | :---: |
| Both sexes | 56.1 | 80.9 | 44.6 |
| Male | 61.3 | 83.4 | 50.3 |
| Female | 50.9 | 78.0 | 39.1 |
| Speak, read and write in Portuguese |  |  |  |
| Both sexes | 25.2 | 40.1 | 18.3 |
| Male | 29.0 | 42.8 | 22.1 |
| Female | 21.4 | 37.0 |  |
| Speak, read and write in Indonesian |  |  |  |
| Both sexes | 45.3 | 74.1 | 31.8 |
| Male | 50.0 | 77.2 | 36.5 |
| Female | 40.5 | 70.6 | 27.3 |
| Speak, read and write in English |  |  |  |
| Both sexes | 14.6 | 24.7 | 7.6 |
| Male | 17.0 | 32.8 | 9.1 |
| Female | 12.3 | 26.2 | 6.2 |

Although there are reservations about the reliability of these data, the census results indicate that a relatively low number of East Timorese citizens know Portuguese while a high number know Tetum. However, a constraint on the use of Tetum in education is that, while it is widely known, it has several varieties and is not spoken everywhere especially in the area of Ponta Leste of Timor-Leste such as Los Palos and the enclave Oecusse where the proficiency of Tetum is low (Taylor-Leech, 2009). The census results highlight the complexity of arriving at a functioning definition of a first language, let alone designating the sequence of additional languages for teaching purposes. The figures also point to the need for a flexible approach to educational planning and provision.

### 2.6. Mother tongue in Timor-Leste

Defining the term 'mother tongue' is not as straightforward as it may seem. UNESCO defines a person's mother tongue as "...the language that a person acquires in their early years ... which normally becomes its natural instrument of thought and communication" (UNESCO, 1953, p. 46). In the later document UNESCO further broadens the definition of mother tongue as the language(s) that one has learnt first; the language(s) one identifies with or is identified as a native speaker of by others; the language(s) one knows best and the language(s) one uses most, it may also be referred to as 'primary' or 'first language (L1)' (UNESCO,

2003, p. 15). In multilingual contexts, there is the added complexity of multiple languages being present from birth, making it problematic to consider any one a single mother tongue.

Kosonen \& Young (2009) define mother tongue in an educational context as a language one speaks and understand completely enough to learn academic content at the appropriate level. In the case of Timor-Leste there are 20 mother tongues (Gordon, 2005; Hull, 1998a). According to Skutnabb-Kangas (1990, p. 9), an individual may speak their mother tongue by origin, competence, function or identification. Speaking a mother tongue by origin means it is the first language that an individual learned at home. Speaking a mother tongue by competence refers to the language one knows best, and by function means the language one uses most, while identification means a language that someone identifies with. In this study, the term mother tongue follows the definition provided by Ministry of Education in promoting Mother Tongue Based Multilingual Education (MTBMLE) in which mother tongue is defined as the home languages or first languages of learners. For educational purposes Tetum is considered the second language (L2), although it is acknowledged that Tetum may be regarded as first language (L1) for teaching purposes in some communities. This definition captures the reality of language situation in Timor-Leste where there may be more than one vernacular language.

Mother tongues in Timor-Leste have various origins, namely, Austronesian language varieties, and Papuan language varieties. According to Hull (1999), the Austronesian origin means that they are "cousins" of Malay-Indonesian, Javanese, Tagalog, Malagasy, Motu, Fijian, Samoan and Maori. However, although the Austronesian languages of Timor belong, with Malay, to the Western MalayoPolynesian (or Hesperonesian) division of Austronesian, they are too different in structure and vocabulary to be mutually intelligible with Malay-Indonesian (Hull, 1999).

The National Language Institute lists the Austronesian language varieties spoken in Timor-Leste as Tetum (and its varieties), Habun, Kawaimina (the Kairui, Waima'a, Midiki, Naueti dialects), Galoli, the Atauran and Dadua dialects (belonging to the Wetarese language), Makuva (or Lóvaia), Mambae, Idalaka (Idate, Isni Lolein and Lakalei dialects), Kemak, Tokodede, Bekais and Baikenu.

The Papuan language varieties, listed as Bunak, Makasai, Makalero and Fataluku, are believed to be related to the Papuan languages of the Trans-New Guinea phylum spoken Fakfak district on the Bomberai Peninsula of West Papua (Hull, 1998a, pp. 2-4, 1999). The exogenous languages present in Timor-Leste are Malay, Arabic, Chinese, Portuguese, modern Indonesian and English.

There are different opinions on the number of mother tongues in Timor-Leste, Ethnologue (Gordon, 2005) listed twenty languages in Timor-Leste, The National Language Institute identified nineteen languages while Hull (1998) identified 16 languages with dialectical variationsThe Timor-Leste population census of 2010 listed 32 endogenous languages and five exogenous languages. This difference in number arises because the census considered some dialects of the same language as separate languages.. This differences, as pointed out by Bowden and Hajek (2007, p.264) arises from different ways of classifying languages and dialects. For example, in the 2010 population census, each of the five different dialects of the Idalaka and Atauran languages were all listed as separate languages.

Table 3 shows the data of languages spoken in Timor-Leste and their active number of speakers as well as the main areas where the languages are used based on 2010 population census. From Table 3 it is evident that Tetum Prasa has by far the largest number of speakers at $36.56 \%$, followed by Mambae at $12.47 \%$, Makasai at $9.67 \%$, and Tetum Terik at $6.03 \%$. Out of these 32 mother tongues, seven made up a total of $81 \%$ of the speakers of mother tongues in Timor-Leste, with the other languages having in average $1-2 \%$ of active speakers. Tetum with its varieties Tetum Prasa and Tetum Terik accounts for almost $42.3 \%$ all the speakers of mother tongues.

Table 3. Languages in Timor-Leste based on 2010 population census

| Language origin | Language/ mother tongue | Number of speakers | Percentag e of total population | Main areas where use |
| :---: | :---: | :---: | :---: | :---: |
| Austronesia | Adabe | 181 | 0.02\% |  |
|  | Atauran | 147 | 0.01\% |  |
|  | Rahesuk | 1,015 | 0.10\% |  |
|  | Raklungu | 2,220 | 0.21\% |  |
|  | Resuk | 1,691 | 0.16\% | Atauran Language varieties; Atauro island |
|  | Baikenu | 62,201 | 5.90\% | Oecussi |
|  | Bekais | 3,887 | 0.37\% | North of Balibo and Batugede |
|  | Dadu'a | 3,146 | 0.30\% | Around Manatuto |
|  | Galolen | 13,066 | 1.24\% | North coast, Laclo, Manatuto, Laleia, Wetar |
|  | Habun | 2,741 | 0.26\% | South of Manatuto and north east of Laclubar |
|  | Idalaka (+) | 259 | 0.02\% |  |
|  | Idate | 13,512 | 1.28\% |  |
|  | Isni | 703 | 0.07\% |  |
|  | Laloein | 1,130 | 0.11\% |  |
|  | Lakalei | 3,250 | 0.31\% | Idalaka varieties; South east of Dili |
|  | Kairui | 5,993 | 0.57\% |  |
|  | Midiki | 9,586 | 0.91\% | Central Timor-Leste |
|  | Kemak | 61,969 | 5.88\% | Far west, near the border with west Timor |
|  | Makuva (aka | 56 | 0.01\% | North east tip of Timor Island |
|  | Mambae | 131,361 | 12.47\% | Mountains of central Timor |
|  | Naoeti | 15,045 | 1.43\% | South east coast, around Uatolari |
|  | Tetum-Terik | 63,519 | 6.03\% | The central south coast of Timor-Leste and its hinterland |
|  | Tetum-Praca | 385,269 | 36.56\% | In and around Dili |
|  | Other Tetum |  | 0.00\% |  |
|  | Tokodede | 39,483 | 3.75\% | Bazartete, Liquiça, Maubara |
|  | Waima'a | 18,467 | 1.75\% | North Coast |
| Papua | Bunak | 55,837 | 5.30\% | Suai and Covalima regions |
|  | Fataluku | 37,779 | 3.59\% | Lospalos |
|  | Makalero | 7,802 | 0.74\% | Lospalos |
|  | Makasai | 101,854 | 9.67\% | Baucau regions |
|  | Sa'ani | 4,763 | 0.45\% | Buacau regions |
| Exogenous | Portuguese | 595 | 0.06\% | Mainly in Dili area |
|  | Indonesian | 3,045 | 0.29\% |  |
|  | English | 773 | 0.07\% |  |
|  | Malay | 107 | 0.01\% |  |
|  | Chinese | 722 | 0.07\% |  |
|  | Other | 495 | 0.05\% |  |
|  | Total | 1,053,669 |  |  |

In terms of the language spread, the majority of languages of Papuan origin, Makasai, Fataluku, Makalero and Sai'ni, are spoken in the eastern part of the Timor Island while Bunak is the spoken in the regions of Suai and Covalima near the border with west Timor. Languages of Austronesian origin are more spread out with Tetum and its variety Tetum Terik found in almost all parts of the island, with Mambae, Kemak and Tokodede also found in the western part of the island. The figure below shows the spread of the languages in Timor-Leste.


Figure 1. Language map of Timor-Leste (Bowden and Hajek, 2007, p.266)

It is important to notice that with an area of 15.000 square kilometers and with a population of around 1.1 million (Census Atlas, 2006), Timor-Leste probably has one of the most diverse language situation, therefore it is important that any language policy implemented in Timor-Leste needs to consider this fact. Although every mother tongue in Timor-Leste has it geographical situation, the widespread of Tetum beyond its geographical location has strengthen argumentation of Timorese people being multilingual with at least two vernacular languages. In addition to that, the widespread of Tetum has also provided indications of people's preference toward Tetum.

### 2.7. Language policy and planning in Timor-Leste

Language planning is defined as a deliberate effort to influence the function, structure, or acquisition of languages or a language variety within a speech
community (Kalpan \& Baldauf, 1997; Cooper, 1985, p.45). The goals of language planning differ depending on the nation or organization, but generally include making planning decisions and possibly changes for the benefit of communication and variety of language reforms (Nahir 2003).

Kaplan and Baldauf (1997, p.3) define language policy as "a body of ideas, laws, regulations, rules and practices intended to achieve the intended language change". It may be undertaken with formal, official governmental sanction (e.g. constitutions, legislation, policy statements) or reflected in unofficial and informal practices such as in the discourse of language, politics and society. The decisions on language policy and planning will influence the right to use and maintain languages, affect language status, and determine which languages are developed. Language policy and planning decisions have a major impact on language vitality and, ultimately, on the rights of the individual. Kaplan and Baldauf (2003) emphasized that language policy and planning are frequently used to pursue the agendas of those in power, It is therefore important to ensure that these policies really reflect the wishes and aspirations of the communities that will be impacted by the policy.

Language policy and planning activities are generally categorised into four types (Kaplan \& Baldauf, 1997): status planning (which concerns the uses of language), corpus planning (which concerns the structure of language), acquisition planning (which concerns the users of language), and prestige planning (which concerns the image of the language). Where status planning may be defined as efforts directed at the allocation of the functions of languages and literacies in a speech community; corpus planning as those efforts directed at influencing the form or structure of languages and literacies; prestige planning may be thought of as those efforts directed at improving the image of languages; and, finally, acquisition planning may be summarised as efforts to influence the distribution of languages and literacies.

As Lo Bianco (2004) noted, one of the characteristic results of status planning is laws and clauses in constitutions prescribing the official standing of languages and regulations for their use in public administration. In the case of Timor-Leste, the national constitution sets the basic rules for status planning. Under Article 13, it specifies two official languages, Tetum (vernacular language) and Portuguese,
while requiring the state to 'value and develop Tetum and the other national languages'. Further in article 159 Indonesian and English are considered as working languages within the civil service side by side with official languages 'as long as deemed necessary' (p. 63).

In Haugen's (1983) matrix of language planning goals, corpus planning consists of the policy/form-oriented goal of codification and the cultivation/functionoriented goal of elaboration. Codification refers to the selection and standardization of a linguistic norm, which according to Haugen (1983) is divided into three activities, "graphisation", or the development of a system of writing and orthography, "grammatication", or the development of a standard grammar, and "lexication", or the development of a standard lexicon and terminology. Corpus planning is where the language policy in Timor-Leste is lacking. Although the language selection for specific purposes and status had been made, the corpus planning of each language was not established appropriately. Tetum one of the coofficial languages was still an endogenous language used more as a verbal language within the community with no set of standardization in regard to the three aspects mentioned above. The Catholic church was the only "official entity" that had been using the language in writing for religious purposes. However there were no clear rules or regulation in linguistic term. Portuguese was the only language that had complied with the language standardization. However the constitution does not specifically determine which variant of Portuguese should be used, as there are two main variants of Portuguese in the world today; Iberian Portuguese/European Portuguese and Brazilian Portuguese. Later this issue became critical as the country sought to develop a policy for language in the education context (Taylor-Leech, 2013), especially in regard to teacher training and development and education curriculum. In regard to the two working languages, English and Indonesian, there are no specific provisions as to which version and language rules are to be used.

Prestige planning which is defined as the "enhancement of the prestige of a language" through its use in higher domains (Lo Bianco, 2004, p. 743) such as the sciences, the professions, diplomacy, high culture, refined social interaction and literature is done through the provision of co-official languages in the use of state documents and policy. Ager (2001) referred to this process as "image
creation". Image creation plays a central role in identity construction. In the civil service, the reintroduction of Portuguese and the introduction of Tetum is conducted in accordance with Law 8/2004, which came into force on 16 July, 2004. This law established a number of requirements including the obligation of public servants to use the official languages as the languages of the public service. Article 2(3) of this law states that the law applies to civil servants of the Defence Forces, the Police and administrative staff of the Office of the President of the Republic, the National Parliament, the courts, the Public Defenders Unit and the Prosecution Unit (Taylor-Leech, 2007). The government also established The National Institute of Languages with the mission to oversee all language-oriented research (including language-in-education projects, interpreting and translating and teaching English as a second language) carried out within the national territory (Taylor-Leech, 2007)".

One of the most important language planning decisions in education is the choice of the medium of instruction (Tsui \& Tollefson, 2004). The role of schools as the main component in the education sector is therefore very important as the formal transmitter of languages and cultures (Kaplan \& Baldauf, 1997, p. 123). Language acquisition planning therefore needs to take into account language education programs in schools and universities and language teaching for various purposes. Policy-oriented goals must be related to curriculum and personnel, methods and materials, and resource and evaluation. In the case of Timor-Leste, much of this work is inconsistent and under developed.

### 2.8. Language in education policy post-independence in Timor-Leste

After independence in 2002, language policy in education has been primarily driven by the provisions for languages in the National Constitution. Under Article 13, Tetum and Portuguese were established as the official languages, with the state required to "value and develop Tetum and the other national languages". Further, in Article 159, Indonesian and English are considered as working languages within the civil service side by side with the official languages "as long as deemed necessary" (p. 63).

The education system adopted a 6-3-3 model (six years primary education, followed by three years of pre-secondary and three years of secondary education). In this period, the policy on the medium of instruction focused exclusively on the
rapid reintroduction of Portuguese in a submersion-schooling model with Portuguese as the sole language of instruction from Grades 1-6 of primary education (Taylor-Leech, 2013). However, some difficulties occurred with this model mainly because few teachers spoke Portuguese, let alone wrote it. This fact forced the Ministry of Education to relax its policy and allow teachers to use Tetum. In 2005 the Ministry accepted Tetum as the medium of instruction in the first two years of schooling, i.e. for Grades 1 and 2 in primary school.

In 2008 the government enacted a new base law for education (Law14/2008) that established the education system framework. Under this new framework the education system provided 9 years of compulsory free basic education, divided into three sequential 3 -year cycles. The first cycle covers years $1-3$, the second cycle cover years 4-6 and the third cycle covers years 7-9. Basic education is then followed by 3 years of secondary education. The new law also established Tetum and Portuguese as the teaching languages of the East Timorese education system (Ministry of Education, 2008b, English version).

The National Education Strategic Plan (NESP) 2011-2015 sets out seven priority programs for the improvement of the provision and quality of education. Under Priority Program Two, the "Basic Education Reform" states that on completion of basic education "all children should excel in both national official languages and learn the fundamentals to understand English, their first foreign language" (Ministry of Education, 2009, p. 19, English version). The NESP does not provide any argumentation as to why English is considered important for the nation; however it does indicate that English will be introduced in Grades 5 and 6. Indonesian does not appear to have any place in the primary curriculum according to the Basic Education Act and the NESP. The NESP also explicitly defines English as the first foreign language in the schooling system.

On 21 February 2011, the Ministry of Education officially launched a new policy document promoting mother tongue based multilingual education (MTB-MLE). MTB-MLE is basically a policy that uses students' first languages (mother tongue) for initial instruction with the gradual introduction of Tetum and Portuguese and the later addition of Indonesian and English. In this document, mother tongues are defined as the home languages or first languages of learners. For educational purposes Tetum is considered the second language (L2), although
it is acknowledged that Tetum should be regarded as first language (L1) for teaching purposes in some communities. Portuguese is regarded as L3, English as L4 and Indonesian as L5. English is to be introduced in Grade 7 as a compulsory subject. However this policy does not indicate if or when Indonesian should be introduced in secondary schools. This policy framework conforms to a form of late-exit bilingual schooling (Ramirez \& Merino, 1990) recognizing the principle that additive multilingualism works best when the L1 is maintained in the system for as long as possible (Heugh, Benson, Bogale, \& Yohannes, 2007; SkutnabbKangas, 2000)

In 2013, MTB-MLE program was initiated as a pilot project in 12 schools across three districts Lautem, Manatuto and Oekusi. A progress report, produced in 2014 one year after the commencement of the project, suggested that the program is an outstanding success. The report emphasized, "use of the mother tongue has produced confident, engaged and happy children, who are learning literacy and beginning to transfer their literacy skills to other languages". The report further added that, "links between schools and communities are greatly enhanced to the benefit of both". However some issues were also reported, such as, that the additive multilingual principle promoted by the program does not seem to be well understood in the pilot schools, and the place of Portuguese language in the curriculum in an additive multilingual framework is not well managed or understood by teachers. The report also indicated the lack of resources necessary to implement the program (Taylor-Leech, 2013).

### 2.9. Informal language learning

The term 'Informal language learning' was first introduced and popularized by Knowles (1950). He describes the informal learning in the context of adult learning as friendly and informal, with flexibility of processes and the use of experience, enthusiasm and commitment of participants. He emphasized how formal and informal learning complement each other by stating that formal learning is more appropriate for new learning of an intensive nature, while informal learning experiences provide the best opportunity for practicing and refining the things learned in a formal context. (Knowles ,1950). Similarly, Rogers (2004) suggested that informal language learning is unstructured, unpurposeful but is the most extensive and most important part of all the learning
that all of us do every day of our lives. On the contrary, formal language learning is structured, purposeful, and school based.

Lightbown and Spada (2001) describe informal settings as the contexts in which the adult learner is exposed to the target language at home or at work or in social interaction, and formal settings as the contexts where the target language is being taught to a group of second or foreign language learners. In formal language learning settings, the focus of learning is on the language itself. On the contrary, in informal language learning settings the focus is on meaning. In these settings language learners interact with native speakers in the target language, use different technologies at home or at work, watch a movie, or listen to music or songs just for entertainment but which can lead to language learning. In other words, by viewing a movie or listening to a song in informal settings, language learners indirectly get involved in the language learning process when they try to understand the movie or the song by using a dictionary or subtitle (Pemberton, Fallahkhair \& Masthoff, 2004).

Nunan and Richards (2015) used the term out-of-class learning to represent how informal learning can contribute to the autonomous learning in which the focus is on learners and how they learn. Autonomous learning is said to make learning more personal and focused since it based on the learner's needs and preferences. Nunan and Richards (2015) provide five approaches for implementing informal language learning namely, involving learners in out-of-class learning, using technology and the internet, learning through watching television, out-of-class projects, and interacting with native speakers. It is likely that informal language learning is an important aspect to consider in addition to formal language learning in a country where basic educational and learning resources are still lacking, where children spend only four to five hours daily at school and in a fledging education system and multilingual context such as that of Timor-Leste.

## Chapter III

## Research Methodology

### 3.1. Introduction

The methodology of this study is rooted in pragmatism. A pragmatic perspective draws on employing "what works," using diverse approaches, giving primacy to the importance of the research problem and question, and valuing both objective and subjective knowledge (Morgan, 2007). Creswell (2014, p.11) argued, "Pragmatism is not committed to any one system of philosophy and reality. This applies to mixed methods research in that inquirers draw liberally from both quantitative and qualitative assumptions when they engage in their research". Creswell (2014, p.11) also stated, "Truth is what works at the time. It is not based in a duality between reality independent of the mind or within the mind." Thus, in mixed methods research, investigators use both quantitative and qualitative data because they work together to provide the best understanding of a research problem.

The status and importance of a language in society and within an individual derives largely from adopted or learnt attitudes. An attitude is individual, but it has origins in collective behaviour. Attitude is something an individual has which defines or promotes certain behaviour. Similarly, people use language in patterned ways, in multilingual contexts language use is concerned with how languages in a person's repertoire are used for different situations. The examination of language use patterns strengthens our understanding of human communication and the primary purposes for each language. These aspects are important factors to be considered in language policy especially in a multilingual context such as TimorLeste.

Language attitude in relation to language policy is a topic that has been widely researched, therefore numerous knowledge and lessons can be drawn from many countries and studies. However it should be noticed that Timor-Leste has a different context, hence lessons from several similar cases in other countries can be adopted, but the specificity of Timor-Leste must be taken into account . For all
these reasons, the researchers took a pragmatic position that insists on "what works" and emphasizes "answering the research question" by application of mixed method that combines the quantitative and qualitative method.

Mixed methods research is more than simply collecting qualitative data from interviews, or collecting multiple forms of qualitative evidence (e.g., observations and interviews) or multiple types of quantitative evidence (e.g., surveys and diagnostic tests). It involves the intentional collection of both quantitative and qualitative data and the combination of the strengths of each to answer research questions (Dowding, 2013). Quantitative (mainly deductive) methods are ideal for measuring the pervasiveness of "known" phenomena and central patterns of association, including inferences of causality, while qualitative (mainly inductive) methods allow for identification of previously unknown processes, explanations of why and how phenomena occur, and the range of their effects (Pasick et al., 2009).

### 3.2. Research Design

This study employed convergence parallel design in which the quantitative and qualitative data are collected at the same time and then the information is integrated in the interpretation of the overall results (Creswell, 2009, 2011). Two different instruments were used to expand and enrich the findings because this allows the use of both approaches in tandem so that the overall strength of a study is greater than either quantitative or qualitative research (Creswell \& Clark, 2007). All methods have their own inherent strengths and weakness, so not only does the use of multiple methods assist in data triangulation, but it also helps counteract the potential weaknesses of the individual data collection techniques, thus supporting construct validity.

In this model (as depicted in Figure 2), the quantitative and qualitative data on the same phenomenon are collected and analysed separately and then the different results are converged (by comparing and contrasting them) during the interpretation.


Figure 2. Convergence parallel mixed method
The purpose of convergent design is "to obtain different but complementary data on the same topic" (Morse, 1991, p. 122) to best understand the research problem. This design is used when the researcher wants to triangulate the methods by directly comparing and contrasting quantitative statistical results with qualitative findings for corroboration and validation purposes. Another purpose of this design is to enhance quantitative results with qualitative findings, synthesizing complementary quantitative and qualitative results to develop a more complete understanding of a phenomenon, and compare multiple levels within a system (Creswell, 2011, p. 77). Following this line, the data acquired from the questionnaire and semi-structured interviews were used to answer the research questions (as outlined in Section 1.4 Table 1).

As stated by Johnson et al. (2007), the mixed method combines elements of qualitative and quantitative research approaches for the purposes of breadth and depth of understanding and corroboration. The objective of this research was to investigate the phenomena of the attitudes and preferences of students at two levels of education toward the languages and language policy in Timor-Leste. This research further aimed to gain an in-depth understanding of how and why these student attitudes and preferences occurred and how they might affect the implementation of the language-in-education policy in Timor-Leste.

The mixed method design was also used because of the exploratory nature of this research and the intention to discover how the results could be used to inform policy development in Timor-Leste. The design recognizes that some of the
quantitative results may be more readily appreciated by policy makers in the Timor-Leste context, while the qualitative aspects may be of greater interest to other researchers.

### 3.3. Quantitative Data Collection

The questionnaire used was adapted from Baker (1992). Baker's questionnaire was chosen because it provided a tool that can be used to measure attitudes and preferences in a multilingual context. Further, the questionnaire has been used previously in various studies assessing students' preferences and attitudes toward language (Coady, 2001; Lasagabaster \& Huguet, 2007). In particular, this questionnaire was used in a large-scale survey on the language attitudes of preservice teachers toward multilingual acquisition in a number of bilingual contexts in Europe such as Ireland, Malta, Wales, Fiesland, The Basque country, Catalonia and Galicia. These contexts featured at least three languages: the minority (L1 or L2 or both), the majority (L1 or L2 or both) and the foreign language (L3) (Lasagabaster \& Huguet, 2007). Hence, the questionnaire has been applied effectively in multilingual contexts similar to that of Timor-Leste.

### 3.3.1. Questionnaire

The questionnaire used in this study was composed of 94 questions divided into four parts: the socio demographics ( 12 short questions), self-rated language proficiency ( 20 items), language use and background (14 questions), and attitudes toward multilingualism (48 items). Appendix 9 provides the details of the modifications and adaptations of the Baker's original questionnaire (1992) for this study.

### 3.3.1.1 Identity and socio demographic items

This section was composed of nine short questions:

1. Age: This variable referred to the age of the student at the time of the data collection. Since the study covered from secondary students up to university students, this variable allowed for differentiation of language use and attitudes according to age.
2. Gender: The inclusion of the variable gender allowed differentiating between male and female.
3. Mother tongue: This question listed the mother tongues found in Timor-

Leste (Gordon, 2005; Hull, 1998). The complete list of mother tongues can be found in the questionnaire in Appendix 2
4. Parental occupation: Based on the occupations of parents, five categories representing socio-professional status were created:

- Public servant: corresponded to parents that work with the government.
- International or national NGO staff: refers to parents that work with either international or national non-governmental organizations.
- Private company staff: referred to parents that work in private companies.
- Self-employed: refers to parents that work in non-formal sectors, small business and farmers.
- Other: referred to parents who do not fit in any of the groups mentioned above, this could mean unemployed.

5. Age at learning the language: This variable consisted of four questions, and referred to the age at which a student started to learn or know the language based on the student point of view of the four languages officially recognized in Timor-Leste: the two co-official languages, Tetum and Portuguese, and the two working language; English and Portuguese. The aim was to capture how these languages were learned as these students progressed from basic education up to university and to compare this with the development of language policy in education in Timor-Leste.
6. District of origin: Referred to the district where the student was born. Thirteen districts in the Timor-Leste administration system were listed. The aim was to capture the relationship between the student's district of origin and their language use and attitude.
7. Past institution: This variable took into account the type of secondary/pre secondary institution of the respondent's previous school, either private or public school. If a respondent was a secondary school student, the student would indicate the pre-secondary school; similarly a university student would indicate the type of senior secondary school the student previously attended.
8. Type of school (current): This variable captured the differentiation in language use and attitude based on the type of school (public/private). Note that many public schools in Timor-Leste are under resourced
compared to the private schools; hence it was important to investigate how this condition might affect the student attitudes and preferences.
9. Current institution: This variable refers to the current institution the student was enrolled in, either secondary school or university. As pointed out in question 8, many public schools in Timor-Leste are under resourced. Further, many private universities have not adopted the current language policy in education; hence it was important to see whether these factors influence student's attitudes and preferences.

### 3.3.1.2 Self-rated language proficiency

This section provided the space for the student to rate their language proficiency in five areas: general language competency, reading competency, writing competency, listening competency and speaking (oral) competency. A five-point Likert scale was used to capture students’ opinions on their own language competency. An example of the questions can be seen in Figure 3.
13. What is your reading proficiency in Tetum
a. None
b. A little
c. Average
d. Good
e. Very good
14. What is your writing proficiency in Tetum
a. None
b. A little
c. Average
d. Good
e. Very good

Figure 3. Example of self-rated proficiency question
This section of the questionnaire consisted of a total of 20 items with a five item set used to assess student proficiency in reading, writing, speaking, listening and general proficiency in each of the four languages. A factor score for language proficiency was then created from the sum of the value of the five items in each language (Comrey \& Lee, 1992) to be used in subsequent analyses. Factor scores are composite variables, which provide information about an individual's placement on the factor(s) (DiStefano, Zhu \& Mindrila, 2009).

Multiple studies have shown that self-ratings are significantly correlated with objectively measured proficiency on a broad variety of measures, for instance
between self-ratings and reading fluency, reading comprehension, picture naming, auditory comprehension, sound awareness, receptive vocabulary, and grammaticality, judgment speed and accuracy (Delgado, Guerrero, Goggin \& Ellis, 1999; Marian, Blumenfeld \& Kaushanskaya, 2007) . These correlations are often highly robust (significant at the $p<.01$ level), and can also be moderate or large in size, especially for ratings of a non-dominant language which were as high as .74 in some cases (Marian et al., 2007).

### 3.3.1.3 Language use and background

Sixteen items in the language use and background section were constructed to capture how students use their languages in a range of everyday situations. These situations included formal classroom situations involving interaction with the teacher, informal situations with other students, at home with parents and other family members and students' language preferences in the selection of TV programs, radio, newspaper, listening to music and social media (e.g. internet, Facebook, Twitter and Instagram). These items allowed student to choose what language they used most in situations as described above with five options listing the four languages (Tetum, Portuguese, English, and Indonesian) and an additional option for other languages not included in these four languages.

### 3.3.1.4 Attitude toward languages

This construct sought to capture the tendencies to evaluate favorably or unfavorably particular languages, in this case, attitudes toward the four languages. Using a five-point Likert scale, the participants were asked to rate each statement, from strongly agree to strongly disagree. Each item was then coded with one being the most negative answer and five the most positive. A factor score for attitude toward language was then created from the sum of value of ten items in every language (Comrey \& Lee, 1992) to be used in subsequent analyses. Figure 4 provides a sample of the questions from this section

Here are some statements about the Tetum language. Please say whether you agree or disagree with these statements. There are no right or wrong answers. Please be as honest as possible. Answers with ONE of the following:

SA : Strongly Agree
A : Agree
NAND: Neither agree Nor Disagree
D : Disagree
SD $\quad$ Strongly Disagree

| No | Statements | SA | A | NAND | D | SD |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 64. | I like hearing Tetum Spoken |  |  |  |  |  |
| 65. | Tetum should be taught to all pupils in Timor-Leste |  |  |  |  |  |
| 66. | Tetum is a language worth learning |  |  |  |  |  |

Figure 4. Sample questions for attitude toward language

### 3.3.2. The sample selection

Given the geographical conditions in Timor-Leste with a rough terrain and difficulty of access to some parts of the country, and the fact that the study was conducted during the examination periods for some secondary students, obtaining a random sample representative of all secondary and university students in TimorLeste would be extremely difficult. Therefore, this study adopted an accessible/convenience sampling method in which certain groups of people are chosen for study because the researcher has a relatively easy access to them (Creswell, 2012). However attention was paid to ensure the balance of several characteristics of the sample, namely the type of institutions (university and secondary school) and location (rural and urban).

Five hundred and fifty questionnaires were distributed, to higher and secondary education institutions. Of these, 440 were returned and only 396 valid questionnaires were included in the analysis. The remaining 44 were considered invalid because they were only partially completed, or returned blank with no responses. The following analysis, therefore, will only include the valid 396 questionnaires ( $72 \%$ ) of 550 distributed.

Table 4. Sample distribution by location and type of institution

| $\begin{array}{c}\text { Details of Institution } \\ \text { Location }\end{array}$ |  | $\begin{array}{c}\text { Type of Institution } \\ \text { University }\end{array}$ | Secondary |
| :--- | :--- | :---: | :---: | :---: |$]$ Total

The samples were drawn from 11 institutions composed of three higher education institutions with $34.4 \%$ of the total sample and eight secondary schools represent $65.6 \%$ of the total sample. The higher number of secondary students in the sample is to reflect the proportion of population of secondary students and university students that stood at 68,179 students with $71,2 \%$ of them being secondary students (DNE-MF, 2010b) . The detailed sample distribution can be seen in Table 4. The participants were selected from four out of 13 districts in TimorLeste, namely Dili, Baucau, Liquiça and Manatuto. Dili, as the capital city and with the biggest number of inhabitants was represented by $59.6 \%$, of which $35.4 \%$ were university student from three institutions and $24.2 \%$ were secondary students from three secondary schools. Samples for university student were taken only from the capital city Dili as all universities are based in Dili and also because the government only acknowledges higher education institutions that deliver in Dili. Baucau, the second largest district, accounted for $15.7 \%$ of the total sample with two secondary schools. Liquiça, a district about 40 km west of Dili, was represented by $19.2 \%$ from two secondary schools and Manatuto, a city located between Dili and Baucau, accounted for $5.5 \%$ of the sample with one secondary school.

### 3.3.3. Quantitative data analysis

The quantitative data analysis was conducted in two ways: descriptive statistics and inferential statistics, as outlined in Appendix 7. Descriptive statistics were used to describe trends of a single variable or question through indices of general tendencies (mean, mode, median), the spread of scores (variance, standard deviation and range) or comparing how one score relates to other using cross tabulation (Creswell, 2012). Inferential statistics is used to compare two or more groups of the independent variable in terms of the dependent variable by analyzing data from a sample to draw conclusions about the unknown population (Creswell, 2012).

In addition to these two methods, several other methods were used during the data analysis: the explanatory factor analysis (EFA) and normal distribution analysis. The EFA was applied to identify order and structure in the data set. Factor analysis can be considered as a variable-reduction procedure in which many variables are replaced by a few factors that summarize the relations among the variables (Goldberg \& Velicer, 2006).The EFA conducted on the dependent variable of attitude toward language (Tetum, Portuguese, English and Indonesian) yielded one factor composed of 10 items to represent attitude toward language. A similar result could be observed across the four attitudes toward language in this study. A detailed discussion of this EFA can be found in Chapter IV. The complete list of statistical methods used in this study can be found in Appendix 7. The normal distribution analysis was also performed to check whether the factor obtained from the EFA could be further investigated in inferential statistics using parametric analysis. The result showed that the factor score of four dependent variables of attitude toward language was not normally distributed; hence a nonparametric analysis was used in the inferential statistics. Three methods were used to determine whether the factor was normally distributed; the first method was using the graphical method through comparing a histogram of the sample data to a normal probability curve and evaluating the P-P plot of the cumulative probability of a variable against the cumulative probability of the particular distribution (actual $z$-score plotted against the expected $z$-score). The second method was quantifying the normality with numbers by observing the value of Z for skewness and Kurtosis. The third method was running the Kolmogorov-Smirnov test for the
normality (Field, 2009). The detailed procedure and result of these procedures can be found in Appendix 6.

### 3.3.4. Validity and reliability

To control the measurement error, validity and reliability were established for this study. The validity of an instrument refers to an instrument "that accurately measures what it is supposed to measure" (Vogt, 1999, p.301). The validity of the questionnaire has been established by the studies from which the current questionnaire was drawn (Baker, 1992; Coady, 2001; Huguet et al., 2008; Lasagabaster \& Huguet, 2007).

The reliability of an instrument refers to the degree to which scores obtained with an instrument are consistent measures of whatever the instrument measures (Fraenkel, 2003). Reliability analysis was conducted to check for the internal consistency of the participants across the items on the instruments using the coefficient alpha (Cronbach, 1984). For the purposes of this study, the reliability coefficient had to meet a minimal standard of .7 to .8 to be considered reliable (Field, 2009).

The English version of the questionnaire was given to an expert in the local language, Tetum, for translation. Some adjustments were made to reflect the context of the local language. The questionnaire was then pilot tested with ten students: five secondary students and five university students in Timor-Leste, who were not included in the main study.

### 3.4. Qualitative data collection

The qualitative data was obtained through semi-structured interviews. A semistructured interview has a sequence of themes to be covered, as well as suggested questions. At the same time, the interviewer is open to changes of sequences and forms of questions in order to follow-up the answers given (Kvale, 1996). This method provided a very flexible technique for small-scale research. The aim was to provide opportunities for open-ended responses, such as students recounting their personal experiences of language use and how this relates to their attitudes towards the current and future language-in-education policy. The interviews also provided an insight into the impact of student attitude toward multilingual policy that may inform the development of language policy in the future.

### 3.4.1. Interviewees' profiles

During the period of data collection, seven students were interviewed in structured interviews with everyone given at least eight to ten questions. The detailed questions can be seen in Appendix 3. The interviews were conducted concurrent to the quantitative data collection with the questionnaire, meaning that students who filled in the questionnaire and acknowledged their willingness to be interviewed were selected conveniently based on their readiness to take part in the interview, with consideration given to the gender balance and representation of both university and senior high school students. Prior to the interview, the aim and objective of the interview were explained to each student and they were also asked to sign a consent form which detailed the rules and confidentiality of the data obtained.

Of seven interviewees, three were females, two being university students in their second year, both at the Timor-Leste National University (UNTL) and one a secondary school student. Two female students were from the eastern districts, one from Lospalos district and the other from Viqueque district. The third female student came from the western district of Liquiça. All female students were aged between 18-20 and all had been exposed only to the post-independence education system. The four male students were composed of three university students and one secondary school student. The three university students came from different universities, one from a public university and two from two different private universities, while the secondary student was from a private secondary school. In terms of educational background, all of these three university students had been exposed to the Indonesian education system during the Indonesian occupation period with one actually progressing to university level, although never completing it, while the other two had initial exposure to the Indonesian education system up to lower primary school (equivalent to years 6-7). The fourth male student was educated solely in the post-independence school system. Two of the male students came from the eastern district of Timor-Leste, Viqueque, and two from western districts, Liquiça and Maliana. Table 5 below provides a brief profile of the interviewees. The names are pseudonyms only and none of the participants' actual names have been used.

Table 5. Profiles of the interviewees

| No | Pseudonym | Gender | Education | Age | District of origin | Type of education attended |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | John | M | Secondary | 19 | Liquiça | Portuguese and Tetum immersion |
| 2. | Tony | M | University | 26 | Viqueque | Initial years in Indonesian and then Portuguese and Tetum immersion |
| 3. | Ela | F | University | 25 | LosPalos | Initial years in Indonesian and then Portuguese and Tetum immersion |
| 4. | Ardo | M | University | 43 | Viqueque | Indonesian |
| 5. | Lau | F | Secondary | 18 | Liquiça | Portuguese and Tetum immersion |
| 6. | Ida | F | University | 20 | Maubara | Portuguese and Tetum immersion |
| 7. | Abas | M | University | 20 | Dili | Portuguese and Tetum immersion |

### 3.4.2. Qualitative Data Analysis

The duration of the interviews ranged from 25 to 35 minutes according to the personal traits of interviewee and their understanding of the questions. Each person was asked eight to 14 questions covering four main topics related to language use, language preference, attitude toward language and language policy. The complete list of questions can be found in Appendix 3. The interviews were conducted in Tetum, one of the national languages and also one of the regional languages. All participants were able to respond to the questions fully without any language issues. The interviews were recorded using two digital recorders for security purposes and the interviewer also took some field notes for information such as the time of the interview, place, consent form, and any other relevant information.

Transcriptions were then prepared in Tetum and included the original interaction as occurred in the interviews, including interviewer questions and all responses from the interviewee. Analysis and interpretation of interview data were conducted through content analysis. Common and recurring patterns were identified and investigated separately from the questionnaire data. Subsequently, the qualitative data were examined in conjunction with the research questions of
the study. After carefully reading through all the transcriptions, four main themes with sub themes were created. The qualitative analysis is discussed in detail in Chapter V. Table 6 provides the themes and sub themes created as a result of the coding process.

Table 6. Themes and sub themes drawn from the qualitative coding

| No | Main themes | Sub themes |
| :--- | :--- | :--- |
| 1. | Interviewee's profile | Name, age, gender, educational background, district of <br> origin, type of education attended |
| 2. | Language background | 1. Language repertoire <br> 2. Language proficiency |
|  |  | 3. How a language is learnt <br> 4. Language use |
|  |  | 5. Importance of multilingual language learning |

### 3.5. Summary

As discussed in this chapter, the study adopted a mixed method with convergent parallel design. In this approach, quantitative data from questionnaires and qualitative data from interviews were collected in parallel on the same phenomenon and analyzed separately. The results were then converged (by comparing and contrasting the different results) during the interpretation.

The participants of both questionnaires and interviews were selected using the accessible sampling method. After collecting the completed questionnaires, the researcher identified and contacted the volunteered interviewees. The interviews were conducted as soon as the time and place were confirmed between the researcher and the interviewees.

All data, both quantitative and qualitative, were collected from three universities and eight secondary schools. Using the research questions as the guiding principles, quantitative and qualitative data were analysed separately, but matched with each other for interpretation. The quantitative data was analysed using the

SPSS statistical package using descriptive statistics and inferential statistics. The qualitative analysis was conducted using content analysis based on the interviews.

## Chapter IV

## Quantitative Data Analysis

### 4.1. Introduction

This chapter presents findings from statistical analysis of the questionnaire data. Section 4.2 presents the description and analysis of the socio-demographic characteristics of participants. Section 4.3 reports on the descriptive analysis of the students' preference for and use of languages and their language proficiency and attitudes toward languages. Section 4.4 provides a report on the inferential analysis of the social-educational factors that might influence the students' attitude toward the use of different languages. The inferential analysis was conducted using non-parametric methods, as the result from the sample was not normally distributed. Section 4.5 comprises the reliability analysis while Sections 4.6 and 4.7 quantitatively address the original research questions relating to students' preferences for and uses of multiple languages in their education, their attitudes toward the different languages and socio educational factors that might influence students' attitudes. The chapter ends with a summary of findings from the quantitative data in Section 4.8.

### 4.2. Socio-demographics characteristics of the sample

This section outlines the socio-demographic characteristics of the sample.

### 4.2.1. Age

According to the questionnaire data analysis, the average age of participants was 19 years ( $\mathrm{SD}=3.262$ ) with the age varying from 13 to 43 years. Secondary school students were an average age of 18 years old ranging from 13 to 24 years, while the university students were an average age of 22 years (with the age range of 1743) as depicted in Table 7. Out of 396 valid respondents, only 388 provided the information regarding their age while the other six students did not provide any information on their age, hence the explain the 388 total respondents in table 7.

Table 7. Age profiles of participants

| Type of institution | $\mathbf{N}$ | Mean | Min. | Max. | Std. error <br> of mean | Median |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| University | 136 | 22.32 | 17 | 43 | .29 | 22.00 |
| Secondary high school | 252 | 18.04 | 13 | 24 | .10 | 18.00 |
| Total | 388 | 19.54 | 13 | 43 | .16 | 19.00 |

### 4.2.2 Gender

The distribution of the sample with respect to gender was $49.4 \%$ male and $50.6 \%$ female, with the missing data accounting for $0.013 \%$, which is still within the accepted margin of error. The proportion of gender balance is also reflected when exploring for the institution type. Of the 136 valid sample of university students, $51.5 \%$ were male and $48.5 \%$ were female, whereas of the 252 valid samples of secondary students, $48.3 \%$ were male while female students accounted for $51.7 \%$. The gender proportion of the sample is representative of the male/female proportion in the secondary and higher education sectors in Timor-Leste. Data from the Education Management Information System (EMIS), Ministry of Education, Timor-Leste, showed that in October 2013 of 47,549 students registered in all general and technical secondary schools, $49.9 \%$ were male while $50.1 \%$ were female (EMIS, 2013), while out of 14,543 students registered in all universities in Timor-Leste, $55.2 \%$ were male and $44.8 \%$ were female (ANAAA, 2013). Thus, the sample reflects the gender profile within the broader community

### 4.2.3 Socio cultural status/socio-professional status

The socio-professional status of parents was measured by their employment status in five categories reflecting the situation in Timor-Leste. Table 8 shows that most of the parents were self-employed (39.6\%) followed by government employee/government staff at $25 \%$ and private company staff and nongovernmental organization (national/international NGO) respectively at $6.1 \%$ and $2 \%$. These figures do not reflect the information provided by the CIA (CIA, 2014) that put agriculture as the main labour occupation at $64 \%$ followed by service and industry respectively at $26 \%$ and $10 \%$. This could be caused by the uneven
representation of respondents from rural and urban areas in the data collected for this study. One interesting fact is that almost $26.3 \%$ of respondents chose "other" as their parents' employment status, which could mean that most of them did not have a job. This may reflect the national unemployment rate that stood at $18.4 \%$ in 2010 (CIA Fact Book 2014).

Most of the parents came from low socio-economic backgrounds with an unsteady stream of income, and as a result they would only have had sufficient income to send their children to free public schools and most probably would not have been able to support their further study at the university level. Hence the children's attitude toward language would have been shaped by the education they received from basic to secondary education that uses immersion in Portuguese and Tetum.

Table 8. Frequency distribution of parental occupation

| Parental occupation | Frequency | (\%) |
| :--- | ---: | ---: |
| Self-employed | 157 | 39.6 |
| Other | 104 | 26.3 |
| Public servant | 99 | 25 |
| Private company staff | 24 | 6.1 |
| National/international | 8 | 2 |
| NGO staff | 4 | 1 |
| Missing | 396 | 100 |

### 4.2.4. District of Origin

Table 9 shows that although data was collected from only four districts, Dili, Baucau, Manatuto and Liquiça, that students actually came from 13 districts in Timor-Leste. The table illustrates the multicultural society and mobility between the districts in Timor-Leste. However, a much closer look at the data reveals a different picture, as can be seen in the cross tabulation between school location and district of origin. Dili, as the capital city, has by far the most diverse society with students from all districts, while others districts, namely Baucau, Liquiça and Manatuto showed the least diverse society with very limited mobility from other districts. Baucau, for instance, is composed mainly of people of Baucau origin and of neighbouring eastern districts like Manatuto, Lautem and Viqueque, with only one (1) from the western district of Liquiça. This phenomenon can be explained
by the fact that Dili is still considered as offering more opportunity in terms of education and employment..

Table 9. Distribution of respondents based on their district of origin

| District of <br> origin | Baucau | Location of the school |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dili | Liquiça | Manatuto | Percent <br> $(\%)$ | Total |  |  |
| Baucau | 46 | 34 | 2 | 1 | 21 | 83 |
| Liquiça | 1 | 12 | 68 | 1 | 20.7 | 82 |
| Manatuto | 7 | 7 | 0 | 20 | 8.6 | 34 |
| Ermera | 0 | 28 | 1 | 0 | 7.3 | 29 |
| Bobonaro | 0 | 24 | 3 | 0 | 6.8 | 27 |
| Dili | 0 | 23 | 0 | 0 | 5.8 | 23 |
| Viqueque | 4 | 19 | 0 | 0 | 5.8 | 23 |
| Covalima | 0 | 20 | 0 | 0 | 5.1 | 20 |
| Lautem | 4 | 16 | 0 | 0 | 5.1 | 20 |
| Manufahi | 0 | 20 | 0 | 0 | 5.1 | 20 |
| Ainaro | 0 | 15 | 1 | 0 | 4 | 16 |
| Aileu | 0 | 7 | 1 | 0 | 2 | 8 |
| Missing | 0 | 6 | 0 | 0 | 1.5 | 6 |
| Oekusse | 0 | 5 | 0 | 0 | 1.3 | 5 |

### 4.2.5. Mother tongue

From the sample obtained, Makasai was the largest mother tongue with $18.7 \%$ of speakers, followed by Tetum Prasa 15.7\%), while Tokodede and Mambai came in third and fourth respectively with $14.1 \%$ and $13.9 \%$. Kairui, Lacalei and Idate were the least spoken languages with percentages below $1 \%$. However a combination of Tetum Prasa and Tetum terik figures would result in a total of $21.5 \%$, which would be the largest mother tongue. This information reflects the number of mother tongues reported in the 2010 census (M. o. F. Timor-Leste, 2010) where Tetum Prasa, Mambae and Tokodede were the three most spoken languages, with Kairui and Idate among the least spoken languages.

A further observation based on the location of school showed a similar tendency regarding mother tongues as was found in the district of origin. Dili, as the capital of the country, is by far the most diverse city with speakers of all Timor-Leste languages, while in Baucau, most of the languages spoken are of trans NewGuinea or Papuan origin such as Makasai, Waima'a and Fataluku. Similar to

Baucau, in Liquiça languages of Austronesian origin such as Tokodede, Mambai and Bunak are spoken, although there is also a large number of Tetum Prasa speakers. This geographical localisation of certain languages seems to be consistent with the findings from Bowden and Hajek (2007).

The data also supports the fact Tetum has become the second language for many people because of the important status that Dili has as a capital city. In term of language spread, Tetum Prasa was the only language spoken in all districts with larger numbers in Dili, Baucau and Liquiça, as can be observed in the Table 10. A further look comparing the district of origin and mother tongue confirmed this tendency. Mambai came in second with speakers in six districts across TimorLeste.

Table 10. Mother tongue speakers based on the location of school

| Mother tongue | Location of school |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Baucau | Dili | Liquiça | Manatuto | Frequency | Total (\%) |
| Makasai | 38 | 36 | 0 | 0 | 74 | 18.7 |
| Tetum Prasa | 11 | 37 | 12 | 2 | 62 | 15.7 |
| Tokodede | 0 | 7 | 49 | 0 | 56 | 14.1 |
| Mambai | 0 | 49 | 5 | 1 | 55 | 13.9 |
| Bunak | 0 | 23 | 2 | 0 | 25 | 6.3 |
| Tetum Terik | 2 | 17 | 1 | 3 | 23 | 5.8 |
| Kemak | 0 | 22 | 1 | 0 | 23 | 5.8 |
| Fataluku | 3 | 12 | 0 | 0 | 15 | 3.8 |
| Waima'a | 5 | 3 | 2 | 1 | 11 | 2.8 |
| Galoli | 0 | 3 | 1 | 5 | 9 | 2.3 |
| Other language | 0 | 4 | 2 | 2 | 8 | 2 |
| Mideki | 0 | 1 | 0 | 4 | 5 | 1.3 |
| Naueti | 3 | 2 | 0 | 0 | 5 | 1.3 |
| Makalero | 0 | 4 | 0 | 0 | 4 | 1 |
| Habun | 0 | 2 | 0 | 2 | 4 | 1 |
| Idate | 0 | 2 | 0 | 0 | 2 | 0.5 |
| Lakalei | 0 | 2 | 0 | 0 | 2 | 0.5 |
| Kairui | 0 | 0 | 0 | 1 | 1 | 0.3 |
| Missing | - | - | - | - | 3 | 0.8 |
| Total | 62 | 233 | 76 | 22 | 396 | 100 |

Although based on the data Makasai is the largest language group, its spread is limited to the eastern part of the country with most speakers coming from Baucau, Viqueque and Manatuto. Similar to Makasai, Tokodede can only be found in the

Liquiça district. This fact indicates that Tetum has become a common language even in the districts where Tetum is not traditionally present.

### 4.2.6. Age at learning the language

According to the questionnaire data, of the four languages in the Timor-Leste educational system, Tetum was the language first learned/known by the speakers at the average age of 5 years. Portuguese was the second language learned/known at an average age of 10 years, followed by Indonesian and English respectively at 12 and 14 years.

The respondent students knew or started to learn Tetum at the beginning of their schooling. This was to be expected given the framework of the immersion program currently in place by the Ministry of Education in which Tetum is used as the auxiliary language in the first few years of basic education. In the same way, the students' average age of 10 years for learning Portuguese which occurred in the fourth grade of the basic education, conforms to the current system that transitions to Portuguese in the third and fourth grades. Similar to Tetum and Portuguese, the average age of 14 years for learning/knowing English points to the final year of pre-secondary or first year of secondary which again complies with the current policy of teaching English in secondary level (years 10 to 12).

A rather interesting phenomenon can be observed with the Indonesian language. Although Indonesian is not formally taught in the education system from the primary through the secondary level, the data indicated that somehow students learned the language outside the formal educational system at age 12-13, the early secondary levels (years 7-9). This suggests that some other factor is influencing the learning/knowing of Indonesian outside of the current educational policy. Further analysis is provided in Chapter V. Table 11 provides the data analysis of the students' age at learning or knowing a language.

Table 11. Students' age at learning/knowing the language

| Language | N | Range | Sum | Mean <br> age | Std. <br> deviation | Variance |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Tetum | 394 | 18 | 2226 | 5.65 | 3.08 | 9.53 |
| Portuguese | 389 | 27 | 3902 | 10.03 | 4.03 | 16.25 |
| Bahasa Indonesia | 384 | 25 | 4884 | 12.72 | 4.54 | 20.58 |


| English | 385 | 27 | 5349 | 13.89 | 3.28 | 10.78 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

### 4.3. Preferences and uses of students' languages

### 4.3.1. Language use

Tetum was the lingua franca for the participant students, with the majority ( $59 \%$ ) using Tetum in almost all activities. A lingua franca is a language that is used for communication between groups who do not speak each other's languages, as well as between native speakers (if any) of the lingua franca and other groups. A lingua franca is by definition learned as a second language by at least some of its speakers.


Figure 5. Contexts of students' actual usage of languages
The students' exposure to the three international languages (Portuguese, English and Indonesian) was very limited. Portuguese, as the language of instruction, had an overall exposure of only $8.3 \%$, which was even less than Indonesian, which officially was not used in the school setting. Even in the school setting Portuguese was only used in $20 \%$ of all instances. Given the current policy of immersion language learning of Portuguese and Tetum from primary school on, this information does not reflect the intended aim of the Portuguese immersion program. Figure 5 illustrates the students' actual usage of the four languages.

### 4.3.2. Place where language is learned

Figure 6 provides a snapshot of where students learned the four languages, in school, at home, or in another context. The findings showed that Tetum was learnt both in the formal classroom setting (58.3\%) and in an informal setting (39.4\%), such as at home and other places. The tendency was evident for both secondary and university students. Portuguese was learnt mostly in the school setting, with very little informal learning. This was confirmed both at secondary and university levels. Although English was also mainly learnt in the school setting (80\%), many students claimed to have learned the language in an informal setting ( $20 \%$ ).


Figure 6. Places where the four languages were learnt

An interesting fact can be observed regarding Indonesian, which most students ( $65.7 \%$ ) claimed to have learnt at school, while the remaining $32 \%$ claimed to have learned it in an informal setting such as at home and other places. This is surprising given that Indonesian was not officially taught in the school system from the basic to the secondary education system. However, at the university level Indonesian was still widely used as the language of instruction. A further analysis confirmed this fact, with $69 \%$ of university students and $63.7 \%$ of secondary
school students claiming to have learnt or be learning Indonesian at school.
Based on this information the conclusion can be drawn that most students learnt Tetum informally, while Portuguese, the country's official language and the language of instruction, was mainly learned formally at school with no informal learning. Indonesian was also mainly learned formally at school but a large number of students also claimed to have learnt it in an informal setting. Similar to Portuguese, English was also mainly acquired at school; however a small number of students were able to access informal learning outside the school setting.

### 4.3.3 Language proficiency

### 4.3.3.1 General language proficiency

The following section discusses findings from students' responses to questions 17, 22, 27 and 32 of the questionnaire (Figure 7) asking students to rate their general proficiency in each of the four languages.
17. How would you rate your general proficiency in Tetum
a. None
b. A little
c. Average
d. Good
e. Very good
22. How would you rate your general proficiency in Portuguese
a. None
b. A little
c. Average
d. Good
e. Very good
27. How would you rate your general proficiency in English
a. None
b. A little
c. Average
d. Good
e. Very good
32. How would you rate your general proficiency in Bahasa Indonesia
a. None
b. A little
c. Average
d. Good
e. Very good

Figure 7. General self-rated language proficiency in four languages
In terms of general proficiency, a majority of students (71\%) claimed to have a good/very good proficiency in Tetum, which was the highest of the four languages. This fact was observed both in secondary and university students (Appendix 8). This was more evidence that Tetum had become the lingua franca of these students even though for most of them Tetum was not even their mother
tongue.
Indonesian was the language with the second highest proficiency (56.3\%) both for secondary and university students (Appendix 8). This finding demonstrates again the high proficiency in Indonesian despite it not being officially taught in schools. Curiously, Portuguese was only ranked third after Indonesian, although most of the students would have had an exposure to Portuguese of at least six to nine years in an immersion language program. Almost $31.7 \%$ of the students considered themselves to have little or no proficiency in Portuguese. This fact is an indication of how the current policy of using Portuguese is not achieving the intended result of proficiency in Portuguese. The finding could also indicate the difficulties faced by the students in learning and understanding the Portuguese language.


Figure 8. General language proficiency

English had the highest number of respondents with little or average proficiency ( $62 \%$ ), which could indicate that it was becoming popular with many students trying to learn the language although with only limited proficiency. This is reinforced by the fact that secondary school students rated higher proficiency (39.5\%) then university students (21.5\%) in the English language (Appendix 9). For the record, English was only taught as a subject at the beginning of senior secondary level (years 10-12). The data possibly indicates an access and generational change towards English

### 4.3.3.2. Specific language proficiency

The five items of the self-rated language proficiency questions addressing student proficiency in five areas: reading, writing, listening, speaking and general proficiency are exemplified in Figure 9 below regarding English:

```
23. What is your reading proficiency in English
    a. None
    b. A little
    c. Average
    d. Good
24. What is your writing proficiency in English
    a. None
        b. A little
        c. Average
        d. Good
        e. Very goo
25. What is your speaking proficiency in English
    a. None
    c. Average
    d. Good
26. What is your listening Proficiency in English
    a. None
    b. A little
    c. Average
    d. Good
    e. Very good
27. How would you rate your general proficiency in English
    a. None
    b. A little
    c. Average
    d. Good
    e. Very good
```

Figure 9. The five items of self-rated language proficiency in English

Table 12 presents the descriptive results based on the composite score of each type of language proficiency that was obtained by the sum value of the five items of the self-rated proficiency questions.

Table 12. Descriptive statistics of factor score of self-rated language proficiency

| Language | N | Range | Mean | Std. deviation | Variance |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Tetum | 388 | 20.00 | 20.08 | 3.43 | 11.77 |
| Indonesian | 390 | 20.00 | 17.91 | 4.34 | 18.87 |
| Portuguese | 385 | 20.00 | 16.51 | 3.63 | 13.20 |
| English | 391 | 20.00 | 14.25 | 4.11 | 16.89 |
| Valid N (listwise) | 372 |  |  |  |  |

In general students claimed to have high proficiency in Tetum and Indonesian, average proficiency in Portuguese, while English rated below the average, as can be observed in Table 12. Tetum also showed the lowest level of dispersion with a standard deviation of 3.43 and variance of 11.77, while Indonesian had the highest
level of dispersion with 4.34 in standard deviation and 18.87 in variance, providing evidence of mixed opinion.

These findings reinforced the results obtained from the students' general language proficiency questions where Tetum and Indonesian language were rated as first and second with the highest proficiency while the two foreign languages, Portuguese and English, were the languages with the lowest proficiency. This fact also reinforced the contributory effect of Tetum and Indonesian being learnt in both formal and informal contexts, while Portuguese and English were learnt almost exclusively in a formal context.

### 4.4. Factor analysis

To identify order and structure of the data set, exploratory factor analysis (EFA) was used as an exploratory tool. EFA is a widely recommended procedure (Behrens, 1997; Norušis, 2006) that isolates factors that ideally approach a simple structure and are interpretable. Thompson (2004) suggested the use of EFA as one of the measures of validity with significant factor loadings indicating convergent validity and not too high correlations between latent factors indicating discriminant validity.

The Kaiser-Meyer-Olkin (KMO) index of sampling adequacy and Bartlett's test of sphericity were used to test for factorability of this data (Field, 2005). Field (2005) recommended that the guidelines set by Tabachnik and Fidell (1996) of KMO index above 0.6 and Bartlett's p value smaller than 0.5 should be used in order to assess the appropriateness of factor extraction from a set of indicators. Kaiser's criterion and scree test were used to determine the number of factors to be extracted. Stevens (2009) recommended the application of Kaiser's criterion for research where less than 30 variables are examined, which makes it an appropriate measure in this analysis to use Kaiser's criterion that factors with Eigenvalue higher than 1 should be retained. The graphical scree test (proposed by Cattell, 1966) is another criterion used to make the decision as to which factors need to be excluded. The factors to be kept are those on the steep slope above the point at which Eigenvalues seem to level off.

Initially there were 12 items used to measure the latent construct of attitude toward a specific language. In these 12 items, two negatively worded questions
were included, which were initially used to check for respondents' consistency. These two items were: "learning ... is a waste of time" and "there are more useful languages to learn than ...". However, the EFA, which included these two negatively worded items, yielded an additional factor with negative loading as shown in Table 15. This could indicate that respondents did not fully understand the questions, or the items did not capture the intended construct. Further, a reliability analysis using Cronbach's alpha consistently provided support for the use of 10 items for the measurement of attitude toward language construct.

Table 13. KMO and Bartlett's test

|  | Attitude toward <br> Tetum (12 items) | Attitude toward <br> Tetum (10 items) |  |
| :--- | :--- | ---: | ---: |
| Kaiser-Meyer-Olkin Measure of <br> Sampling Adequacy. | 0.85 | 0.88 |  |
| Approx. Chi- |  |  |  |
| Bartlett's <br> Test of | Square | 1305.23 | 1167.34 |
| Sphericity | Df | 66 | 45 |
|  | Sig. | 0.00 | 0.00 |

The explanatory factor analysis with 10 and 12 items factor and the process of choosing 10 items as the factor structure is described for only one example, the attitude toward Tetum language. The explanatory factor analyses for attitudes toward English, Portuguese and Indonesian yielded similar results, which are recorded in Appendix 5.

In general the KMO and Bartlett's test showed a good result with KMO measured above 0.8 , which is considered to be great (Hutcheson \& Sofroniou, 1999) while the Bartlett's test showed a significant p value at 0.01 . As shown in Table 13, for the 10 items, the initial Eigenvalues are 4.23 for factor one and 1.15 for factor two which means that factor one explained a variance of $42.3 \%$ of the total variance while factor two explained only $11.5 \%$ of total variance. For the 12 items, the analysis resulted with three factors with the Eigenvalues respectively of 4.28, 1.6 and 1.13 for factors one, two and three (Appendix 5).

Table 14. Total variance (Initial Eigenvalues)

| Factor | Initial Eigenvalues |  |  |  | Extraction sums of squared loadings |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | Total | \% of Variance | Cumulative \% | Total | \% of Variance | Cumulative \% |  |  |
| 1 | 4.23 | 42.32 | 42.32 | 3.65 | 36.56 | 36.56 |  |  |
| 2 | 1.15 | 11.50 | 53.82 | 0.66 | 6.55 | 43.12 |  |  |
| 3 | .94 | 9.41 | 63.23 |  |  |  |  |  |
| 4 | .76 | 7.60 | 70.83 |  |  |  |  |  |
| 5 | .62 | 6.20 | 77.028 |  |  |  |  |  |
| 6 | .60 | 6.03 | 83.06 |  |  |  |  |  |
| 7 | .52 | 5.19 | 88.25 |  |  |  |  |  |
| 8 | .45 | 4.52 | 92.77 |  |  |  |  |  |
| 9 | .39 | 3.86 | 96.63 |  |  |  |  |  |
| 10 | .34 | 3.37 | 100.000 |  |  |  |  |  |

Extraction method: alpha factoring.

However the results from the factor matrix, as can be seen in Table 15, showed that factors loadings for factor one of 10 items attitude toward Tetum is consistently higher than factor two. This trend was also observed when the analysis was conducted for the attitudes toward the other languages of Portuguese, English and Indonesian.

## Table 15. Factor matrix

| No | Description of items | Factors (10 items) |  | Factors (12 items) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 1 | 2 | 3 |
| 1 | I like hearing Tetum spoken | 0.52 | -0.14 | 0.51 | -0.03 | -0.16 |
| 2 | Tetum should be taught to all pupils in Timor-Leste | 0.61 | -0.08 | 0.62 | 0.13 | -0.15 |
| 3 | Tetum is a language worth learning | 0.65 | 0.13 | 0.65 | 0.12 | 0.05 |
| 4 | Studying Tetum is important because it will allow me to meet and converse with more and varied people. | 0.65 | 0.36 | 0.65 | 0.22 | 0.27 |
| 5 | Studying Tetum is important because I will be able to interact more easily with speakers of Tetum | 0.63 | -0.18 | 0.62 | 0.02 | -0.22 |
| 6 | Studying Tetum is important because it will allow me to further my study | 0.66 | 0.51 | 0.66 | 0.08 | 0.49 |
| 7 | Tetum is an easy language to learn | 0.33 | -0.19 | 0.35 | -0.22 | -0.13 |
| 8 | Studying Tetum is important because it will be useful in getting a good job | 0.64 | 0.34 | 0.65 | 0.00 | 0.41 |
| 9 | I really enjoy learning Tetum | 0.71 | -0.10 | 0.70 | -0.05 | -0.04 |
| 10 | I like speaking Tetum | 0.58 | -0.18 | 0.61 | -0.10 | -0.15 |
| 11 | Learning Tetum is a waste of time | - | - | -0.05 | 0.59 | -0.20 |
| 12 | There are more useful languages to learn than Tetum | - | - | 0.01 | 0.78 | -0.02 |

Extraction method: alpha factoring.
a. 2 factors extracted. 10 iterations required.

As can also be observed from the 12 item factor analysis, the two negatively worded questions (items 11 and 12) yielded a negative loading which could indicate that respondents did not fully understand the questions, or the items did not capture the intended construct. Similar results were also observed when analysis was conducted on attitude toward other languages. Hence for the factor structure for attitude toward Tetum language is consistent only on one factor with 10 items.

Based on this result and similar results of factor analyses of the other languages, the subsequent analysis involving the factor score for attitude toward language used the 10 items, with one factor (factor one), as the factor score. Further reliability analysis in the next section provides more supporting evidence for using 10 items with one factor score.

### 4.5. Reliability Analysis

Statistical reliability is necessary in order to ensure the validity and precision of the statistical analysis. Reliability means that a measure should consistently reflect the construct that is measured (Field, 2009). In survey research, the internal consistency of a set of items is the crucial factor. If items are related to each other, responses to those items will be similar. If a person agrees with the proposition expressed in one item, they are likely to agree with similar items. Cronbach's alpha is the most commonly used measure of internal consistency (Field, 2009). Kline (1999) suggested the cut-off point of 0.7 for Cronbach's alpha. The following section will provide the reliability analysis for attitude toward Tetum only, as the detailed analysis of the other languages can be seen in Appendix 6.

As Table 16 shows, a further analysis of inter-item correlations using Cronbach's alpha for the 12 items resulted in 0.769 , which is generally considered to be good (Kline, 1999). However a higher Cronbach's alpha of 0.884 was obtained when using 10 items.

Table 16. Reliability statistics

| Cronbach's alpha | No of items |
| :---: | :---: |
| .769 | 12 |
| .844 | 10 |

Furthermore, Table 17 shows how all 10 items contributed positively for reliability as the total Cronbach's alpha declined if an item is deleted. However the table also indicates that the two negatively worded questions contributed negatively to the reliability of the whole construct and Cronbach's alpha would actually increase if these items were deleted, supporting the use of 10 items for more reliable measurement of the construct.

Table 17. Cronbach's alpha if item deleted

| Items | Cronbach's alpha if item deleted |  |
| :---: | :---: | :---: |
|  | Ten items | Twelve items |
| I like hearing Tetum spoken | . 839 | . 758 |
| Tetum should be taught to all pupils in Timor-Leste | . 831 | . 742 |
| Tetum is a language worth learning | . 824 | . 739 |
| Studying Tetum is important because it will allow me to meet and converse with more and varied people. | . 822 | . 726 |
| Studying Tetum is important because I will be able to interact more easily with speakers of Tetum | . 831 | . 745 |
| Studying Tetum is important because it will allow me to further my study | . 822 | . 734 |
| Tetum is an easy language to learn | . 849 | . 771 |
| Studying Tetum is important because it will be useful in getting a good job | . 821 | . 736 |
| I really enjoy learning Tetum | . 820 | . 733 |
| I like speaking Tetum | . 834 | . 750 |
| Learning Tetum is a waste of time |  | . 803 |
| There are more useful languages to learn than Tetum |  | . 793 |

These results reinforced the case for excluding the two negatively worded questions from the analysis, leaving only 10 items in the latent factor structure for attitude toward Tetum. Similar results were also obtained when analyses were conducted on attitudes towards Portuguese, English and Indonesian (Appendix 6)

### 4.6. Attitudes toward language

Students generally expressed positive attitudes toward all languages, with English enjoying the highest positive attitude with a mean value of 44.55 followed by Portuguese, Tetum and Indonesian respectively, with a mean value of 43.55, 41.97 and 39.93. In terms of dispersion, English had the lowest level of standard deviation and variance at 4.7 and 22.95 , providing evidence of more homogeneity
in the students' attitudes toward English. Indonesian had the highest standard deviation and variance at respectively 7.67 and 58.9 , showing most heterogeneity within groups.

Table 18. Descriptive statistic of factor score of attitude toward language

| Language | N | Range | Mean | Std. Deviation | Variance |
| :--- | :---: | ---: | :---: | ---: | ---: |
| English | 340 | 32.00 | 44.55 | 4.79 | 22.95 |
| Portuguese | 337 | 22.00 | 43.55 | 4.99 | 24.96 |
| Tetum | 367 | 34.00 | 41.97 | 6.08 | 36.97 |
| Indonesian | 363 | 40.00 | 39.94 | 7.68 | 58.91 |
| Valid N (listwise) | 280 |  |  |  |  |

This shows that most students had very favorable attitudes toward all languages, especially in regard to foreign languages (English and Portuguese). An interesting fact can be observed with regard to Indonesian, which, although ranked second in terms of general proficiency, had the least favorable attitude. This could be influenced by the fact that Indonesian is still considered as the language of colonialism and many people still make the association between Indonesian and the atrocities perpetrated against the Timor-Leste population by Indonesia during the 20 years of occupation. The student attitude result also revealed contradictory results in the language proficiency with Tetum rated as the language with the highest proficiency and English with the lowest proficiency, while Indonesian and Portuguese ranked second and third.

The highly favourable attitudes toward English could reflect the increasing importance of English worldwide as an international lingua franca. Additionally, according to Tragant (2006) students are starting to focus more on instrumental reasons for language learning. The more positive attitudes toward English could reflect an increasing interest in the professional and social contributory value of English.

With regard to Portuguese, the result showed that although the language was being used as the language of instruction, students showed a less favorable attitude compared to English, which was taught as a subject only from the secondary level. Again this could be related to the value of these languages as perceived by students.

### 4.6.1. Relationships between attitudes toward language

To examine whether attitudes toward languages were correlated to each other, a non-parametric analysis (c) was used. All attitudes toward language were found related to each other positively $\left(0.18<\mathrm{r}_{\text {(Kendall }}<0.42 ; 0.25<\mathrm{r}_{\text {(spearman) }}<0.53\right)$ and significantly ( $\mathrm{p}<0.01$ ). The strongest association was found between attitudes toward Portuguese and attitudes toward English ( $r_{(\text {Kendall's tau) }}=0.42 ; r_{\text {(spearman's }}$ rho $=0.53$ ). Similar associations were also found for secondary students and university students with a slightly different degree of strength association (Appendix 8). These results mean that students with a positive attitude toward English would also have a positive attitude toward Portuguese, and vice versa.

Table 19. Non-parametric test result between attitudes toward language

|  |  | Attitude toward Tetum | Attitude toward Portuguese | Attitude toward English | Attitude toward Indonesian |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kendall's <br> tau_b | Attitude toward Tetum | 1.000 | . $28{ }^{* *}$ | . $18^{* *}$ | . 30 ** |
|  |  |  | . 000 | . 000 | . 000 |
|  | Attitude toward Portuguese | . 28 ** | 1. | $\begin{aligned} & .42^{* *} \\ & .000 \end{aligned}$ | $\begin{aligned} & .30^{* *} \\ & .000 \end{aligned}$ |
|  |  | . 000 |  |  |  |
|  |  |  |  |  |  |
|  | Attitude toward English |  | . $42^{* *}$ | 1.00 | . $28^{* *}$ |
|  |  | $.000$ | . 000 |  | . 000 |
|  |  |  |  |  |  |
|  | Attitude toward Indonesian | $\begin{aligned} & .30^{* *} \\ & .000 \end{aligned}$ |  | . 30 ** | 1.00 |
|  |  |  | $.000$ | . 000 |  |
|  |  |  |  |  |  |
| Spearman's rho | Attitude toward Tetum | 1.000 | . $36{ }^{* *}$ | . $25^{* *}$ | . 40 ** |
|  |  |  | . 000 | . 000 | . 000 |
|  | Attitude toward Portuguese | . $36{ }^{* *}$ | 1.000 | $\begin{aligned} & .53^{* *} \\ & .000 \end{aligned}$ | . 38 ** |
|  |  | . 000 |  |  | . 000 |
|  |  |  |  |  |  |
|  | Attitude toward English | . 25 ** | . $53 * *$ | 1.00 | $\begin{aligned} & .36^{* *} \\ & .000 \end{aligned}$ |
|  |  | . 000 | . 000 |  |  |
|  |  |  |  |  |  |
|  | Attitude toward Indonesian | . 40 ** | . $38 * *$ | . $36{ }^{* *}$ | 1.000 |
|  |  | . 000 | . 000 | . 000 |  |
|  |  |  |  |  |  |

** $=$ significant

### 4.6.2. Self-rated language proficiency and attitude toward language

There were positive correlations found in the analysis between:

1) Portuguese proficiency and attitude toward Portuguese $\left(r_{(\text {Kendall's tau) }}=0.13\right.$; $\left.\mathrm{r}_{(\text {spearman's rho })}=0.18 ; \mathrm{p}<0.01\right)$,
2) English proficiency and attitude toward English $\left(\mathrm{r}_{(\text {Kendall's tau })}=0.2\right.$;
$\mathrm{r}_{\text {(spearman's rho) }}=0.27 ; \mathrm{p}<0.01$ ) and
3) Indonesian proficiency and attitude toward Indonesia $\left(\mathrm{r}_{(\text {Kendall's tau })}=0.1\right.$;

$$
\left.\mathrm{r}_{(\text {spearman's sho) }}=0.14 ; \mathrm{p}<0.01\right) .
$$

In addition there was also positive correlation between Indonesian proficiency and attitude toward English. The complete result can be seen in Table 20. This result showed that students with a favourable attitude toward a specific language would normally have a higher proficiency in that language, and vice versa. This result consistent with several studies that found positive relationships between language competences and attitudes toward language (Baker, 1992; Huguet, Janés, \& Chireac, 2008; Janés, 2006a, 2006b; Lapresta et al., 2009; Lasagabaster, 2005; Laugharne, 2007; Madariaga, Huguet, \& Lapresta, 2013; Querol \& Huguet, 2010).

Table 20. Non-parametric test result between self-rated language proficiency and attitude toward language

| Self-rated proficiency |  |  | Attitude toward | Attitude toward | Attitude toward | Attitude toward |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kendall's tau | Tetum | Correlation |  |  |  |  |
|  |  | Coefficient | . 032 | . 015 | . 053 | -. 005 |
|  |  | Sig. (2-tailed) | . 406 | . 700 | . 184 | . 901 |
|  | Portuguese | Correlation | -. 007 | . $130{ }^{* *}$ | . 047 | -. 015 |
|  |  | Coefficient |  |  |  |  |
|  |  | Sig. (2-tailed) | . 848 | . 001 | . 243 | . 687 |
|  | English | Correlation | -. 057 | -. 001 | 198** | . 059 |
|  |  | Coefficient | -. 057 | -. 001 |  | . 059 |
|  |  | Sig. (2-tailed) | . 130 | . 987 | . 000 | . 116 |
|  | Indonesian | Correlation | -. 004 | . 048 | . $128^{* *}$ | . $101{ }^{* *}$ |
|  |  | Coefficient | -. 004 | . 048 |  | . 101 |
|  |  | Sig. (2-tailed) | . 914 | . 224 | . 001 | . 008 |
| Spearman's rho | Tetum | Correlation | . 044 | 020 | . 073 | -. 007 |
|  |  | Coefficient |  |  |  |  |
|  |  | Sig. (2-tailed) | . 410 | . 713 | . 183 | . 892 |
|  | Portuguese | Correlation | -. 010 | 179** | . 064 | -. 019 |
|  |  | Coefficient | -. 010 |  | . 064 | -. 019 |
|  |  | Sig. (2-tailed) | . 854 | . 001 | . 245 | . 717 |
|  | English | Correlation | -. 081 | -. 001 | . $265{ }^{* *}$ | . 083 |
|  |  | Coefficient | -. 081 | -. 001 |  | . 083 |
|  |  | Sig. (2-tailed) | . 126 | . 985 | . 000 | . 117 |
|  | Indonesian | Correlation | -. 004 | . 066 | . $167{ }^{* *}$ | . 140 ** |
|  |  | Coefficient | -. 004 | . 066 | . 167 | . 140 |
|  |  | Sig. (2-tailed) | . 932 | . 231 | . 002 | . 008 |

Similar results were also obtained when accounting only for university students, with a small difference as there was no correlation registered between Portuguese proficiency and attitude toward Portuguese language. This could be explained by
the fact that Portuguese was not used at all university levels. As for secondary students, the only difference compared to the general sample results was that no correlation was obtained between Indonesian proficiency and attitudes toward Indonesian (Appendix 8). This could be caused by the fact that Indonesian was not officially taught to secondary students. These results proved that attitude towards language is shaped by the experience students have of a language, including the degree of exposure. If the language is never used or not intensively used, the attitude might not be as positive as toward other languages that students are exposed to.

### 4.7. Socio-educational factors and attitudes toward languages

This section aims to describe the influence of several socio-educational and language related variables on students' language attitudes. To build a more detailed image of the relationships between these variables and language attitudes, several effects were explored, not only on each attitude toward language, but also on the differences between the attitudes toward Tetum, Portuguese, English and Indonesian language.

### 4.7.1. Gender and attitude toward language

Using Mann-Whitney's the non-parametric U test, analyses were conducted to test whether there was a difference of language attitude between males and females. The result on the overall sample provided no evidence to support the notion of a gender-based language attitude. When the analysis was conducted only on the sample of secondary students, a similar result was found, that is, there was no attitude difference based on gender.

Table 21. Test statistics of correlation between gender and attitude toward language (total sample)

| Test | Attitude <br> toward Tetum | Attitude <br> toward <br> Portuguese | Attitude <br> toward <br> English | Attitude toward <br> Indonesian |
| :--- | ---: | ---: | ---: | ---: |
| Mann-Whitney U | 15414 | 13834 | 13068.5 | 15824 |
| Wilcoxon W | 31704 | 27529 | 27433.5 | 31400 |
| Z | -.97 | -.030 | -1.09 | -.2 |
| Asymp. Sig. (2-tailed) | .331 | .98 | .28 | .84 |

Grouping variable: gender of participant
However, when accounting only for university students, there was a difference in
attitude toward English based on gender, with male students having a more positive attitude than female students ( $\mathrm{p}<0.01$ ), as shown in Table 22. Based on this result the conclusion can be drawn that, although there was no evidence of different attitudes based on gender in the total sample, when accounting for university students, male students had a more favorable attitude toward English than female students. This result in general contradicts several findings in the literature that point to female students having a more positive attitude (Wright \& Scullion, 2007).

Table 22. Test statistics of correlation between gender and attitude toward language (university student)

| Test | Attitude <br> toward <br> Tetum | Attitude <br> toward <br> Portuguese | Attitude <br> toward <br> English | Attitude <br> toward <br> Indonesian |
| :--- | ---: | ---: | ---: | ---: |
| Mann-Whitney U | 1977 | 1567 | 1094.5 | 1624.500 |
| Wilcoxon W | 4057 | 3220 | 2690.5 | 3515.500 |
| Z | -.63 | -.93 | -3.47 | -1.62 |
| Asymp. Sig. (2-tailed) | .53 | .35 | .001 | .11 |

Grouping variable: gender of participant.

### 4.7.2 Students' age and attitude toward language

To determine whether there were associations between students' age and attitude toward language, a non-parametric correlation analysis using Kendall's tau and Spearman's rho was conducted. The results obtained from the overall sample (Table 23) showed that there was a positive correlation between a student's age and attitude toward Tetum ( $\mathrm{r}_{(\text {Kendall's tau) }}=0.12 ; \mathrm{r}_{\text {(spearman's rho) }}=0.16 ; \mathrm{p}<0.01$ ). There was a negative correlation between a student's age and attitude toward English $\left(\mathrm{r}_{\text {(Kendall's tau) }}=-0.10 ; \mathrm{r}_{\text {(spearman's rho) }}=-0.14 ; \mathrm{p}<0.01\right)$. When the analysis was run for university students, the results showed a positive correlation between the student's age and attitude toward Indonesian $\left(\mathrm{r}_{(\text {Kendall's tau })}=0.15 ; \mathrm{r}_{\text {(spearman's rho) }}=\right.$ 0.2 ; significant at $\mathrm{p}<0.05$ ). Similar results were also obtained when analyses were conducted on secondary students (Appendix 8 ).

Table 23. Test statistics of correlation between age and attitude toward language

|  |  | Attitude <br> toward <br> Tetum | Attitude <br> toward <br> Portuguese | Attitude <br> toward <br> English | Attitude <br> toward <br> Indonesian |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Indall's | Correlation | $.12^{* *}$ | .03 | $-.10^{*}$ | .04 |
|  | Age | Coefficient | Sig. (2-tailed) | .003 | .422 |
|  | .309 |  |  |  |  |
|  |  | N | 360 | 330 | 333 |

Based on these findings it can be inferred that the older the student, the more positive the attitude toward Tetum, while the younger the student, the more positive the attitude toward English. These results shows that the younger generation held a more positive attitude toward English, while older students were more favorable toward Tetum. In addition, secondary and university students were more favorable toward Indonesian as they grew older.

### 4.7.3 Students' age at learning language and attitude toward language

Generally there was no association found between students' age at learning language and attitude toward language, with the exception of students' age at starting to learn Tetum and attitude toward Tetum $\left(\mathrm{r}_{(\text {Kendall's tau }}\right)=0.1 ; \mathrm{r}_{\text {(spearman's sho) }}$ $=0.13 ; \mathrm{p}<0.05)$. With regard to secondary students, the analysis resulted in several statistically significant correlations, namely between attitude toward English and age at learning English $\left(r_{(\text {Kendall's tau })}=-0.11 ; r_{\text {(spearman's rho) }}=-0.15\right.$; $\mathrm{p}<0.05$ ) and between attitude toward Portuguese and age at learning the Portuguese $\left(\mathrm{r}_{(\text {Kendall's tau) }}=-0.10 ; \mathrm{r}_{\text {(spearman's sho })}=-0.15 ; \mathrm{p}<0.05\right)$. The detailed results can be seen in Table 24.

Table 24. Test statistics of correlation of age at learning language and attitude toward language

| Age at starting to learn the language |  |  | Attitude toward Tetum | Attitude toward Portuguese | Attitude toward English | $\begin{array}{r} \text { Attitude } \\ \text { toward } \\ \text { Indonesian } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tetum |  | Correlation Coefficient | . $09{ }^{*}$ | -. 03 | -. 030 | . $1^{*}$ |
|  |  | Sig. (2-tailed) | . 02 | . 43 | . 45 | . 01 |
|  |  | N | 364 | 334 | 337 | 361 |
| Kendall's tau | Portuguese | Correlation Coefficient | -. 01 | . 01 | -. 06 | . 04 |
|  |  | Sig. (2-tailed) | . 71 | . 73 | . 13 | . 31 |
|  |  | N | 358 | 329 | 332 | 355 |
|  | English | Correlation Coefficient | -. 01 | . 01 | -. 07 | -. 01 |
|  |  | Sig. (2-tailed) | . 80 | . 79 | . 11 | . 89 |
|  |  | N | 358 | 328 | 331 | 352 |
|  | Indonesian | Correlation Coefficient | . 07 | . 02 | -. 04 | . 030 |
|  |  | Sig. (2-tailed) | . 05 | . 68 | . 38 | . 42 |
|  |  | N | 357 | 328 | 334 | 355 |
| Spearman's rho | Tetum | Correlation |  |  |  |  |
|  |  | Coefficient |  | -. 04 | -. 04 | 14 |
|  |  | Sig. (2-tailed) | . 02 | . 43 | . 45 | . 01 |
|  |  | N | 364 | 334 | 337 | 361 |
|  | Portuguese | Correlation Coefficient | -. 02 | . 02 | -. 08 | . 05 |
|  |  | Sig. (2-tailed) | . 67 | . 75 | . 13 | . 31 |
|  |  | N | 358 | 329 | 332 | 355 |
|  | English | Correlation Coefficient | -. 016 | . 012 | -. 089 | -. 010 |
|  |  | Sig. (2-tailed) | . 77 | . 82 | . 11 | . 85 |
|  |  | N | 358 | 328 | 331 | 352 |
| Indonesian |  | Correlation Coefficient | . 1 | . 02 | -. 05 | . 04 |
|  |  | Sig. (2-tailed) | . 06 | . 68 | . 36 | . 42 |
|  |  | N | 357 | 328 | 334 | 355 |

Based on these results several conclusions can be drawn: overall, the age when beginning to learn Portuguese, English and Indonesian language did not influence the attitude toward the specific language. However, with regard to secondary students, the results showed that the younger the age when learning English, the more favorable the attitude towards English and Portuguese. This result, especially with regard to secondary students, isconsistent with the findings of

Muñoz and Tragant (2000) that discovered a positive correlation between attitudes toward learning English and the number of hours dedicated to English study.

### 4.7.4. Type of institution (secondary school or university) and attitude toward language.

Tests were also conducted to check whether there was a difference in attitude toward language based on the type of institution (secondary school or university) students were attending. The results showed that indeed there was difference in attitude toward English between secondary school and university students, with secondary school students having more positive attitudes toward English. Furthermore, evidence also supported the existence of attitude difference toward Tetum, with university students showing a more positive attitude than secondary school students.

Table 25. Test statistics type of institution (secondary vs university) and attitude toward language

| Test | Attitude <br> toward <br> Tetum | Attitude <br> toward <br> Portuguese | Attitude <br> toward <br> English | Attitude <br> toward <br> Indonesian |
| :--- | ---: | ---: | ---: | ---: |
| Mann-Whitney U | 13377.5 | 12837 | 10039 | 14394.5 |
| Wilcoxon W | 40638.5 | 36273 | 17542 | 22779.5 |
| Z | -2.29 | -.27 | -3.77 | -.73 |
| Asymp. Sig. (2-tailed) | .02 | .79 | .0 | .46 |
| Grouping variable: type of institution |  |  |  |  |

Grouping variable: type of institution

These results further strengthened the evidence that younger generations had a more positive attitude toward English language, whilst university students had a more favorable attitude toward Tetum language.

### 4.7.5. Type of institution (public or private) and attitude toward language.

Analysis was also conducted to see whether there were differences in attitude toward language between students from private and public schools/universities. The results (Table 26) showed that there were differences in attitude toward Tetum, with public school/university students showing a more positive attitude than private school/university students ( $\mathrm{p}<0.01$ ). Similarly, there was also a difference in attitude toward Portuguese with public school/university students showing a more positive attitude ( $\mathrm{p}<0.05$ ).

Table 26. Test statistics on type of institution (public vs private) and attitude toward language

| Test | Attitude <br> toward <br> Tetum | Attitude <br> toward <br> Portuguese | Attitude <br> toward <br> English | Attitude <br> toward <br> Indonesian |
| :--- | ---: | ---: | ---: | ---: |
| Mann-Whitney U | 12356 | 11576.5 | 13720 | 15649.5 |
| Wilcoxon W | 28827 | 26282.5 | 26123 | 32485.5 |
| Z | -3.90 | -2.34 | -.110 | -.19 |
| Asymp. Sig. (2-tailed) | .000 | .019 | .912 | .852 |

Grouping variable: present school or university

To get a better understanding of the effect of private and public schools/universities on attitude toward language, further analysis was conducted separately for university student and secondary school students. For university students, there was difference of attitude toward Indonesian with private university students showing a more positive attitude than public university students ( $\mathrm{p}<0.01$ ). For secondary students, the difference of attitude were observed toward the three languages of Tetum, Portuguese and Indonesian. Public school students showed more positive attitudes toward these three languages than private school students. No difference was observed in attitudes toward English.

Table 27. Test statistics of type of institution (public vs private) and attitude toward language

| Institution | Test | Attitude <br> toward <br> Tetum | Attitude <br> toward <br> Portuguese | Attitude <br> toward <br> English | Attitude <br> toward <br> Indonesian |
| :--- | :--- | ---: | ---: | ---: | ---: |
| University | Mann- | 1600 | 1354.5 | 1526 | 1140.50 |
|  | Whitney U |  | 2257.5 | 4301 | 4300.50 |
|  | Wilcoxon | 2546 | -1.04 | -.16 | -3.16 |
|  | W | -1.15 | .298 | .872 | .002 |
|  | Asymp. Sig. | .250 | 4613 | 4885 | 5110.5 |
|  | (2-tailed) | Mann- | 4646 | 12998 | 13930 |
| Secondary school | Whitney U |  | 14840.5 |  |  |
|  | Wilcoxon | 14237 | -2.09 | -1.52 | -2.83 |
|  | W | -3.67 | .036 | .129 | .005 |
|  | Asymp. Sig. | .000 |  |  |  |

Based on these results several conclusions can be drawn. In general students from public schools/universities had a more favorable attitude toward Tetum and Portuguese. This could mean that the government effort in the immersion
programs of Portuguese and Tetum was showing a good result in public schools. However it could also be inferred that private institutions may not be implementing the program effectively.
With regards to university students, the students from private institutions were still very much in favor of Indonesian and this could pose a serious problem for the government in their efforts to scale up the compulsory use of Portuguese at the university level. On the other hand evidence showed that public school students were more favorable toward Tetum, Portuguese and Indonesian.

### 4.7.6. School location and attitude toward language.

To understand the effect of school location on attitude towards language, a nonparametric analysis using Kruskall Wallis was conducted. The analysis revealed that there were differences in student attitudes toward English (p<0.01) and Indonesian based on the school location as shown in Table 28.

Table 28. Test statistics of school location and attitude toward language

| Kruskall Wallis Test |  | Attitude <br> toward <br> Tetum | Attitude <br> toward <br> Portuguese | Attitude <br> toward <br> English | Attitude <br> toward <br> Indonesian |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Chi-Square |  | 2.848 | 1.703 | 12.452 | 8.481 |
| Df |  | 3 | 3 | 3 | 3 |
| Asymp. Sig. | Sig. | .416 | .636 | .006 | .037 |
| Monte Carlo | 99\% | Lower | $.420^{\mathrm{a}}$ | $.630^{\mathrm{a}}$ | $.005^{\mathrm{a}}$ |
| Cig. | Confidence | Bound <br> Upper <br> Sig | .407 | .618 | .003 |

Grouping variable: location of institution
a. Based on 10000 sampled tables with starting seed 92208573 .

To identify differences within groups a post-hoc test using a repeated measure of two-independent sample (Mann-Whitney) with an adjusted critical level of significance was conducted (Field, 2009). Since there were four groups within the variable of school location and six independent tests were necessary, the new critical value would be $0.05 / 6=0.0083$ (Field, 2009). Table 29 provides the value that appeared below the new critical value of 0.0083 .

Table 29. Post-hoc test statistics of school location and attitude toward language

| Location | Test | Attitude toward <br> English | Attitude toward <br> Indonesian |
| :--- | :--- | ---: | ---: |
| Dili-Manatuto | Mann-Whitney U | 1314 | 1843.5 |
|  | Wilcoxon W | 22635 | 25496.5 |
|  | Z | -2.68 | -1.45 |
|  | Asymp. Sig. (2-tailed) | .007 | .148 |
| Dili-Baucau | Mann-Whitney U | 4546 | 4807 |
|  | Wilcoxon W | 25867 | 28460 |
|  | Z | -2.44 | -2.59 |
|  | Asymp. Sig. (2-tailed) | .015 | .009 |

Based on these results several conclusions can be drawn. There was a difference in attitude toward English, with students in the Manatuto district showing a more positive attitude than students in Dili (p<0.0083). On the other hand, students in Baucau showed a more positive attitude toward Indonesian than students in Dili. These results provided indications that students in rural areas (Baucau and Manatuto) had more favorable attitudes, in the case of Manatuto toward English, and in the case Baucau toward Indonesian, than students in the capital city, Dili. These results also showed that although students in rural areas might not have the same access to quality education as students in the urban area, it did not negatively affect their attitude toward languages.

### 4.7.7. Parental occupation and attitude toward language

To examine whether there was an association between parental occupation and attitude toward language, a Kruskall Wallis test was conducted. The initial results showed that there was a difference between parental occupation and attitude toward Tetum ( $\mathrm{p}<0.05$ ) as shown in Table 30.

Table 30. Test statistics of parental occupation and attitude toward language

| Kruskall Wallis Test |  | Attitude <br> toward <br> Tetum | Attitude <br> toward <br> Portuguese | Attitude <br> toward <br> English | Attitude <br> toward <br> Indonesian |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Chi-Square |  | 9.89 | 2.85 | 4.61 | 2.40 |
| Df |  | 4 | 4 | 4 | 4 |
| Asymp. Sig. | Sig. | .042 | .584 | .330 | .663 |
| Monte Carlo | 99\% | Lower | $.043^{\mathrm{a}}$ | $.585^{\mathrm{a}}$ | $.336^{\mathrm{a}}$ |

Grouping variable: parental occupation of respondent
a. Based on 10000 sampled tables with starting seed 79654295 .

To obtain in depth information on the differences within the group, a further posthoc test using a repeated measure of two-independent sample (Mann-Whitney) was conducted, with an adjusted critical value of 0.005 , derived from five groups in the variable, thus $0.05 / 10=0.005$ (Field, 2009). Further analysis using repeated Mann-Whitney provided evidence that the difference of attitude toward Tetum was between public servant parents and other with other having a more positive attitude ( $\mathrm{p}<0.005$ ) as shown in Table 31.

Table 31. Post-hoc test statistics of parental occupation and attitude toward language

|  | Parental occupation of respondent | N | Mean Rank | Sum of Ranks |
| :---: | :---: | :---: | :---: | :---: |
| Attitude toward Tetum | Public servant | 95 | 83.95 | 7975.00 |
|  | Other | 96 | 107.93 | 10361.00 |
|  | Total | 191 |  |  |

Table 32. Test statistics parental occupation of student

|  | Sum value of 10 items of <br> attitude toward Tetum |
| :---: | :---: |
| Mann-Whitney U | 3415.000 |
| Wilcoxon W | 7975.000 |
| Z | -3.003 |
| Asymp. Sig. (2-tailed) | .003 |

a. Grouping variable: parental occupation of respondent

Parents' socio-professional status and their education are related to their own attitudes and supporting and encouraging behaviors concerning their children's language learning. Nonetheless, the evidence can be described as contradictory, seeing that in some contexts the variables were found to influence students' language attitudes (Bokhorst-Heng \& Santos Caleon, 2009; Caruana, 2007; Lasagabaster 2007, 2008; Loredo Gutiérez et al., 2007; Mettewie \& Janssens, 2007), while other studies showed that they had no significant effect (Lasagabaster, 2009; Safont, 2007; Ytsma, 2007). In this study, the tendency was only seen between groups of "other" (unemployed) and "public servant", with "other" showing more favourable attitudes toward Tetum.

### 4.8. Concluding comments

The quantitative results and subsequent analyses reveal a variety of findings. With regard to mother tongue, Makasai was the largest language group followed by Tetum Prasa, while Tokodede and Mambai came in third and fourth respectively with Kairui, Lacalei and Idate as the least spoken languages at below $1 \%$. These results consistent with the results obtained in the 2010 census (M. o. F. TimorLeste, 2010). In terms of language spread, Tetum Prasa was the only language spoken in all districts whereas other mother tongues were spoken only within their geographical boundaries.

In term of language use, Tetum had become the lingua franca for students surveyed in this study, with the majority of students using Tetum in almost all activities. On the other hand, the students' exposure to the three international languages (Portuguese, English and Indonesian) was very limited. Portuguese, as the official language and the language of instruction, was ranked below Indonesian language. Given the current policy of immersion language learning of Portuguese and Tetum since primary school, this information does not reflect the intended result of the Portuguese immersion program.

Most students learnt Tetum informally, while Portuguese was mainly learned formally in the school setting with no informal learning. Indonesian was also mainly learned formally in the school setting; however, a large number of students also claimed to have learnt the language in an informal setting. Similar to Portuguese, English was also mainly acquired at school; however a small number
of students were able to access informal learning outside the school setting. Many studies have shown that informal language learning is unstructured and unpurposeful but is the most extensive and most important part of all the learning that we do every day of our lives (Rogers, 2004; Lightbown \& Spada, 2001).

Based on the students' self-rated proficiency, the majority claimed to have a good/very good proficiency in Tetum, followed respectively by Indonesian, Portuguese and English. Similar results were obtained in regard to specific competence in reading, writing, speaking, listening and general competence. One interesting fact is that Portuguese as the official language was ranked below Indonesian, which had not even been taught or used in most schools since 2010.

In terms of attitude toward language, students generally expressed positive attitudes toward all languages, with English enjoying the highest positive attitude, followed by Portuguese, Tetum and Indonesian. The highly favorable attitudes toward English could reflect the increasing importance of English at worldwide level as the international lingua franca. Another reason could be that students are starting to focus more on instrumental reasons for language learning (Tragant, 2006). Accordingly, the more positive attitudes toward English could reflect an increasing interest in the professional and contributory value of English. With regard to Portuguese, the result proved that although the language was being used as the language of instruction, students showed a less favorable attitude compared to English, which was taught only as a subject from secondary level.

All attitudes toward language were found to be related to each other positively, with the strongest association found between attitudes toward Portuguese and attitudes toward English. Students with a favorable attitude toward a specific language would normally have a higher proficiency in that language, and vice versa, which was true of Portuguese, English and Indonesian. Similar patterns were also observed for both university students and secondary students; however, secondary students did not show any correlation between Indonesian proficiency and attitude toward Indonesian. This could be caused by the fact that Indonesian was not officially taught to secondary students. Similarly, there was no relationship between university students' attitude toward Portuguese and Portuguese proficiency, perhaps because Portuguese was not taught at all university levels.

There was no evidence of difference in attitude based on gender in the general sample. However, among university students, males had a more favorable attitude toward English language than females. This result in general contradicts several findings in the literature that point to female students having a more positive attitude (Wright \& Scullion, 2007) In regard to age, the younger generation held a more positive attitude toward English, while the older the students became the more favorable they were toward Tetum. In addition, both secondary and university students became more favorable toward Indonesian as they grew older. Overall, the age at which students started to learn Portuguese, English and Indonesian did not influence their attitude toward the specific language. However, with regard to secondary students, the result showed that the younger the age to start learning English, the more favorable the attitudes toward both English and Portuguese

In general, students from public schools/universities had more favorable attitudes toward Tetum and Portuguese. This could mean that the government effort in immersion program of Portuguese and Tetum was showing a good result in public schools; however it could also be interpreted that private institutions have not made sufficient efforts to embrace the program or, alternatively, the government has not done enough to engage private schools in the program. Private university students were still very much in favor of Indonesian language and this can pose a serious problem for the government in their effort to scale up the compulsory use of Portuguese at the university level. Evidence regarding secondary students showed that public schools students were more favorable toward Tetum, Portuguese and Indonesian.

There were indications that students in rural areas (Baucau and Manatuto) had more favorable attitudes toward English in the case of Manatuto, and toward Indonesian in the case of Baucau, than students in the capital city, Dili. These results showed that although students in rural areas might not have the same access to quality education as students in the urban area, it did not affect negatively their attitudes toward languages. Indeed, the quantitative data raises issues such as this that is illuminated further through the qualitative data analysis and discussion. It is the discussion of the interview data to which the next chapter turns.

## Chapter V

## Discussion of Interview data

### 5.1. Introduction

The qualitative data for this study were obtained through semi-structured interviews. Seven students were interviewed using eight to fourteen questions. The detailed questions can be seen in Appendix 3. The interviews were conducted subsequent to the quantitative data collection and students who participated in the questionnaire and expressed their willingness to be interviewed were selected on the basis of gender balance and representativeness of educational institution: university and senior high school. The quotes are attributed by the pseudonym of the students (as outlined in chapter III).

The following sections provide the analyses of the interview data through a series of general themes and sub-themes. Section 5.2 focuses on the language background and proficiency and how a particular language was learnt, as well as providing an in depth description of the language use and the importance of multilingual learning. The themes of Section 3 are the students' general attitudes toward the four languages in the Timor-Leste education system, while Section 4 provides the content analysis of the students' attitudes toward language policy in education and their vision of future language policy in Timor-Leste. A summary of the analyses of the themes is compiled in Section 5.

### 5.2. Language background and proficiency

This section provides the analysis related to students' language repertoire and proficiency, language use and how the language was learnt. The analysis was based on the interview results and addressed four languages (Tetum, Portuguese, English and Indonesia) and the mother tongue.

### 5.2.1. Language repertoire and proficiency

All students interviewed were multilingual with the knowledge of between four to six languages consisting of at least two mother tongues and at least one international language. Four students were multilingual in six languages with
three to four mother tongues and two to three international languages. One student had five languages with two mother tongues and three international languages, and two had four languages with two mother tongues and two international languages.

Almost all students claimed high proficiency in Tetum and their mother tongue, with the exception of one student from the east (Lospalos) who claimed to have only a fair proficiency in Tetum because Tetum is not her mother tongue and she only learned the language in primary school but felt confident when she came to Dili to study at the university. She said:

My second language is Tetum; however I am not very proficient in Tetum, because in our region since we were little we only spoke our mother tongue Fataluku, so it was when I entered the school system that I first learned Tetum (Ela).

She then added:

We never spoke Tetum in our home up to my senior high school period. It was only when I moved to Dili to study at the university that I started to communicate with my friends in the Tetum language (Ela).

Although the student claimed a fair knowledge of Tetum, the fact the whole interview was conducted in Tetum proved the contrary. She was merely being modest recognizing the stigma and preconception. She used expressions like:

People say Moko people are like that, even if we have come to live in Dili we still speak our mother tongue Fataluku when we meet each other (Ela).

Moko is the term used to refer to people from the LosPalos region. There are various regions in Timor-Leste where the use of Tetum is very limited and the mother tongue is very important. These regions include LosPalos and the enclave Oecussi. However in this case, although the student acknowledged the preconception that goes with people from her region that they do not know Tetum, she was in fact able to speak Tetum well.

Most students claimed to have a fair to good understanding of Indonesian. Many of them gave different reasons for this. One student revealed he had very good Indonesian because he had studied during the Indonesian occupation when the only language of instruction in schools was Indonesian:

The next language I learned was Indonesian because we began our learning process in Indonesia (Ardo).

Others learned Indonesian through watching programs on television. All students claimed to have a low to fair understanding of Portuguese and English with one mature aged student claiming to have no knowledge at all of English. One student said:

Currently the foreign languages that I know are English and a little bit of Portuguese (John).

Another student said

The international languages that I know are Indonesian, English and Portuguese, but I only know a little bit of English and Portuguese (Tony).

Another student stated:

The languages that I know are Tetum, just a little Portuguese, not maximum but just neutral English, next is Melayu... I understand Melayu and can speak a little but not too much (Lau).

Table 33 provides a brief student profile of their language proficiencies from the most proficient to the least proficient according to their own opinion.

Table 33. Profile of students' language proficiency

| Language | Language proficiency in descending order |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | John | Tony | Ela | Ardo | Lau | Ida | Aba |
| Tetum | $1{ }^{\text {st }}$ | $2^{\text {nd }}$ | $4^{\text {th }}$ | $3^{\text {rd }}$ | $1{ }^{\text {st }}$ | $2^{\text {nd }}$ | $1{ }^{\text {st }}$ |
| Portuguese | $4^{\text {th }}$ | $4^{\text {th }}$ | $5^{\text {th }}$ | $6^{\text {th }}$ | $4^{\text {th }}$ | $3^{\text {rd }}$ | $3^{\text {rd }}$ |
| English | $2^{\text {nd }}$ | $6^{\text {th }}$ | $2^{\text {nd }}$ | - | $3^{\text {rd }}$ | $4^{\text {th }}$ | $4^{\text {th }}$ |
| Indonesian | $3^{\text {rd }}$ | $5^{\text {th }}$ | $3^{\text {rd }}$ | $4^{\text {th }}$ | $2^{\text {nd }}$ | $5^{\text {th }}$ | $2^{\text {nd }}$ |
| Other | $5^{\text {th }}$ | $1{ }^{\text {st }}$ Naoeti | $1{ }^{\text {st }}$ | $1{ }^{\text {st }}$ Naoeti | $5^{\text {th }}$ Tokodede | $1{ }^{\text {st }}$ | - |
| languages/ <br> mother <br> tongues | Mam <br> bae | $3^{\mathrm{rd}}$ <br> Makasai | Fataluku | $2^{\text {nd }}$ Tetum <br> terik <br> $5^{\text {th }}$ Makasai | $6^{\text {th }}$ Mambae | Mambae |  |

When asked to rate their language proficiency, all students put their mother tongue as the first language with the highest proficiency. In cases where there was more than one mother tongue, Tetum was normally put as the second language with the highest level of proficiency. Some students had more than two mother tongues, one would be the language they learned from their parents and the second might be a language commonly spoken in the community where they were brought up, which could be the same as the parents' mother tongue but could also be a different language. The third language for such students was Tetum. However, the order between the second and third languages could be reversed depending on the level of exposure and how well integrated the student was in the community. This showed that most students were proficient in their mother tongue even when the language was not taught at school. Another conclusion that can be drawn is the fact that Tetum had indeed become a lingua franca of these students that had different languages as their mother tongue.

In terms of foreign languages, Indonesian seemed to prevail over the others with more students claiming to know Indonesian, followed almost equally by English and Portuguese. Depending on the educational background, students who had Indonesian education would put Indonesian as their first foreign language, while post-independence students would rank English, Portuguese and Indonesian in almost the same position. Three students put English as their first international language ahead of Indonesian and Portuguese, while two students indicated Portuguese as their first international language, and two put Indonesian as their first language. Two students put Indonesian language as their second language after Tetum.

The fact that many students still spoke Indonesian fluently was intriguing, as the language had not been taught officially in the education system from primary to secondary level since 2010, although some private universities still adopt the use of Indonesian as the language of instruction. These students' proficiency in Indonesian was due to a combination of formal language learning at school, at least during the time when Indonesian was still used in the school system, and informal language learning through social interaction and through popular media influence like television. English was also gaining popularity among the students as an international language, overtaking Portuguese.

An interesting fact about three students who placed English as their first international language is that they were all aged between 17-21, which means that they would have been exposed to Portuguese submersion/immersion teaching for at least 13 years during their time in school, whilst English would have come to their attention probably later at the pre-secondary or secondary level. This exposure would have been either through the school system or through a private non-formal educational provider, which would have given them a maximum three to seven years of exposure. This indicated that the younger generation in TimorLeste is possibly becoming more proficient in English as an international language, or at least that Portuguese as the official language and the language of instruction at school is not being properly learnt and understood by students, resulting in a perception of poor proficiency.

### 5.2.2. How a particular language is learnt

### 5.2.2.1. Mother tongue

Most of the students attributed their proficiency in their mother tongue to the fact it was the language they were brought up with at home. As one student commented:

Naoeti was the first language I learned; I learned if from my parents (Tony).

Similarly, another student said:

Tokodede is my first language; I learnt it from my parents and surrounding community (Lau).

All of the students knew at least two mother tongues, and some even understood up to four mother tongues. In these cases, the surrounding environment played an important role in introducing the language either through friends at school or through friends and wider community members as is evident from the following comment:

Makasai is my second language because when I grew up my surrounding neighborhood spoke Makasai; in fact Makasai and Naoeti were spoken evenly in community. That is why I picked up Makasai so quickly (Ardo).

In other cases the knowledge of more than one mother tongue was acquired from the parents because either one or both parents knew more than one mother tongue, as expressed by one of the students:

I only have a passive knowledge of Mambai, which is my third mother tongue, because both my father and my mother knew the language and occasionally they use the language at home so I could understand the language a little bit (Lau).

In this particular case both parents were at least bilingual if not multilingual with the knowledge of at least two mother tongues and one international language, Indonesian.

Tetum was the most widely known mother tongue. All of the seven sample students, claimed to have fair to fluent proficiency in Tetum. They indicated that they learnt the language first from home and then from their community and lastly from their school. In the cases where Tetum was not the mother tongue and was not present in the community, the students were still able to learn the language in the school system, as indicated by one of the students from the LosPalos district:

When we started our primary school (year 1 to year 6), our teachers taught us using a mixture of Indonesian and Tetum. For me personally, it was in sixth grade when I began to understand Tetum (Ela).

One conclusion that can be drawn from these comments is that the mother tongue was learnt in an informal environment through social interaction. The first really important components of the social group were the parents and close family circle such as brothers and sisters. The wider community also played an important role in the acquisition of a second mother tongue while formal learning through school only complemented what students had acquired from informal learning. This result portrays the typical method for mother tongue acquisition in Timor-Leste.

### 5.2.2.2. The Indonesian language

There were typically two or three ways of learning Indonesian. First, through Indonesian schooling: some of the students, especially those currently in
university, had been exposed to education under Indonesian rule or even during the initial years of independence from 2000-2004 when Indonesian was still used as the language of instruction. Second, the younger generation, who did not receive Indonesian language instruction at school, would have learnt the language from television, especially through Indonesian television, as mentioned by some of the students:

Well, we could follow Indonesian language through TV programs, so it was rather easy to pick up and I believed that at fourth grade I began to understand Indonesian language (John).

Another student said:

I learnt Indonesian language from television and also from conversing with other people who spoke Indonesian language (Ida).

The third way that students acquired Indonesian was through education at the university level, as most universities and higher education institutions in TimorLeste still use Indonesian as their language of instruction. This fact is reflected in some of the student's comments:

When we reached university, lecturers mainly use Indonesia language with the explanations in Tetum (Ela).

The same student then added,

Some of the lecturers prepare their slides in Indonesian and explain them in Tetum. Some have both in Tetum. Some have the slides in Portuguese but the explanations are still in Tetum (Ela).

This fact is not surprising at all since most of the university lecturers would have graduated in Indonesian universities and would only be proficient in Indonesian. Even in the National University (UNTL), which claimed to use only Portuguese in their lessons, some discrepancy was found between the policy statement and policy implementation, as explained by one of the UNTL students:

Although the official policy in UNTL requires Portuguese as the official language of instruction, in reality it's not being implemented in full. In UNTL only the Faculty of Law uses Portuguese in all their lessons and also Faculty of Medicine, but in Faculty of Agriculture we use four languages (Ela).

She provided some further examples:

So most of the explanations are in Tetum; only some are in Portuguese, with most of the slides in Indonesian. From my first year up to fourth year now, only one lecturer had both the slide presentation and the subsequent explanations in Portuguese (Ela).

Evidently, most lecturers were not proficient in Portuguese and were therefore not confident to deliver the lessons in Portuguese. These lecturers resorted to the alternative practice of mixing languages in their repertoire, in this case Indonesian and Tetum. As a result of this practice, students acquired Indonesian in the formal (university) educational system.

Television (TV) provided a valuable space for the learning of Indonesian. Six of the seven participant students stated a preference for Indonesian television over Portuguese and Timorese television. This was especially because there were so many more options for programs, ranging from talk shows to entertainment, movies, and soap operas compared to the limited range on the local TV. The learning process occurred informally as Indonesian was not officially taught in school, yet through television programs the student was able to learn the language unconsciously. One of the students from Liquiça district used this phrase:

Ita bele dehan katak parabola ne easy for everyone to know that (John).

This expression is a mixture of mother tongue and English spoken by one of the participant to highlight the importance of media, in this case, television. The translation is

We can say that satellite TV makes it easy for everyone to learn Indonesian (John).

Another fact that strengthens the presence of Indonesian language is that there are still so many people who use the language in informal situations such as conversation. Even if the conversation is in Tetum or another local language, Indonesian words are often incorporated, for example when asked about what TV program she likes, one student answered:

> Hau gosta nonton iha ita nian programa ne hau gosta deit noticia tvtl, e sinetron hau mos ladun gosta. Hau gosta nonton hare ema hanesan halo berita hanesan sai hal yang unik unik iha Televisaun Indonesia hanesan hotspot (Lau).

Which can be translated in to English:

In our local television, I only like the news program. I don't like Indonesian soap opera. I like watching TV programs that show unique stuff like a program from Indonesian TV called HotSpot (Lau).

In these three sentences alone there are seven Indonesian words (in bold in the original quotation). These words were used not deliberately but rather have become common practice in public. Tetum has a limited vocabulary, and therefore people tend to borrow words from other languages if they cannot find a suitable word for a particular expression in the primary language.

It is likely, therefore, that Indonesian will continue to be used in Timor-Leste in coming years even though the official language policy in education does not include the teaching of Indonesian. Students will likely still be able to learn the language informally through social media, social interactions, school to some degree, especially in private universities, or through direct exposure with Indonesian speakers or Timorese with proficiency in Indonesian.

### 5.2.2.3. English

Most of the students first learned English in the school system at around junior secondary level (approximately years 7-8), although the official policy has English as a subject in the secondary level (year 10-12). In the statements of three students who put English as their first foreign language in terms of fluency, the common pattern is that in addition to learning English at school as a subject, they
all also took part in non-formal English courses provided by a vocational/non formal education institution.

In John's case, after completing primary education, he went to a nonformal/vocational education provider called Science of Life Study (SOLS) where he learned English. English was in fact his third international language. John started learning English at the beginning of junior secondary school (years 7-9) at the age of 13-14 years. There was also a strong impetus from the student's father who regarded English as the language of international stature. He made this comment when asked about why he decided to learn English:

Our father said that we had to learn English because English is the international language if we want to communicate with foreigners (John).

One particular feature about this institution (SOLS) is that it had trainers from English speaking countries, in this case America, which motivated the student to learn even more. Another student, Lau also participated in an English course in SOLS, while a third student, Ela, had a slightly different study route, enrolling first in a university course majoring in English, although eventually she had to drop out after being accepted to a public university (UNTL).

Learning a language outside of the school system gave these students additional knowledge that supported their language learning. Further, since they voluntarily and consciously took part in the language learning, their motivation and impulse to learn the language came from within them, driven by their own will, as opposed to learning a language in the school system where they might feel like they are being forced to learn

These facts provided evidence that English was mainly learnt in the school environment, although some students with better proficiency in English had additional exposure to English by taking part in private language lessons. The private language providers were better resourced with more qualified trainers, and seemed to have better pedagogy and focus, as such students were more motivated and engaged in learning.

### 5.2.2.4. Portuguese

All students in this study had different levels of exposure to Portuguese language
depending on when they entered school. Students who were studying at university would normally have had a shorter time learning Portuguese because they would have been at school in the transition period between the phasing out of the old curriculum (Indonesian and Tetum) and the phasing in of the new curriculum (Portuguese and Tetum). Some claimed to have only started learning Portuguese at junior secondary level (year 7). One student did not learn Portuguese at all during the primary school as he had completed his schooling prior to 1999 (in the Indonesian occupation period). Students enrolled in school after 2004 would have experienced the immersion method with Tetum and Portuguese.

Unlike the three languages, Tetum, Indonesian and English, which students could learn in informal situations either through their parents and family members, watching television programs, or in non-formal/vocational schools or through social interaction, the only place where students could learn Portuguese was at school. Their parents would probably have no knowledge of Portuguese, nor would their other family members. Although Portuguese television can be accessed through local state television, most students did not watch it because they thought the programs were uninteresting and because they could not understand the language, as expressed by one of the students:

I don't really like Portuguese TV because I don't understand it and also their programs are no good (Ardo).

Another comment came from a student that:

I only watch RTP when there is a soccer game or news about soccer (John).

Outside school, there were no other institutions or entities that provided courses or training in Portuguese language, and Portuguese was not used in social interaction.

One particular student pointed out that the existing situation of Portuguese being learnt only in the formal school system was inadequate and unproductive:

Portuguese will continue to be learned in the school setting. However people rarely become knowledgeable when learning in a formal setting ...Young people like things or activities that involve festivities. So they are easily attracted to take part in non-formal learning (Lau).

This quote shows how students might feel disengaged with the current school system which is considered boring and are looking for places with better environments and more interesting programs.

Students currently enrolled in university had less exposure time to Portuguese due to the curriculum before independence as explained above, while students enrolled in the secondary level had more exposure to Portuguese in the immersion-learning environment with Tetum. In addition, most university students, with the exception of some students from UNTL, did not experience Portuguese in lectures. This fact provided some insights into causes of low proficiency in Portuguese, even though the implementation of language policy with Portuguese as the language of instruction had been around for almost eight years.

### 5.2.3. Language use

### 5.2.3.1 Tetum

In general Tetum was the language used in all situations whether at school or outside school. Even in the school environment such as during classes, students used Tetum to communicate with each other and with the teacher, as expressed by one secondary student:

In classroom with lecturer we use Tetum to communicate, outside classroom, we talk to our teachers in Tetum (Ela).

Another university student gave the following answer:

At school, especially in an environment like school, the majority use Tetum language, and then mix it with Portuguese and Indonesian (Tony).

In an informal environment outside school, six of the students identified Tetum as the language of preference in most situations, for instance when talking to parents, brothers and sisters, other family members and among friends, as highlighted by
one of university student:

Outside the school environment I use Tetum, like speaking with a family member, doing activity at home or meeting up with friends (Ida).

Similarly, another high school student described how he used Tetum:

Daily communication with my friends is in Tetum, even with our friends from the same district we speak mostly Tetum (John).

Therefore these responses show that Tetum is used in formal context such as school and also in informal context such as daily communication with friends and relatives.

### 5.2.3.2 Mother tongue

Only one student from the Los Palos district preferred the mother tongue, Fataluku, over Tetum in informal settings. Even for this student, the use of the mother tongue was limited to situations where people from the same districts meet. Other students also highlighted the use of mother tongue in certain ways, especially when they talked to a close circle of friends who came from the same district, as highlighted by one university student from Los Palos district:

Well it's like this, people say "once you're Moko you always be Moko", so even when we have been living in Dili for a long time, every time we meet each other we'd never speak in Tetum, we'd always use our mother tongue Fataluku because we feel more comfortable with it (Ela).

Students used their mother tongue when communicating with elderly people, as pointed out by one of high school students from the Liquiça district:

It depends, for example with the elderly people like my grandparents I would use Tokodede (Lau).

The mother tongue is also used when students visit relatives in their village of origin, as explained by one of the students from Viqueque district:

When we go back to Viqueque then we use Tetum terik (Tony).

### 5.2.3.3 Portuguese

The use of Portuguese was very limited. Of all students interviewed only one student claimed to use Portuguese during classes:

We only use Portuguese when we speak to the lecturers (Ida).

Others claimed that the use of Portuguese was rare, as pointed out by one of the university students:

Very little engagement with Portuguese, because we never use it at university and very rarely use it in our daily conversations (Ela).

One of the students said that Portuguese was sometimes used to tease or for joking purposes among friends:

Outside the school environment sometimes we speak in Portuguese just to tease each other (Tony).

Portuguese was mainly used as the language of instruction during classes but only in a very limited way, as the subsequent explanation would be in Tetum. There are a number of reasons for this, but most students complained of their teacher's lack of proficiency in Portuguese. The students also considered Portuguese a difficult language, and complained that they could not practise Portuguese outside school. In fact, the only reason they were learning the language in their view was because it was compulsory, many having spent their primary school years without learning it

### 5.2.3.5 Indonesian

Indonesian has been removed from the school curriculum since 2004. However many people still speak Indonesian, mainly in informal situations, such as among close friends, as described by one student:
...then Indonesian language, which we use between our close circle of friends (Ela).

Some students did not use Indonesian language intentionally, but rather borrowed words or expressions that were already common in the public domain, as disclosed by a university student:

We don't use Indonesian, but we use some words from Indonesia as auxiliary words which we are accustomed to, but not with the real intention of using the Indonesian language (Tony).

As has been stated previously, although Indonesian language is not taught in schools anymore, almost all the universities in Timor-Leste, with the exception of some courses in the public university where Portuguese is used, use Indonesian as the language of instruction (with a mixture of Tetum).

### 5.2.3.6 English

According to the students, English was used in very limited ways, mainly when interacting with foreigners or used during an English class on occasions where English is used by international lecturer as part of the grant assistance from other country as expressed by one of secondary students:

If we meet with friends from other country like Australia who asks us questions in English then I'd respond in English (John).

Another student indicated the use of English in relation to the presence of an international lecturer in his area of study (civil construction) as part of a university network with another university in Japan. He said:
...but English is important because sometimes international technician from Japan who delivers subject on asphalt testing speaks in English and we need to use English in order to be understood by him too (Abas).

Similarly, another student used English in communication with foreigners thorough social media, in this case Facebook, she said:

If we chat with friends from abroad we use English, sometimes we don't understand what they say but we consult the dictionary (Lau)

The use of English in the classroom is related to the status of English as a subject in secondary level and in the first year of university. However many students also made the additional effort to learn English through English courses provided by non-formal education providers. The arrival of online media such as Facebook and Twitter have also provided the students with new avenues for communication in English.

Overall, Tetum was by far the most used language in formal (school environment) and informal settings by these sample students. In formal settings, Tetum was used in conjunction with Portuguese and for communication purposes between teachers and students and among students. In informal settings Tetum was used in everyday situations. Tetum, therefore, was the lingua franca in all situations. The use of Portuguese was very limited, mainly during lessons at schools and never outside school, as there was no opportunity. Indonesian was still used in informal settings, mainly in conversations among students and Indonesian words from were also borrowed in the conversation because of the limited vocabulary of Tetum.

### 5.2.4. Importance of multilingual language learning

When asked whether it is important to learn more than one language at school, all students who were interviewed agreed. For example, one stated that:

Because a person who knows many languages is rich, but when we speak limited languages we are poor in language (Ardo).

In general students offered several reasons for learning multiple languages, but most of them considered the knowledge of international languages to be really important because they are a means for communication with visitors:

For me it's important because, although we are from various districts in Timor-Leste, many people from other countries come to Timor-Leste. We need to know many languages in order to communicate with other people (Ela).

Some considered the importance of learning a foreign language in terms of further study either in English or Portuguese-speaking countries, as emphasized by another student:

I like to develop my language knowledge because language is a very important means of communication, so if we want to go to Australia or Portugal to further our study, we need to know their languages (Tony).

Other students explained that learning international languages would enable the learning of new knowledge and technology:

Through language we can learn about science and technology. For example, about the content of the topic we learn in class, before we can learn the content we would need to know the language first (Abas).

Therefore, these languages were perceived as having a certain prestige or value for self-advancement.

All the students recognized the importance of learning many languages, especially foreign languages. Interestingly, students considered foreign languages to be important compared to the knowledge of local languages. For these students, being multilingual meant having the knowledge of more than one foreign language. Students referred to the instrumental role played by these languages for further studies and also for learning of new knowledge and technology. Students also considered the importance of foreign languages for communication with foreigners, which would enable them to access improved social, educational and occupational opportunities.

### 5.3. Attitudes toward languages

This section provides the content analysis based on the interview regarding students' attitude toward languages existing in Timor-Leste's education system.

### 5.3.1 Attitudes toward Tetum

Students expressed mixed feelings when asked about their attitudes towards the languages they know, but in general all had a very favorable feeling toward Tetum, mainly because it was the language spoken by a majority of Timorese people and is regarded as a lingua franca:

Sometimes we say Tetum is no good but Tetum is a language that is used widely in Timor-Leste for communication at the national level (John).

Another student highlighted the important role played by Tetum language in the national identity:

Tetum is important to represent national identity (Ardo).

One student emphasized the importance of Tetum in relation to educational requirements, as Tetum will be used to write a final thesis or monograph:

In our university (UNTL), commencing in 2014 onward, all thesis have to be written in Tetum. So Tetum becomes very important to understand (Ela).

This attitude toward Tetum may explain the high proficiency in Tetum as compared to other languages. Tetum also played an important role in reflecting the national identity for these students. This may be related to hundreds of years under colonialism where people felt that their social and cultural identities were neglected and ignored, and now they feel that having Tetum as the national language distinguishes them from other people.

All students also shared the opinion that Tetum needed to be further developed because there are still confusing aspects in the language system. They were of the opinion that although Tetum was adequate as a spoken language, it was sometimes hard to write because there were no standardized rules, as pointed out by one university student:

We need to develop Tetum, because personally I think it's a bit difficult to write (Tony).

Another student complained about the lack of vocabulary in Tetum:

For me personally Tetum is very good to use although some of the words (vocabulary) are not helpful (John).

Another student also complained about how Tetum has become confused with so many words borrowed from other languages like Portuguese, Indonesian and English. Students also highlighted the lack of resources available to support the learning of Tetum with only a few books written in Tetum, as summarized by one of the secondary students:

Tetum is easy to learn but I also feel sad because we use Tetum that is mixed with other languages like Portuguese and Indonesian. We need to develop Tetum so that we could have a standardized Tetum. We also need to have many resources available in Tetum like books so we can understand better (Lau).

Therefore, these responses indicate that while it is valued for its oral use and symbolic value, Tetum is in need of development in its written from

### 5.3.2 Attitudes toward Portuguese

In regard to Portuguese, students showed mixed feelings with some in favor and some less so. One student at the national university (UNTL) who had been exposed to Portuguese for several years expressed positive feelings towards the language:

I feel fine with Portuguese because we learn it every day in university, speaking in Portuguese, so I feel I have become accustomed to it (Ida).

However another student from the same university expressed a different feeling towards Portuguese:

Portuguese is important, but for me it's not. Since our country uses two official languages, it's also important for us to learn these two languages (Ela).

She stressed the importance of Portuguese in relation to its status as an official language and not because she was motivated by her own will to learn the language. Many students also described Portuguese as a difficult language to learn. This comment came from a secondary student who had learnt the language for at least 7-9 years since primary level:

For me Portuguese is not an easy language; in fact it is really difficult because the verbs are really difficult to memorize. Although I'm currently learning the language, I need more time to learn the verbs (John).

Another student who was educated in the Indonesian system but then had lessons in Portuguese commented:

Portuguese is so difficult, especially its grammatical structure, unlike Indonesian which has a very simple grammatical structure (Tony).

One student from a private institution exhibited negative feelings toward Portuguese because he considered Portuguese as a language of colonizers, and therefore, as an independent country, Timor-Leste should express its own identity by using Tetum:

I am not very content to learn a colonialist language; a language that was brought in by a colonizer country. As an independent country Timor-Leste should have its own national identity (Ardo).

Another student's feeling towards Portuguese was shaped by her personal experience in dealing with people from Portugal, in this case teachers and lecturers from Portugal that were assisting in the UNTL. She said:

I have a friend from Spain, who had worked in Portugal before coming to Timor, telling us stories about Portuguese people being so stingy and a bit unfriendly. We found it to be of some truth, because we have many Portuguese in our university, but only few would respond to your greetings; many would not even care to respond. So for me their language is not very important, but English is (Ela).

These comments show that there are mixed views towards Portuguese and these go beyond the teaching to the associations between the language and its speakers and their place and role in Timor-Leste society.

### 5.3.3 Attitudes toward English

Most students considered English a difficult language but at the same time they showed a desire to learn English:

English is a bit difficult. However I want to force myself to learn English language (Tony).

This particular student considered English as his weakest language and Portuguese as his strongest language, yet he showed a strong desire to learn English. Similarly, another university student from a private university
commented:

I think I like English more than other languages; I really like it, but it's difficult to write and speak (Abas).

English was this student's weakest language too. Other students, especially those who had been exposed to some degree of English language learning, showed positive feelings towards English as expressed by some of them with comments like:

English for me is not difficult and I have a very strong (positive) feeling toward the language and I really want to learn more. Personally

English is the most important language, because it facilitates our communication with foreigners (John).

Therefore some students showed that in terms of foreign languages, proficiency and attitude do not necessarily go hand in hand. In other words, low proficiency does not imply an unfavorable attitude. On the contrary several cases showed that students with low proficiency had favorable attitudes toward the language. This could be linked to the value and status of the language, which in this case is English as a global language.

Students were asked about what language they think is most important for their future, in terms of employment, further study and their future in general. Table 34 lists the students' language preferences for their future.

Table 34. Students' language preferences

| Pseudonym | Preferred language for the future |
| :--- | :--- |
| John | English and Tetum |
| Tony | English and Portuguese |
| Ela | English |
| Ardo | Tetum and Portuguese |
| Lau | English and Portuguese |
| Ida | Portuguese and English |
| Abas | Tetum, Indonesian and English |

Almost all the students put English as their preferred language, followed by Portuguese. Most of the students who chose English put forward reasons such as English being an international language of communication, English as a medium to learn new knowledge and technology, English as enabling better access to
education and employment opportunities. At the same time, those who chose Portuguese gave the reason that Portuguese is the official language of TimorLeste and is stipulated in the Constitution and therefore there is no alternative but to learn the language. Some students also included Tetum as one of the preferred languages because for them Tetum is the national language of communication in Timor-Leste. An interesting fact about this information is that although students did not have sufficient proficiency or in some cases no proficiency at all in English, they all had a positive attitude towards English and showed interest in learning the language.

Based on the above discussion, it can be seen that there are various influences and factors at play on students' attitudes towards different languages. The prominent factors, as the students themselves acknowledged repeatedly, are the state of the language system, its status in society, its potential for individual social mobility, its perceived value for the students' future, the degree of language difficulty, and finally, the political, symbolic and historical value attached to the language.

### 5.4. Attitudes toward language policy

### 5.4.1. Current language policy in the education system

During the interview, students were asked about their past and current experiences in regards to the language policy in education, especially the language of instruction at schools. All secondary students reported that Portuguese was being used as the instruction language; however different practices were found in the implementation stages. One student from a senior secondary school in Liquiça claimed that Portuguese had been used from the junior secondary (grades 7-9) up to senior secondary (grades 10-12) but that Tetum was also used as an auxiliary language:

The language policy practices we experienced in pre-secondary and now in the secondary level are similar, which is using Portuguese. However there is one difficulty in which Portuguese is not used entirely, meaning Portuguese is used but the explanations are in Tetum (John).

He added that the daily interactions during classes between teachers and students and among students were in Tetum:

When they speak to us they speak in Tetum (John).

He also criticized the current language policy of mixing languages, especially Portuguese and Tetum, as not being very helpful in enhancing student proficiency in Portuguese, because students could not learn Portuguese properly due to limited exposure to Portuguese and very limited interactions in Portuguese. Another student blamed students and to some degree their teachers for this situation. She claimed that teachers tried to use Portuguese but they soon realized that many students were not engaged in the learning because they could not understand Portuguese, so the teachers shifted to using Tetum as an auxiliary language. She blamed the teachers because they were unable to compel students to use Portuguese and because they lacked ability in using Portuguese:

At the beginning our teachers tried to teach us in Portuguese, but many students were not interested in learning the language, so the teachers just went along with what the student wanted by using Tetum for explanations (Lau).

Several deficiencies in the implementation stages were highlighted, such as the lack of teacher quality not only in their mastery of the Portuguese language but also in terms of language teaching pedagogy with an inability to actively engage students in learning the language. Another deficiency was the low level of proficiency in Portuguese achieved by the students, due to the lack of exposure to and practice in the language. Evidence showed that students reached their secondary level with a sense that they have very low understanding of Portuguese language.

More varied practices were found at the university level. Most of the private university lecturers used the Indonesian language as their language of instruction with a mixture of Tetum, as pointed out by one of the private university students:

The majority of lecturers use either Tetum or Indonesian or a mixture of both, that is the reality in UNDIL (Ardo).

He further pointed to the fact that many students graduated from secondary level unable to speak Portuguese:

Although Portuguese is taught from the primary to secondary level, many still are not able to speak Portuguese that is why we call it bahasa Gadogado (Ardo).

Bahasa Gado-gado is term derived from Indonesian to refer to mixing languages. Another private university student from a different university expressed similar opinions:

We learnt Portuguese and English as subjects only in the first semester, but overall we use mostly Indonesian during classes (Abas).

This may be due to the fact that almost all the lecturers were graduates from Indonesian universities and were only able to deliver the lecture in Indonesian. However the student also underlined that Tetum was still used in conjunction with Indonesian as an auxiliary language. This fact shows a gap between policy planning and practice in terms of the lack of a mechanism to implement and realise the policy in practice (Shohamy, 2006). .The use of Tetum and Portuguese from basic education to secondary education is not followed at the higher education level, possibly negatively impacting on students' development of language proficiency and cognitive ability.

Students from public universities had two main opinions about their experiences of the language of instruction. One was about the use of Portuguese with the mixture of Tetum as pointed out by one student:

In general, lecturers compose their lessons and handouts in Portuguese; however their explanations would be in Tetum. If there are terms that we don't understand in Portuguese, they would use Tetum or our mother tongue for further explanations (Tony).

Another student claimed that although the official language policy in the public university was Portuguese, in practice, at least in the faculty where the student was studying, Indonesian was mainly used:

During high school all the subjects were taught in Portuguese but the explanations were in Tetum so it was easy for us to understand. When we reached university, lecturers mainly use Indonesian with the explanations in Tetum (Ela).

She went on to comment on current language policy at her institution:

In this university, we have a mixed language situation with Portuguese, Indonesian, Tetum and English. Some lecturers do use English but very rarely (Ela).

Students from the public university also pointed to the presence of foreign teachers from Portuguese speaking countries like Portugal and Brazil as being beneficial but also problematic. They claimed that while they were able to learn Portuguese from a native speaker, since students did not have sufficient knowledge in Portuguese, they were not able to understand fully what these lecturers taught, and as a result content knowledge was not fully understood by students.

From these responses, a number of conclusions can be drawn. Firstly, although the official policy has a mandatory use of Portuguese as the language of instruction, in terms of implementation Portuguese was used in a very limited way in the experiences of these students. Tetum and Indonesian were being used as auxiliary languages. This situation was evident especially in the higher education sector where most lecturers used a mixture of Tetum and Indonesian. Thus, students' responses appear to indicate a gap between stated policy and reality in the education system. This is particularly marked at the tertiary level where students are expected to deal with higher order knowledge, and yet the languages that they have available to them are not well suited to this due to the limited proficiency of students in these languages prior to commencing tertiary studies

### 5.4.2. Opinions about the current language policy

When students were asked about their opinion of the current language in education, some students expressed concerns. One university student stated:

I feel a bit dissatisfied with the current situation because, as I have
mentioned, we are learning subjects which are written in Portuguese but the explanation are done in Tetum. How can we master the language if we keep using mixed languages? (John).

The same student further expressed his opinion in support of the use of Tetum as the sole language of instruction in education:

If possible, Tetum should be used as the only official language in schools to allow more comprehension and understanding of the subjects even though Portuguese is the official language (John).

Another secondary student provided a similar view when asked about the current language policy in education:

In my opinion our language policy is not well defined. We use Tetum but then combine it with other languages like Portuguese and Indonesian (Lau).

Another student was content with the current language policy because the policy allowed him to learn many languages:

I feel happy because in this life I'm able to learn many languages (Tony).

However, he also acknowledged the criticism against Portuguese but offered a viewpoint from a political perspective:

Many people complain about using Portuguese but we have to look at it from national and international political points of view, because Portuguese, English and Indonesian are international languages so we have no other option but to learn it, that's why I'm happy (Tony).

A similar opinion was expressed by another public university student, who emphasized the current status of Portuguese:

I'm happy with the current policy, because it's written in our constitution that Tetum and Portuguese are our official languages (Ida).

Two of the students expressed mixed feelings about the policy. One stated:

Yes and No. Yes, because we can learn many languages and also because the language policy allows the use of mother tongue which facilitates the student comprehension. However it might pose some problems if students want to pursue further studies. If the language policy adopted only the use of mother tongue then students would only understand Tetum and not Indonesian (Abas).

In line with the first student, the second student pointed to the benefit of the current policy in allowing literacy in multiple languages; however she was apprehensive about the use of Portuguese pointing out that Portuguese is a difficult language to understand:

There are good and bad sides of it. The good side is that it allows us to learn many languages, but the negative side is when the teachers speak Portuguese all the time it's hard for us to understand. After all, Portuguese is not our native language (Ida).

Table 35 below provides the summary of students' opinions when asked about what language would they choose to become the official language and why.

Table 35. Students' preference for official language

| Pseudonym | Preferred official <br> language | Main reasons |
| :---: | :---: | :---: |
| John | Tertuguese and Tetum | Widely used and spoken <br> Tony <br> Ela <br> Ardoulated by the national <br> Constitution |
| Lau | Tetum and Portuguese | Follow the mainstream opinion |
| Ida | Tertuguese | As a national identity symbol <br> As stipulated by the national <br> Constitution |
| Abas | Tetum | Widely used and spoken and easy <br> language |
| Widely used and easy language |  |  |

The majority of students opted for Tetum giving reasons such as that Tetum is a widely used and spoken language in Timor Leste and represents the national identity. Others preferred Portuguese because it is the official language stipulated by the Constitution. Many students provided opinions in support of the use of

Tetum because of the role played by Tetum as the lingua franca, while opinions in support of Portuguese were mainly related to the status of Portuguese as the official language. Thus students had mixed reactions to the current language policy situation with some perceiving it as an opportunity for developing a multilingual capability and others critiquing it as limited and unfocussed.

### 5.4.3 Visions for the future

### 5.4.3.1 The future of Tetum and Portuguese in Timor-Leste

Students expressed various views about the future of language policy and the language situation in the next two decades. Most predicted that Tetum would play a more important role than Portuguese and would become more popular. One student expressed his view about the future of Tetum and Portuguese:

In the future, Tetum will become more predominant while Portuguese will remain as the official language because of the status attached to it (Abas).

Another student made a similar comment:

I think there will be more people learning and deepening [their knowledge of] Tetum than Portuguese (Lau).

This student went on to express his strong opinion about Portuguese:

I think people will still feel compelled to learn it just because it's compulsory, otherwise no one would want to learn it (Lau).

In addition, most students strongly supported further development of Tetum, as can be seen in comment below:

More effort needs to be put in developing Tetum language (Lau).

Furthermore, other students strongly supported the use of Tetum as the single language of instruction in education to improve student comprehension and to avoid misunderstanding, as explained by one student:

In my opinion it is better to use just one language for the learning process, because if the teacher could speak and present the lessons in Tetum I believe we would have more comprehension in general (Abas).

There is a sense of the growing value that students are placing on Tetum for taking a greater and more official role in education in preference to Portuguese.

### 5.4.3.2 The future of English in Timor Leste

Many students predicted English would gain more popularity because of its status as an international language and the values attached to it in terms of education, employment and career opportunities, and international relations and commerce. As pointed out by one student:

My vision for the future is that more people use Tetum and English because we know that many young children like to take the English language course compared to other languages (Ela).

Another student had a similar view favoring English by pointing to the fact that more informal English language learning centers could be found compared to those for learning Portuguese:

In the future I think there will be more people speaking English than Portuguese, because in Timor there are more English training centers than Portuguese (Ardo).

### 5.4.3.3 The future of Indonesian in Timor Leste

According to some students, Indonesian will still exist in Timor-Leste because of the influence of the media, especially television:

In regard to Indonesian, future generations will still be able to speak it if the current trend of having Indonesian TV programs viewed continues (Ardo).

However this student also recognized that the level of understanding would be limited:

However in academic terms, Indonesian will be slowly eroded. Many will still speak Indonesian language informally, but they will not be able to engage in a formal situation (Ardo).

Clearly students' visions for the future were very much influenced by their current attitudes towards the different languages. Their views overall tended to favor Tetum because of the role that Tetum plays as a national language and lingua franca, with some preference also for English because of its status and value as an international language. To a lesser degree, the students also support the existence of Indonesian language due to its social media influence. Portuguese seemed to be supported the least, seeing it as limited to the role of an official language, possibly reducing in use and relevance over time

### 5.5 Concluding comments

This chapter provided the analyses of the qualitative part of this research, which aimed to expand and complement the results obtained from the quantitative part, in regard to students' language use and preference, attitude towards languages, and attitude towards language policy. Various factors that might influence students' attitudes toward language and language policy in education were also explored.

The findings showed that all students were multilingual with the knowledge of at least four languages, composed of at least two mother tongues and two international languages. Most students rated their mother tongue as their most proficient language. In general, all students had favorable feelings toward Tetum, mainly because it was the language spoken by the majority of Timorese people and it has become viewed as the lingua franca of the Timorese people. Tetum was the language spoken by all students regardless of their education level, district of origin and their mother tongue, providing evidence of the extent of the spread of Tetum in Timor Leste.

In terms of foreign languages, Indonesian was the language with the highest proficiency among students, leaving behind Portuguese and English. Many students claimed that they learned the language at school. This revealed a contradictory circumstance to the current language policy in which Indonesian is no longer taught in basic and secondary education. Students also recognized the
influence of the media, particularly television, in contributing to their proficiency in Indonesian and highlighted the place of Indonesian in the social spheres of life in Timor Leste.

Most students showed positive attitudes towards English, giving the reasons that English is an international language of communication and a necessary medium for learning new knowledge and technology, and furthermore that English is seen as providing better access to education and employment opportunities.

Despite massive efforts to reintroduce Portuguese language into Timor Leste since 2002, which was followed by the decision to adopt Portuguese as the language of instruction in education in 2004, students felt no confidence with their Portuguese. Some claimed not to be able to speak Portuguese even after studying the language for seven to ten years. This is contrary to the government's public claims that from 2013 onwards students graduating from secondary school would be proficient in Portuguese. The discrepancies between the official policy statement and the practice at school level were highlighted by the students. Although the officially declared language of instruction in schools, in reality the use of Portuguese was very limited, with most interaction occurring in Tetum. Portuguese was used only for content delivery while the explanations and classroom interaction occurred in Tetum. For their own lack of proficiency students blamed the difficulty of the language, the lack of teacher ability to engage students in Portuguese and the fact that they had very limited exposure to Portuguese.

However, students showed mixed feelings regarding Portuguese with some favorably supporting it and some showing negative feelings towards it. Those supporting Portuguese referred to its status as the official language, whereas the opposing views were linked to its perceived complexity and the lack of opportunity to practice the language, that is, its lack of perceived authenticity of contexts of use.

The following chapter will provide a conclusion and an in-depth analysis based on converging the analyses of quantitative and qualitative findings. It will also outline the implications of the study, and make suggestions for further areas of research.

## Chapter VI <br> Discussion of Quantitative and Qualitative Findings

This chapter presents a discussion of the overall findings in relation to students' preferences and uses of multiple languages in education and their attitudes towards the different languages and the socio-educational factors that influence their attitudes. Since this study employed a mixed method approach, the two data sources are complementary in addressing the research questions and findings. The quantitative findings are presented initially and the findings from interviews then provide further insight and analysis. The qualitative interviews are selectively discussed to extend and elaborate the questionnaire results.

The discussion is structured in relation to the research questions. Section 6.1 focuses on students' preferences and uses of languages; Section 6.2 discusses students' attitudes towards the different languages in Timor-Leste education. Section 6.3 discusses students' attitudes towards language policy while Section 6.4 focuses on the socio-educational factors that might influence students' attitudes toward the uses of different languages in education. Implications of the findings of the study are outlined in Section 6.5 and, arising from the findings of this study, suggestions for future research are presented in the concluding section.

### 6.1. Preferences and uses of multiple languages

This section details the overall findings relating to the first research question on students' preferences and uses of multiple languages in their education. A brief overview of findings is presented and the discussion provides more in-depth analysis and exploration of the significance of the findings.

### 6.1.1. Findings

The results of the questionnaire showed that on average Tetum is the language used most in almost all situations (59\%), at school, at home and for social and leisure activities. The three international languages, Portuguese, English and Indonesian, were used in less than $12 \%$ of all situations. Given the ethnolinguistic situation in Timor-Leste with 20 local languages, where students have
different mother tongues, Tetum appears to have become the lingua franca of the students both at the secondary and university level.

According to the questionnaire, the use of the three international languages was varied. Portuguese, as the language of instruction, was used in a limited way during classes for content delivery, while the interactions during classes were mainly in Tetum. In the interviews, students presented several reasons for this situation namely, lack of teachers qualified in understanding and teaching Portuguese; the difficulty of learning Portuguese; lack of opportunity to practise Portuguese; and also a lack of motivation to learn Portuguese. In informal contexts, the use of Portuguese was almost non-existent as the results from the interview revealed.

The results from the interview provided evidence that although Indonesian is not officially taught in the school system, many students still use the language in informal settings, such as in daily conversations and when liaising with speakers of Indonesian. Similar to Portuguese, the use of English was limited to the delivery of English as a subject at school, and no interactions occurred outside schools with the exception of small groups of students who take part in English courses from private/non-formal language providers. In formal settings, Indonesian was still present in the higher education institutions, especially in private higher education institutions. In these institutions, Indonesian is being used as the language of instruction in conjunction with Tetum. The main reasons for such a practice were that most of the lecturers graduated from Indonesian universities and are only able to deliver the lessons in Indonesian.

To better understand the tendencies in the students' language use, their proficiency and repertoire are significant indicators. Based on the students' selfrated competency in the questionnaire, a majority of students (71\%) claimed high proficiency in Tetum, the highest of the four languages. Indonesian was the language with the second highest proficiency (56.3\%) followed by Portuguese and English (43\% and 31\%). These results were confirmed in the interviews where students claimed high proficiency in Tetum and their mother tongue, fair to good understanding of Indonesian and low to fair understanding of Portuguese and English. In terms of language repertoire, all students who participated in survey and interviews were multilingual with the knowledge of at least four to six
languages consisting of at least two mother tongues and at least one international language.

A closer look at how the students learned these languages can also provide explanations of the students' use and proficiency. The data from the questionnaire showed that Tetum and other mother tongues were mainly learned informally at home and in the community through social interactions. Indonesian was learnt formally at school and informally. On the other hand, Portuguese and English were learnt mainly in formal settings at school with the main difference that Portuguese was used as the language of instruction while English was learned as a subject at the secondary school level. An interesting fact from the questionnaire data is that both secondary students and university students claimed to have learnt Indonesian at school, a situation that contradicts the current policy.

The results from the interview provided further details. As well as being learnt formally at school, Indonesian was also learnt informally through social media especially television, daily conversation and social interactions with people of Indonesian nationality or with Timorese with Indonesian proficiency. The formal learning of Indonesian occurred during the time that Indonesian was still used in the school system and in private universities. English was also learnt outside the school system through English language courses or non-formal language training providers. In the interviews all students confirmed that they only learnt Portuguese in the school context.

In terms of students' language preferences for future careers and study, all students interviewed ranked English as their preferred language followed by Portuguese. Students who chose English gave reasons such as English being an international language of communication, as a medium to learn new knowledge and technology, and as permitting better access to education and employment opportunities. Portuguese was chosen in relation to its status as an official language and allowing access for further studies in Portugal, especially on study scholarships. Tetum was chosen by three students because it is the national language and the lingua franca and also because students felt Tetum represents their identity as Timorese and Timor-Leste as an independent country.

### 6.1.2. Discussion

Based on these findings, observations can be made that informal learning, in the case of Timor-Leste, not only complements the formal learning at school but also plays an important role in language learning. As suggested by Rogers (2004), informal language learning is unstructured and un-purposeful but is the most extensive and most important part of all the learning that we do every day of our lives. Informal language learning is a lifelong process by which every individual acquires and gathers knowledge, skills, attitudes and insights from exposure to the environment at home or at work through reading newspapers and books or by listening to the radio or viewing films or television (Lightbown, 2006), as was observed in the students' informal learning of Indonesian. Whether language acquisition is to take place in formal or informal language learning settings, language learners need to have exposure and access to language input. Language acquisition cannot simply take place in a vacuum without considering exposure to some sort of language input (Gass, 1997), which, in the case of Portuguese, is lacking in Timor-Leste.

Informal learning also reflects aspects of sociocultural theory, stemming from Vygotsky (1978), which emphasizes the role of social interaction, cultural tools, and history in cognitive development and learning. This theory views learning as a process in which students' own efforts to learn are coordinated with the opportunities for learning that are provided by the social and cultural setting; hence, the opportunity for interaction in meaningful ways with others is a major influence on what and how language learning occurs.

The findings show that the sample students had different motivations for learning languages. In regards to Portuguese, the motivation was mainly extrinsic (Ryan \& Deci, 2000) which can be further categorized as external regulation (Deci, 1985). This means that learners perform certain behaviours so as to satisfy external demands or to get external rewards. These external regulated behaviours were usually experienced as being controlled or alienated. In the case of Portuguese, the requirement of Portuguese as the official language of instruction in education was the external driver for learning the language in the students' view. On the other hand, for English and Indonesian, the motivation was more inclined to be intrinsic, by which students decided to learn these languages because of their
inherent interest rather than because of the external outcome (Deci, 1985). In the case of English, its role as a global communication language was the main motivator, while the motivation for learning Indonesian was more related to popular culture, for acceptance in social interactions and because of the influence of the media. According to Ryan and Deci (2000) intrinsic motivation is important as natural wellspring of learning and achievement and results in high-quality learning and creativity. This study, therefore, found English and Indonesian to be more viable languages in East Timor than Portuguese.

The low proficiency in Portuguese can also be linked to student individual motivation, which, according to Clément (1986), is influenced and activated by two aspects of the environment: (a) the relative ethno-linguistic vitalities of the first and second language groups, and (b) the frequency of contact with the second language group. The ethno-linguistic vitality is linked to language status, which, according to Giles et al. (1977), involve three aspects, namely demographic representation, socio-economic status and institutional support. In the case of Portuguese in Timor-Leste, the ethno-linguistic vitality is only present through the institutional support from the government, as the demographic representation of Portuguese speakers in Timor-Leste is low and the socio-economic status of Portugal is not very positive, especially with the recent economic crisis there. In addition, the frequency of contact with the second language group (Clément, 1986) is low in the case of Portuguese in Timor-Leste.

### 6.2. Students' attitudes toward different languages

This section presents the findings and discussion relating to the second research question about the attitude of students toward different languages in the TimorLeste education system. This section also considers students' attitudes towards language in general.

### 6.2.1. Findings

The results of the questionnaire showed that students generally held positive attitudes towards all languages, with English enjoying the highest positive attitude followed by Portuguese, Tetum and Indonesian. This result does not correlate specifically with students' self-rating of their proficiency levels. English, the language with the highest favorable attitude was the language with the lowest
proficiency. On the other hand, Indonesian, which was second in term of proficiency, was placed last in terms of students' attitude.

The results obtained from the interviews portrayed a different picture, with students showing mixed feelings and both favourable and unfavourable attitudes towards the languages they knew. Most students showed a positive and favorable attitude toward Tetum, mainly because they considered Tetum as the national language and essential to the national identity, and the fact that Tetum has become the common language for communication among Timorese people. With regards to English, students showed positive feelings towards the language and a desire to learn the language even though they were not proficient in that language.

In regard to Portuguese, students showed mixed feelings with both favorable and unfavorable attitudes. Those with unfavorable feelings gave reasons such as the difficulty of learning Portuguese, Portuguese being the language of a former colonizer of Timor-Leste and the fact that after so many years of learning, they still could not fully understand the Portuguese language. Students with favorable attitudes mainly pointed to the legal status of Portuguese as an official language that had been stipulated in the Constitution, which everyone had to learn. This result was consistent with findings from Macpherson (2011) of a substantial degree of resistance to the language policy because Portuguese was considered a difficult language and preference was given to studying English instead.

### 6.2.2. Discussion

The discrepancy between students' attitudes and proficiency levels observed in the study can be linked to the status of the languages. In the case of English, the positive attitude is linked to the status of English as the global international language, while the negative attitude toward Indonesian can be linked to the colonial history of Indonesia in Timor-Leste. The positive attitude toward English in the case of Timor-Leste is more related to the affective component of attitude as the cognitive and conative component were not present (Fasold, 1984; Garrett et al., 2003; Rosenberg \& Hovland, 1960). Similarly, the negative attitude toward Indonesian is also more related to the affective component, although the cognitive and conative components were visible with the average proficiency in Indonesian and the daily contact students have with Indonesian through media and social
interactions. The positive attitude of students toward English could reflect the views of Timorese student of the increasing importance of English in Timor-Leste and worldwide as an international lingua franca thus creating inner impetus to learn English (intrinsic motivation). In addition, students also seemed to learn English for its instrumental role for further study, better employment and prestige (Tragant, 2006).

The low proficiency and mixed attitudes students showed toward Portuguese raises the question of the likelihood of a successful implementation in TimorLeste of the government's immersion language policy with Tetum and Portuguese. According to Baker (1992) in relation to attitudes toward language policy, "In the life of a language, attitudes to that language appear to be important in language restoration, preservation, decay or death. If a community is grossly unfavourable to bilingual education or the imposition of a 'common' national language is attempted, language policy implementation is unlikely to be" (p.9). The findings of this study show that Portuguese in particular could be waning in terms of its value and role in Timor-Leste education.

### 6.3. Students' attitude toward language policy

This section will discuss the overall findings relating to the second research question that focuses on the attitudes of students toward different languages in the Timor-Leste education system. In particular, this section looks specifically at students' attitudes toward the language policy in education.

### 6.3.1. Findings

The data from the questionnaire, especially in regard to the age at learning the language, points to the fact that students' progression in learning languages in education follows the stated official policy. Students in this study typically came to school already knowing Tetum. Students then started to learn Portuguese at the age of 10 , the fourth grade of basic education, and English at the age of 14, the final year of pre-secondary or the first year of secondary education. All this data fits with the current language policy in education of an immersion language program of Tetum and Portuguese in basic education and the introduction of English as a subject later in secondary school.

However data from the interviews with the seven students (secondary and university) revealed discrepancies with the stated policy. At the secondary level, Portuguese was being used as the instruction language but different approaches were found in actual practice. Portuguese was used mainly for content delivery, with the explanations and interactions mainly in Tetum. Most students claimed that they completed secondary education with very low proficiency in Portuguese. A different language practice was found at the university level. Private universities mainly used Indonesian for content delivery and a mixture of Indonesian and Tetum for explanations and class interactions. The public university in Timor-Leste sets out to follow the language policy as stipulated by the government with the exclusive use of Portuguese; however even in this university different practices were found at the faculty levels. Some faculties used Portuguese exclusively, such as the Faculties of Law and Education, while other faculties adopted a mix of Portuguese, Indonesian and Tetum depending on the lecturer's discretion.

Students generally expressed mixed feelings regarding the current language policy in education. Some expressed concerns that the use of Portuguese is rather forced due to its status as an official language. Most students are of the opinion that the role of Tetum should be further developed and expanded to become a language that can be used in the education sector. All students agreed that Tetum is a language widely known by all Timorese, it has a simple structure and is easy to learn, and it represents national identity, and therefore, should have a greater role in education.

In viewing the future of the language policy in Timor-Leste, many students predicted Tetum would become more dominant because of the role that it plays as a national language and lingua franca. Some students expressed preference also for English because of its status and value as an international language. To a lesser degree, the students supported Indonesian due to its social media influence but tended to support the role of Portuguese even less, seeing it as limited to the role of an official language and its compulsory nature in education.

### 6.3.2. Discussion

As discussed in the literature review, one of the biggest challenges in language policy in Timor-Leste is corpus planning, which according to Haugen (1983), is divided into three activities, "graphisation", or the development of a system of writing and orthography, "grammatication", or the development of a standard grammar, and "lexication", or the development of a standard lexicon and terminology. Although the decree law number $1 / 2004$ has established a standard orthography of Tetum that recognizes the standard develop by the National Language Institute of Universidade Nacional Timor Lorosa'e (National University of Timor-Leste), the grammatification and lexication are still undetermined. This is reflected in the interview result where despite having a positive and favorable feeling toward Tetum, students also recognized the limitations of the language and urged its further development.

The immersion program of Tetum and Portuguese currently being implemented in Timor-Leste adopts additive bilingualism in which the learner acquires the second language (Portuguese) without detriment to the first (Tetum). The objectives are to facilitate early learning through interactions between teachers and students such that students can become bilingual as well as bi-literate in both Tetum and Portuguese (Benson, 2004). However the findings of this study show that the policy is not achieving the intended result of Portuguese and Tetum biliteracy. Students reported that they became literate in Tetum but not adequately in Portuguese in terms of oral and written comprehension. In addition, students were not proficient in the working languages of English and Indonesian. Hence, there is a mismatch in the current situation between policy and practice, and between the languages valued by students and those required to be used in education.

There seems to be a challenge in terms of the relationship between the ideology underpinning the current language policy and its implementation in practice. Shohamy (2006) identified mechanisms or devices to ensure the smooth implementation of language policy from top-down implementation to achievement of its intended aims. These mechanism/devices include formal rules and regulations, language education, language testing, and informal mechanisms
such as language in public spaces, ideology, myths, propaganda and coercion (Shohamy, 2006, p.58). One of these mechanisms, language in public spaces, is one area that particularly highlights a gap between the official and the de facto language policy (McAllistar 2012). The findings from this study show precisely this phenomenon, and therefore further strengthen the claim of a gap between policy and practice especially with regard to educational settings in Timor-Leste.

### 6.4. Socio-educational factors that might influence students' attitudes toward the uses of different languages in education

This section will provide the findings and discussion relating to the third research question that focused on socio-educational factors that might influence students' attitudes toward the uses of different languages in education. The summary of findings is briefly presented and the discussion provides a more in-depth analysis.

### 6.4.1. Findings

The questionnaire results found that several social-educational and individual characteristics were related to the attitudes of students toward languages in the Timor-Leste education system. This section initially discusses these characteristics with data from the questionnaire and then complements and enriches the analysis with the results of the interviews.

A strong association was found in the questionnaire data between attitudes toward Portuguese and attitudes toward English, indicating that students with positive attitudes toward English would normally have positive attitudes toward Portuguese, and vice versa. In regards to the relationship between language proficiency and attitudes toward languages, the questionnaire data showed that language proficiency is positively related to attitude. The results from the interviews partially confirmed this tendency, as the relationship was clearly evident with English. Three students who claimed some degree of proficiency in English also showed a very positive attitude toward English. However, these students also showed a dislike to Portuguese even though they were being exposed to Portuguese on a daily basis as the language of instruction. Thus the result from interviews indicated that students who favored English had less positive attitudes towards Portuguese contradicting the questionnaire results.

With regards to attitude differences and students' personal characteristics, the questionnaire results showed that there was an attitude difference based on gender among university students with male students having a more positive attitude toward English language than female students. The results from the interviews did not provide sufficient evidence to support this statement. However, of four male students interviewed, two showed preference for Tetum while the other two rated English as their preferred language. Of three female students interviewed, two preferred English and only one Portuguese. Hence, the gender variable did not appear to be a major influence on students' attitudes towards different languages.

The age of students was found to be positively correlated to attitude, particularly to Tetum. The older generation had a more positive attitude toward Tetum while English received more positive attitudes from the younger students. In fact the younger generation favoured English more than all the other languages. The result from the interviews confirmed the tendency, with younger age students at secondary level having more positive attitudes toward English than Portuguese. As regards university students specifically, the questionnaire results found that older students had more positive attitudes toward Indonesian. Clearly, there seems to be a generational change in attitude towards different languages underway in Timor-Leste.

Analysis was conducted on the relationship between schools' characteristics and attitudes towards languages, in regard to the type of school (public/private) that the students attended. The data from the questionnaire found a difference in attitude toward Tetum, with public school/university students showing more positive attitudes than private schools/university students. Similarly, students at public educational institutions showed more favorable attitudes toward Portuguese than those at private institutions. The result from the interviews showed the tendency of university students who were taught in Portuguese to have a more positive attitude toward Portuguese than those who were not taught in Portuguese. However, in general both secondary/university and public/private students showed very positive attitudes toward Tetum language.

With regards to the attitude difference between university and secondary school students, the questionnaire analysis found that secondary students in general had more positive attitudes toward English, while university students generally
showed more positive attitudes toward Tetum. Students at rural schools had more positive attitudes to English and Indonesian than students in urban schools. The results from the interviews confirmed this tendency, with secondary school students showing more positive attitudes toward English while the university students valued Tetum more. One particular note about these secondary students is that almost all of them were participating in some form of non-formal language learning outside school. These students felt more motivated to learn English because of the status of English and also because of the attached instrumental benefits, namely for further study in an English speaking country.

Lastly, the study also investigated the attitude difference based on the parents' employment situation. The data from questionnaire revealed that students from lower economic classes had more favorable attitudes toward Tetum. This was not explored specifically in the interviews; however, it is likely also to be reflected in the public/private school factor, as will be discussed further below.

### 6.4.2. Discussion

Many studies have shown that attitude towards a language is very important in the language learning process (Gardner, 1985, 2001; Ingram, 1989). If students have a positive attitude, they may be more motivated to learn a language (Edwards, 1985; Lasagabaster, 2003). The positive attitudes toward Tetum and Portuguese of public school students over private school students in Timor-Leste could be related to the socio-economic context and cultural capital (Bourdieu, 2011) of their parents in which parents provide their children with cultural capital by transmitting attitude and knowledge. In this study, most students in private schools came from middle to high socio economic status. Parents of these students normally valued English and Indonesian over Portuguese and Tetum (Macpherson, 2011). As most public schools are under resourced, students from these schools might not be exposed to quality language learning in English, and so their attitude toward language in education would be shaped by the languages to which they are exposed, in this case Portuguese and Tetum.

Although a positive attitude is important in achieving proficiency in a language, as these findings show, attitude alone does not lead to proficiency and to the capability to use the language. There are also many other factors such as the
language acquisition approach, differences in learners such as aptitude, motivation, and cognitive style, and the importance of socio-cultural factors such as class/social status and age (Saville-Troike, 2006). Hence, the findings show the valuable contribution of understanding students 'attitudes within a broad picture of many variables impacting on language policy in education.

### 6.5. Implications of the findings

This section discusses the implications of the findings of this study for the language in education policy in Timor-Leste. According to Lewis (1981), any language policy, especially in the system of education, has to take account of the attitude of those likely to be affected. In the long run, no policy will succeed which does not do one of three things: 1) conforms to the expressed attitude of those involved; 2) persuades those who express negative attitudes about the rightness of the policy; or 3) seeks to remove the causes of the disagreement. The implications described below take into account these factors in considering how the findings of this study may inform the language in education policy in TimorLeste in the future.

Implication 1: There is a need to value and build on informal and non-formal language learning.

One of the significant findings of this study is the importance of informal language learning. The study found that Tetum as the national language and the lingua franca was mostly learnt informally outside of the school system. Indonesian was also learnt mostly from social media and social interactions, while most students who claimed high proficiency in English also took part in some form of informal language training. The learning of Portuguese occurred only in the formal learning setting, with students having very little exposure to informal learning opportunities. This finding indicates that students are valuing specific languages and seeking out opportunities to learn and use them beyond formal schooling contexts. One implication of this is to review the current policy in terms of language of instruction (refer to implication 2) and in addition consider ways to increase the connection between formal and informal language experience.

It is important to consider the inclusion of informal and non-formal learning of foreign languages in the grand design of language programs in education.

Improving the relevance of language learning through, for example, the use of social media such as television and the internet (Facebook and twitter) could be considered (Rogers, 2004).

Non-formal learning (Werquin, 2007) is another option that could be considered. A dedicated, state of the art foreign language centre could be established, which is funded by government, run professionally and not linked to the school system and which adopts a different learning pedagogy (Benson, 2011). A self-access language learning centre is an example of such an approach (D. Gardner \& Miller, 1999; Murray, 2011). These centres can become "oases" for the students to improve their language proficiency. As the nature of participation is voluntary and not compulsory and they are based on intrinsic motivation and affect, the learning outcomes may be more positive (Murray, 2011).

Further, the amount of exposure to the target language needs to be boosted. This exposure does not necessarily take place in classrooms, but rather informally at schools in the form of daily conversations and natural interactions between teachers and students and among students, mediated by teachers. In order to do that, teachers and school administrators need to play an important role in engaging the students in conversation in the target language. To further engage the student, the role of native speakers (Portuguese and English) is still needed. However the role needs to be expanded and other extra-curricular experiences such as those of the immersion bilingual programs in Canada (Baker \& Jones, 1998, p. 497) could be introduced. It is also imperative for native speaker teachers (of English or Portuguese) to have sufficient knowledge of the lingua franca Tetum to facilitate and engage students in the varied interactions (Baker \& Jones, 1998).

## Implication 2: There is a need for a greater role of English in education

It is important that the government consider a greater role for English in education given the importance of English as the international lingua franca and the international language for commerce (Crystal, 2012; Grimes, 1996; Nunan, 2003). The more favorable attitudes toward English by younger generations of TimorLeste found in this and other studies of (Reynold, 2011; Taylor-Leech, 2009; Taylor - Leech, 2007) and the fact that the number of English speakers is growing since independence, as indicated in the latest census (MoF Timor-Leste, 2010)
further underpin the importance of developing English education in Timor-Leste If Timor-Leste wants to survive and progress in the globalized world of today where English language is seen as an economic tool, then making a radical decision to embrace English would be a bold but decisive decision for the future of the country.

The government could upgrade the status of English from merely a subject to a language of instruction in the secondary level. This policy could be implemented by first introducing early learning of English as a subject in the early years education curriculum, preferably from year seven to nine, with subsequent exposure to English increased at the secondary level along the lines of middleimmersion programs (Baker \& Jones, 1998, p. 496). Some subjects at the secondary level, such as English language, science and technology, would be taught in English using content-based language learning methods. The government could also consider an immersion bilingual program of TetumEnglish from the beginning of secondary level which could be delivered as an alternative option to the Tetum-Portuguese program, as an immersion bilingual program should not be compulsory but voluntary (Baker \& Jones, 1998).

## Implication 3: There is a need for the improvement of the Tetum language

There are two facets in the improvement of Tetum that need to be considered. First is the standardization of Tetum in terms of graphisation, grammatication and lexication (Haugen, 1983) and second is the greater role of Tetum in the language education policy. The Constitution of Timor-Leste charged the National Language Institute (Instituto Nasional Linguistica [INL]) with the responsibility of Tetum standardization and the preservation of endogenous languages, and to fulfill this charge, the INL has already produced a set of Tetum language standardizations. However, this is not well known at the grassroots level especially among the students and teachers, as was evident during the interviews with many students complaining about the confusion in the standard Tetum used in schools. A strategy is needed to educate teachers and the community about the standardized form of Tetum, and resources are needed for teaching that demonstrate the language particularly in written form.

This study found that students believe that the role of Tetum needs to be expanded from its current role as an auxiliary language for the teaching of Portuguese. Since Tetum has become established as the lingua franca of Timor-Leste, it should be considered as the exclusive language of instruction at the basic education level. This approach would not remove the use of Portuguese as an official language of instruction, but instead would seek to maximize the utilization of Tetum that is understood by all students, thereby facilitating learning and engaging students. Portuguese can remain an official language and can continue to be used as the language of instruction in various subjects, such as Portuguese language, arts and humanity, civic education and general knowledge, while Tetum can be used as the official language for the other major learning subjects. In this way, the current language policy could be revised and differentiated to align specific languages with specific areas of the curriculum.

### 6.6. Recommendations for future studies

Given the findings of the study of this study, there are some aspects that deserve further investigation. This section discusses several possible directions for future research.

## Recommendation 1: Studies of other stakeholders

This study focused on a particular group of participants, namely secondary school and university students. More studies with different samples would provide further understanding of attitudes toward languages in Timor-Leste. Students are an important stakeholder group in the education sector, however there are also other stakeholders who contribute to and are impacted by the shape of the language policy. These stakeholders are teachers, school administrators, parents, policy makers and political leaders and community leaders. These stakeholders' views could also be investigated and correlated with students' views to reveal an even richer picture of the language in education policy and planning needs of Timor-Leste.

The study could also be expanded to include students from basic education to understand their attitudes towards the languages, especially when they are first
introduced to various languages.

## Recommendation 2: Studies of attitude changes

This study investigated the attitude of students towards languages in their education context, and for that purpose adopted a cross-sectional approach due to the nature of the context and the parameters of data collection and research design. However, as stated by Baker (1992), attitudes, by nature, are not static but change. Therefore, future longitudinal studies on attitude changes of participants could enhance the understanding of the attitudes of Timorese students. In fact, this study found a generational change that is occurring and further investigation of this would be invaluable in the rapidly changing context of Timor-Leste.

In addition, the study found that the complicated nature of language attitudes would be difficult to investigate through questionnaire alone and therefore followed the questionnaire up with qualitative interviews. Future studies should also consider adopting both quantitative and qualitative research methods to investigate the multi-facet aspects of language attitudes and uses in multi-lingual contexts such as Timor-Leste.

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## APPENDIX 1

Questionnaire in English

## "ATTITUDES TOWARD LANGUAGES IN TIMOR LESTE EDUCATION SYSTEM"

We would like to ask you to help us by answering the following questions. This is not a test so there are no "right" or "wrong" answers and you don't even have to write your name on it. We are interested in your personal opinion. Please give your answers sincerely as only this will guarantee the success of this investigation. Thank you very much for your help.

## I. Socio Demographics Information

| No | Description | Response |
| :---: | :---: | :---: |
| 1. | Age : | $\ldots . . . . . . .$. (in years) |
| 2. | Course : |  |
| 3. | Gender | $\square$ Male $\quad \square$ Female |
| 4. | Mother Tongue | Baikenu ; Bunak; Fataluku; Galoli; Habun; Idaté; Kairui; Kemak; Lakalei ; Mambai ; <br> Mideki; Makalero ; Makasai ; Naueti ; <br> Tetum Prasa; Tetum Terik; Tokodede; Waima'a ; |
|  |  | $\square$ Fataloku ; $\square . . . . . .$. |
| 5. | Parental Occupation |  |
| 6. | I started learning/knowing Tetum at the age of | ......... |
| 7. | I started learning/knowing Portuguese at the age of | ......... |
| 8. | I started learning/knowing English at the age of | .......... |
| 9. | I started learning/knowing Bahasa Indonesia at the age of | .......... |
| 10. | What district are you from | .......... |
| 11. | I studied (high school/junior high school) at | $\square$ Private school; $\square$ Public school |
| 12. | My current school/University is | $\square$ Private school; $\square$ Public school |

## II. Self-rate Language Proficiency and the Use of Language

In the following section we would like you to answer some questions by simply giving marks to your proficiency level
13. What is your reading proficiency in Tetum?
a. None
b. A little
c. Average
d. Good
e. Very good
14. What is your writing proficiency in Tetum?
a. None
b. A little
c. Average
d. Good
e. Very good
15. What is your speaking proficiency in Tetum?
a. None
b. A little
c. Average
d. Good
e. Very good
16. What is your listening Proficiency in Tetum?
a. None
b. A little
c. Average
d. Good
e. Very good
17. How would you rate your general proficiency in Tetum?
a. None
b. A little
c. Average
d. Good
e. Very good
18. What is your reading proficiency in Portuguese?
a. None
b. A little
c. Average
d. Good
e. Very good
19. What is your writing proficiency in Portuguese?
a. None
b. A little
c. Average
d. Good
e. Very good
20. What is your speaking proficiency in Portuguese?
a. None
b. A little
c. Average
d. Good
e. Very good
21. What is your listening Proficiency in Portuguese?
a. None
b. A little
c. Average
d. Good
e. Very good
22. How would you rate your general proficiency in Portuguese?
a. None
b. A little
c. Average
d. Good
e. Very good
23. What is your reading proficiency in English?
a. None
b. A little
c. Average
d. Good
e. Very good
24. What is your writing proficiency in English?
a. None
b. A little
c. Average
d. Good
e. Very good
25. What is your speaking proficiency in English?
a. None
b. A little
c. Average
d. Good
e. Very good
26. What is your listening Proficiency in English?
a. None
b. A little
c. Average
d. Good
e. Very good
27. How would you rate your general proficiency in English?
a. None
b. A little
c. Average
d. Good
e. Very good
28. What is your reading proficiency in Bahasa Indonesia?
a. None
b. A little
c. Average
d. Good
e. Very good
29. What is your writing proficiency in Bahasa Indonesia?
a. None
b. A little
c. Average
d. Good
e. Very good
30. What is your speaking proficiency in Bahasa Indonesia?
a. None
b. A little
c. Average
d. Good
e. Very good
31. What is your listening Proficiency in Bahasa Indonesia?
a. None
b. A little
c. Average
d. Good
e. Very good
32. How would you rate your general proficiency in Bahasa Indonesia?
a. None
b. A little
c. Average
d. Good
e. Very good

Which Language do you use mostly in following situation (Language Background)
33. What language do you speak the most at home?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
34. What language do you speak the most in class with your teacher?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
35. Where did you learn Tetum?
(a) At home
(b) At school
(c) Other place $\qquad$
(d) I don't remember
36. Where did you learn Portuguese?
(a) At home
(b) At school
(c) Other place
(d) I don't remember
37. Where did you learn English?
(a) At home
(b) At school
(c) Other place $\qquad$
(d) I don't remember
38. Where did you learn Bahasa Indonesia ?
(a) At home
(b) At school
(c) Other place $\qquad$
(d) I don't remember
39. What language do you use most often with your parents?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
40. What language do you use most often with your brothers and/or sisters, if you have any?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
41. What language do you use most often with your friends at school (for example, when you're on the playground
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
42. What language do you use most often with your friends when not at schools(for example, when you're playing at your house)?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
43. In what language do you normally watch the television program?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
44. In what language do you normally read a newspaper?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
45. In what language do you normally listen to music?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$
46. In what language do you normally engage in social media (like Facebook, Twitter, Linked, histogram etc) ?
(a) Tetum
(b) English
(c) Portuguese
(d) Bahasa Indonesia
(e) Other language not included here $\qquad$

## III. Attitude Toward Languages

Here are some statements about the Tetum language. Please say whether you agree or disagree with these statements. There are no right or wrong answers. Please be as honest as possible. Answers with ONE of the following :

SA : Strongly Agree
A : Agree
NAND: Neither agree Nor Disagree
D : Disagree
SD : Strongly Disagree

| No | Statements | SA | A | NAN <br> D | D | SD |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 47. | I like hearing Tetum Spoken |  |  |  |  |  |
| 48. | Tetum should be taught to all pupils in <br> Timor-Leste |  |  |  |  |  |
| 49. | Tetum is a language worth learning |  |  |  |  |  |
| 50. * $\left.^{*}\right)$ | Studying Tetum is important because it will <br> allow me to meet and converse with more <br> and varied people. |  |  |  |  |  |
| 51. (*) | Studying Tetum is important because I will <br> be able to interact more easily with speakers <br> of Tetum |  |  |  |  |  |
| $52 .(\#)$ | Studying Tetum is important because it will <br> allow me to further my study |  |  |  |  |  |
| 53. | Tetum is an easy language to learn |  |  |  |  |  |
| $54 .(\#)$ | Studying Tetum is important because it will <br> be useful in getting a good job |  |  |  |  |  |
| 55. | I really enjoy learning Tetum |  |  |  |  |  |
| 56. | I Like speaking Tetum |  |  |  |  |  |


| 57. | Learning Tetum is a waste of time |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 58. | There are more useful languages to learn <br> than Tetum |  |  |  |  |  |

Here are some statements about Portuguese Language. Please say whether you agree or disagree with these statements. There are no right or wrong answers. Please be as honest as possible. Answers with ONE of the following :
SA : Strongly Agree
A : Agree
NAND: Neither agree Nor Disagree
D : Disagree
SD : Strongly Disagree

| No | Statements | SA | A | NAND | D | SD |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 59. | I like hearing Portuguese Spoken |  |  |  |  |  |
| 60. | Portuguese should be taught to all pupils in <br> Timor-Leste |  |  |  |  |  |
| 61. | Portuguese is a language worth learning |  |  |  |  |  |
| 61. | Studying Portuguese is important because it <br> will allow me to meet and converse with more <br> and varied people. |  |  |  |  |  |
| 63. | Studying Portuguese is important because I <br> will be able to interact more easily with <br> speakers of Portuguese |  |  |  |  |  |
| 64. | Studying Portuguese is important because it <br> will help me to further my study |  |  |  |  |  |
| 65. | Portuguese is an easy language to learn |  |  |  |  |  |
| 66. | Studying Portuguese is important because it <br> will be useful in getting a good job |  |  |  |  |  |
| 67. | I really enjoy learning Portuguese |  |  |  |  |  |
| 68. | I Like speaking Portuguese |  |  |  |  |  |
| 69. | Learning Portuguese is a waste of time |  |  |  |  |  |
| 70. | There are more useful languages to learn than <br> Portuguese |  |  |  |  |  |

Here are some statements about the English Language . Please say whether you agree or disagree with these statements. There are no right or wrong answers. Please be as honest as possible. Answers with ONE of the following :

SA : Strongly Agree
A : Agree
NAND: Neither agree Nor Disagree
D : Disagree
SD : Strongly Disagree

| No | Statements | SA | A | NAND | D | SD |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 71. | I like hearing English Spoken |  |  |  |  |  |


| 72. | English should be taught to all pupils in <br> Timor-Leste |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 73. | English is a language worth learning |  |  |  |  |  |
| 74. | Studying English is important because it will <br> allow me to meet and converse with more and <br> varied people. |  |  |  |  |  |
| 75. | Studying English is important because I will <br> be able to interact more easily with speakers <br> of English |  |  |  |  |  |
| 76. | Studying English is important because it will <br> help me to further my study. |  |  |  |  |  |
| 77. | English is an easy language to learn |  |  |  |  |  |
| 78. | Studying English is important because it will <br> be useful in getting a good job |  |  |  |  |  |
| 79. | I really enjoy learning English |  |  |  |  |  |
| 80. | I Like speaking English |  |  |  |  |  |
| 81. | Learning English is a waste of time |  |  |  |  |  |
| 82. | There are more useful languages to learn than <br> English |  |  |  |  |  |

Here are some statements about the Bahasa Indonesia. Please say whether you agree or disagree with these statements. There are no right or wrong answers. Please be as honest as possible. Answers with ONE of the following :

SA : Strongly Agree
A : Agree
NAND: Neither agree Nor Disagree
D : Disagree
SD : Strongly Disagree

| No | Statements | SA | A | NAND | D | SD |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 83. | I like hearing Bahasa Indonesia Spoken |  |  |  |  |  |
| 84. | Bahasa Indonesia should be taught to all <br> pupils in Timor-Leste |  |  |  |  |  |
| 85. | Bahasa Indonesia is a language worth <br> learning |  |  |  |  |  |
| 86. | Studying Bahasa Indonesia is important <br> because it will allow me to meet and converse <br> with more and varied people. |  |  |  |  |  |
| 87. | Studying Bahasa Indonesia is important <br> because I will be able to interact more easily <br> with speakers of Bahasa Indonesia |  |  |  |  |  |
| 88. | Studying Bahasa Indonesia im important <br> because it will help me further my study. |  |  |  |  |  |
| 89. | Bahasa Indonesia is an easy language to learn |  |  |  |  |  |
| 90. | Studying Bahasa Indonesia is important <br> because it will be useful in getting a good job |  |  |  |  |  |
| 91. | I really enjoy learning Bahasa Indonesia |  |  |  |  |  |


| 92. | I Like speaking Bahasa Indonesia |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 93. | Learning Bahasa Indonesia is a waste of time |  |  |  |  |  |
| 94. | There are more useful languages to learn than <br> Bahasa Indonesia |  |  |  |  |  |

## Dear Student,

If you would like to take part in the interview, we invite you complete the details below to facilitate the contact with you in order to arrange for the interview. The information you provided will be confidential and identity of each participant will not be divulgated.

Name
School/University $\qquad$

Telephone/Mobile Number $\qquad$
Email Address $\qquad$

## APPENDIX 2

## Questionnaire in Tetum

## I. Questionario

" Uso no Atitude estudante ba multi lingua iha Timor-Leste"
Ami hakarak husu ita nia tulun hodi responde perguntas tuir mai. Ida ne'e'e laos exame ne'eduni laiha resposta ne'e'ebé "los" ou "sala" e ita lalika hakerek naran. Ami intersado iha ita nia opiniaun. Favor bele fo resposta sinseriu tamba ida ne'e'e sei garante susesu husi peskiza ne'e'e. Obrigado barak ba ita nia ajuda.

## I. Socio demografico

| No | Deskrisaun | Resposta |
| :---: | :---: | :---: |
| 1. | Tinan | ............. () |
| 2. | Kurso (Area) : |  |
| 3. | Sexo | $\square$ Mane'e $\square$ Feto |
| 4. | Lian inan | Baikenu ; Bunak; Fataluku; Galoli; Habun; Idaté; Kairui ; Kemak; Lakalei ; Mambai ; <br> Mideki; Makalero ; Makasai ; Naueti ; <br> Tetum Prasa; Tetum Terik; Tokodede; Waima'a ; |
| 5. | Aman/inan nia servisu | $\square$ Funsionariu Publiku; $\quad \square$ Fungsionariu NGO (nasional/internasional); $\square$ Funsionariu Empressa privada ; $\square$ Fila Liman ; $\square$ Seluk |
| 6. | Ita komesa estudo/hatene'e lian Tetum iha idade hira? |  |
| 7. | Ita komesa estudo/hatene'e lian Portugues iha idade hira ? | ....... |
| 8. | Ita komesa estudo/hatene'e lian Inglés iha idade hira? |  |
| 9. | Ita komesa estudo/hatene'e lian "Bahasa Indone'esia" iha idade hira? |  |
| 10. | Ita mai husi distritu ne'e'ebé | ....... |
| 11. | Ita estuda ensinu presecundariu iha eskola | $\square$ Eskola privadu; $\square$ Eskola Publiku |
| 12. | Agora dadaun ita estuda iha eskola | $\square$ Privadu; $\square$ Publiku |

## II. Avaliasaun Pesoal ba Profisiensia Lian no Uza Lian (Self-rated Language Proficiency and the Use of Language)

Iha parte tuir mai ne'e'e, ami hakarak ita responde perguntas balun tuir buat ne'e'ebé bele refleta ita nia abilidade lian (lingua)
13. Saida mak ita nia abilidade lee iha lian tetum ?
a. Lahatene'e (Labele ou labele lee)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
14. Saida mak ita nia abilidade hakerek iha lian Tetum?
a. La hatene'e (Labele ou labele hakerek)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
15. Saida mak ita nia abilidade koalia iha Tetum?
a. La hatene'e (Labele ou labele koalia)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
16. Saida mak ita nia abilidade rona iha lian Tetum?
a. La hatene'e (Labele ou labele rona)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
17. Saida mak ita nia abilidade geral iha Tetum ?
a. La hatene'e
b. Uitoan
c. Mediu
d. Diak
e. Diak los
18. Saida mak ita nia abilidade lee iha lian Portugues?
a. La hatene'e (Labele ou labele lee)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
19. Saida mak ita nia abilidade hakerek iha lian Portugues?
a. La hatene'e (Labele ou labele hakerek)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
20. Saida mak ita nia abilidade koalia iha Portugues ?
a. La hatene'e (Labele ou labele koalia)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
21. Saida mak ita nia abilidade rona iha lian Portugues?
a. La hatene'e (Labele ou labele rona)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
22. Saida mak ita nia abilidade geral iha lian Portugues?
a. La hatene'e
b. Uitoan
c. Mediu
d. Diak
e. Diak los
23. Saida mak ita nia abilidade lee iha lian Inglés ?
a. La hatene'e (Labele ou labele lee)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
24. Saida mak ita nia abilidade hakerek iha lian Inglés?
a. La hatene'e (Labele ou labele hakerek)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
25. Saida mak ita nia abilidade koalia iha Inglés?
a. La hatene'e (Labele ou labele koalia)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
26. Saida mak ita nia abilidade rona iha lian Inglésh ?
a. La hatene'e (Labele ou labele rona)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
27. Saida mak ita nia abilidade geral iha Lian Inglésh ?
a. La hatene'e
b. Uitoan
c. Mediu
d. Diak
e. Diak los
28. Saida mak ita nia abilidade lee iha lian Indone'esia?
a. La hatene'e (Labele ou labele lee)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
29. Saida mak ita nia abilidade hakerek iha lian Indone'esia?
a. La hatene'e(Labele ou labele hakerek)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
30. Saida mak ita nia abilidade koalia iha Indone'esia?
a. La hatene'e (Labele ou labele koalia)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
31. Saida mak ita nia abilidade rona iha lian Indone'esia ?
a. La hatene'e (Labele ou labele rona)
b. Uitoan
c. Mediu
d. Diak
e. Diak los
32. Saida mak ita nia abilidade geral iha lian Indone'esia?
a. La hatene'e
b. Uitoan
c. Mediu
d. Diak
e. Diak los

Favor hili resposta ne'e'ebé apropriadu iha perguntas tuir mai. Ita so bele iha deit resposta ida Lian saida mak ita Uza liu iha situasaun tuir mai.
33. Lian saida mak ita koalia barak liu iha uma ?
(a) Tetum
(b) Inglés
(c) Portugues
(d) Indone'esia
(e) lian seluk ne'e'ebé la inklui iha ne'e'e $\qquad$
34. Lian saida mak ita koalia barak liu iha aula ho professor?
(a) Tetum
(b) Inglés
(c) Portugues
(d) Indone'esia
(e) lian seluk ne'e'ebé la inklui iha ne'e'e
35. Iha ne'e'ebé mak ita aprende lian tetum?
(a) Iha uma
(b) Iha Eskola
(c) Fatin seluk $\qquad$
(d) Hau haluha
(e) Hau lahatene'e koalia
36. Iha ne'e'ebé mak ita aprende lian Portugues?
(a) Iha uma
(b) Iha Eskola
(c) Fatin seluk $\qquad$
(d) Hau haluha
(e) Hau lahatene'e koalia
37. Iha ne'e'ebé mak ita aprende lian Inglés ?
(a) Iha uma
(b) Iha Eskola
(c) Fatin seluk $\qquad$
(d) Hau haluha
(e) Hau lahatene'e koalia
38. Iha ne'e'ebé mak ita aprende lian Indone'esia?
(a) Iha uma
(b) Iha Eskola
(c) Fatin seluk $\qquad$
(d) Hau haluha
(e) Hau lahatene'e koalia
39. Lian saida mak ita uza barak liu ho inan aman ?
(a) Tetum
(b) Inglés
(c) Portugues
(d) Bahasa Indone'esia
(e) Lian seluk ne'e'ebé la inklui iha ne'e $\qquad$
40. Lian saida mak ita uza barak liu ho bin ho alin sira?
(a) Tetum
(b) English (Inglés)
(c) Portugues
(d) Bahasa Indone'esia
(e) Lian seluk ne'e'ebé la inklui iha ne'e'e $\qquad$
41. Lian saida mak ita uza barak liu ho kolegas iha eskola (por example kuando halimar ho kolega sira)
(a) Tetum
(b) English (Inglés)
(c) Portugues
(d) Bahasa Indone'esia
(e) Lian seluk ne'e'ebé la inklui iha ne'e'e $\qquad$
42. Lian saida mak ita uza barak liu ho kolega sira kuando la eskola (por exemplo, kuando ita halimar iha ita nia uma ).
(a) Tetum
(b) English (Inglés)
(c) Portugues
(d) Bahasa Indone'esia
(e) Lian seluk ne'e'ebé la inklui iha ne'e'e $\qquad$
43. Ita boot normalmente haree televisaun ho lian saida?
(a) Tetum
(b) English (Inglés)
(c) Portugues
(d) Bahasa Indone'esia
(e) Lian seluk ne'e'ebé la inklui iha ne'e $\qquad$
44. Ita boot normalmente lee jornal ho lian saida?
(a) Tetum
(b) Inglés
(c) Portugues
(d) Bahasa Indone'esia
(e) Lian seluk ne'e'ebé la inklui iha ne'e $\qquad$
45. Ita boot normalmente rona musica iha lian saida?
(a) Tetum
(b) English (Inglés)
(c) Portugues
(d) Bahasa Indone'esia
(e) Lian seluk ne'e'ebé la inklui iha ne'e $\qquad$
46. Ita boot normalmente komunika iha media social ho lian saida ( hane'esan : facebook,twitter, Linked, Istagram)?
(a) Tetum
(b) English (Inglés)
(c) Portugues
(d) Bahasa Indone'esia
(e) Lian seluk ne'e'ebé la inklui iha ne'e
(f) La relevante

## III. Atitude ba lian

Iha kraik ne'e'e iha esteitmento (Deklarasaun) kona-ba lingua Tetum. Favor ida hateten se ita konkorda ou la konkorda ba deklarasaun sira ne'e. Laiha resposta ne'e'ebé los ou sala. Favor bele hone'esto ho ita nia resposta. Reponde ho opsaun ida hodi marka ( $\boldsymbol{\boxtimes}$ ) iha resposta ne'e'ebé tuir ita los liu. Opsaun resposta maka :

KT : Konkorda tebes (liu)
K : Konkorda
N : La konkorda nein aseita
LK : La konkorda
LKT : La konkorda tebes

| No | Deklarasaun | KT | K | N | LK | LKT |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 47. | Hau gosta rona ema koalia tetum |  |  |  |  |  |
| 48. | Lian Tetum lolos tenke hanorin ba estudante hotu <br> iha Timor-Leste |  |  |  |  |  |
| 49. | Tetum ne'e'e lian ne'e'ebé iha valor boot atu <br> aprende |  |  |  |  |  |
| 50. | Estuda tetum ne'e'e importante tamba posibilita <br> hau atu hasoru no koalia ho ema barak no ema <br> oioin. |  |  |  |  |  |


| 51. | Estuda Tetum ne'e'e importante tamba hau bele iha interaksaun fasil ho ema seluk ne'e'ebé koalia tetum |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 52. | Estuda Tetum ne'e'e importante tamba nia bele ajuda hau kontinua hau nia estudos ba nivel as liu |  |  |  |  |  |
| 53. | Tetum ne'e'e lian ne'e'ebé fasil atu aprende |  |  |  |  |  |
| 54. | Estuda Tetum ne'e'e importante tamba bele fo benfisiu atu hetan servisu |  |  |  |  |  |
| 55. | Hau enjoy tebes aprende tetum |  |  |  |  |  |
| 56. | Hau gosta koalia Tetum |  |  |  |  |  |
| 57. | Aprende tetum ne'e'e so gasta tempu deit |  |  |  |  |  |
| 58. | Iha lian seluk ne'e'ebé importante liu atu aprende duke Tetum. |  |  |  |  |  |

Iha kraik ne'e'e iha Deklarasaun kona ba lingua Portugues. Favor ida hateten se ita konkorda ou la konkorda ba deklarasaun sira ne'e. Laiha resposta ne'e'ebé los ou sala. Favor bele hone'esto ho ita nia resposta . Reponde ho opsaun ida hodi marka (区) iha resposta ne'e'ebé tuir ita los liu. Opsaun resposta maka :
KT : Konkorda tebes (liu)
K : Konkorda
N : La konkorda nein aseita
LK : La konkorda
LKT : La konkorda tebes

| No | Statements (Deklarasaun) | KT | K | N | LK | LKT |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 59. | Hau gosta rona ema koalia Portugues |  |  |  |  |  |
| 60. | Lian Portugues lolos tenke hanorin ba estudante <br> hotu iha Timor-Leste |  |  |  |  |  |
| 61. | Portugues ne'e'e lian ne'e'ebé iha valor boot atu <br> aprende |  |  |  |  |  |
| 62. | Estuda Portugues ne'e'e importante tamba <br> posibilita hau atu hasoru no koalia ho ema barak <br> no ema oioin. |  |  |  |  |  |
| 63. | Estuda Portugues ne'e'e importante tamba hau <br> bele iha interaksaun fasil ho ema seluk ne'e'ebé <br> koalia Portugues. |  |  |  |  |  |
| 64. | Estuda Portugues ne'e'e importante tamba nia bele <br> ajuda hau kontinua hau nia estudos ba nivel as liu |  |  |  |  |  |
| 65. | Portugues ne'e'e lian ne'e'ebé fasil atu aprende |  |  |  |  |  |
| 66. | Estuda Portugues ne'e'e importante tamba bele fo <br> bene'efisiu atu hetan servisu |  |  |  |  |  |
| 67. | Hau enjoy tebes aprende Portugues |  |  |  |  |  |
| 68. | Hau gosta koalia Portugues |  |  |  |  |  |
| 69. | Estuda Portugues ne'e'e so gasta tempu deit |  |  |  |  |  |
| 70. | Iha lian seluk ne'e'ebé importante liu atu aprende <br> duke Portugues. |  |  |  |  |  |

Iha kraik ne'e iha deklarasaun kona ba lingua Inglés. Favor ida hateten se ita konkorda ou la konkorda ba deklarasaun sira ne'e. Laiha resposta ne'e'ebé los ou sala. Favor bele hone'esto ho ita nia resposta. Reponde ho opsaun ida hodi marka (区) iha resposta ne'e'ebé tuir ita los liu. Opsaun resposta maka :

KT : Konkorda tebes (liu)
K : Konkorda
N : La konkorda nein aseita
LK : La konkorda
LKT : La konkorda tebes

| No | Statements | KT | $\mathbf{K}$ | N | LK | LKT |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 71. | Hau gosta rona ema koalia Inglés |  |  |  |  |  |
| 72. | Lian Inglés lolos tenke hanorin ba estudante hotu <br> iha Timor-Leste |  |  |  |  |  |
| 73. | Inglés ne'e lian ne'ebé iha valor boot atu aprende |  |  |  |  |  |
| 74. | Estuda Inglés ne'e importante tamba posibilita hau <br> atu hasoru no koalia ho ema barak no ema oioin. |  |  |  |  |  |
| 75. | Estuda Inglés ne'e importante tamba hau bele iha <br> interaksaun fasil ho ema seluk ne'ebé koalia Ingles |  |  |  |  |  |
| 76. | Estuda Inglés ne'e importante tamba nia bele ajuda <br> hau kontinua hau nia estudos ba nivel as liu |  |  |  |  |  |
| 77. | Inglés ne'e lian ne'ebé fasil atu aprende |  |  |  |  |  |
| 78. | Estuda Inglés ne'e importante tamba bele fo <br> benefisiu atu hetan servisu |  |  |  |  |  |
| 79. | Hau enjoy tebes aprende Inglés |  |  |  |  |  |
| 80. | Hau gosta koalia Inglés |  |  |  |  |  |
| 81. | Estuda Inglésh ne'e so gasta tempu deit |  |  |  |  |  |
| 82. | Iha lian seluk ne'ebé importante liu atu aprende <br> duke Inglés. |  |  |  |  |  |

Iha kraik ne'e iha deklarasaun kona ba lingua Bahasa Indonesia. Favor ida hateten se ita konkorda ou la konkorda ba deklarasaun sira ne'e. Laiha resposta ne'e'ebé los ou sala. Favor bele onestu ho ita nia resposta. Reponde ho opsaun ida hodi marka (区) iha resposta ne'ebé tuir ita los liu. Opsaun resposta maka :

KT : Konkorda tebes (liu)
K : Konkorda
N : La konkorda nein aseita
LK : La konkorda
LKT : La konkorda tebes

| No | Statements | KT | K | N | LK | LKT |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 83. | Hau gosta rona ema koalia Bahasa Indonesia |  |  |  |  |  |
| 84. | Bahasa Indonesia lolos tenke hanorin ba <br> estudante hotu iha Timor-Leste |  |  |  |  |  |
| 85. | Bahasa Indonesia ne'e lian ne'ebé iha valor boot <br> atu aprende |  |  |  |  |  |


| 86. | Estuda bahasa Indonesia ne'e importante tamba <br> posibilita hau atu hasoru no koalia ho ema barak <br> no ema oioin. |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 87. | Estuda Bahasa Indonesia ne'e importante tamba <br> hau bele iha interaksaun fasil ho ema seluk <br> ne'ebé koalia Bahasa Indonesia |  |  |  |  |  |
| 88. | Estuda Bahasa Indonesia ne'e importante tamba <br> nia bele ajuda hau kontinua hau nia estudos ba <br> nivel as liu |  |  |  |  |  |
| 89. | Bahasa Indonesia ne'e lian ne'ebé fasil atu <br> aprende |  |  |  |  |  |
| 90. | Estuda Bahasa Indonesia ne'e importante tamba <br> bele fo benfisiu atu hetan servisu |  |  |  |  |  |
| 91. | Hau enjoy tebes aprende bahasa Indonesia |  |  |  |  |  |
| 92. | Hau gosta koalia Bahasa Indonesia |  |  |  |  |  |
| 93. | Estuda Bahasa Indonesia ne'e so gasta tempu <br> deit |  |  |  |  |  |
| 94. | Iha lian seluk ne'ebé importante liu atu aprende <br> duke Bahasa Indonesia |  |  |  |  |  |

## Karu estudante,

Se ita boot hakarak atu partisipa iha intrevista, ami husu atu ita bele kompleta dadus tuir mai para ami bele kontaktu ita atu partisipa iha enkontru ka intervista ne'ebé sei hala'o ho ita. Informasaun ne'ebé ita boot fornese sei rai ho konfidensial no identidade kona-ba partisipante sira sei rai ho segredu.

Naran
Eskola/Universidade : $\qquad$

Numero telephone $\qquad$
Endereso email

## APPENDIX 3

## List of question for structured interview

1. Do you think it is important to learn more than one language? Why ?
2. Tell me about the languages you know and how your learn them?
3. How do you feel about the languages that you know?
4. Do you enjoy learning more than one language during your time at school/university? Why?
5. When you're not at school, how do you use the languages that you know? Or in what situations do you use each of the language in your repertoire?
6. How do you use different languages at school and how do you feel about this?
7. Can you rate your language proficiency from the best to the worst?
8. Why do you think you are better in this Language (refer to question 8) but not in the other? Why and what factors may have caused this difference?
9. Which language do you think is more important for you future ? (ex : further your study, getting a decent job, be successful in carrier? Why?
10. Are you happy with the current language policy in education? (having to learn more than two languages during your time in school) Why? Why not?
11. What do you think needs to change to improve current situation? (do you have any suggestion that you want to convey)?
12. If you had to choose one language to be the official language of education, which one would it be? Why?
13. Do you actively engage in the social media like twitter, Facebook, Linked, Hi5, and Histogram etc.? What language do you use in these situations? Why?
14. How do you imagine languages in TL in 10/20 years time ? (where will TL be with languages in future ?)

## APPENDIX 4

Translated transcription from Tetum to English (one example)

with Ela<br>UNTL student, Second year ( $4^{\text {th }}$ semester), Majoring in Agriculture.<br>Date : November 9, 2014<br>Location : Klibur foundation Office<br>Time : 10.32-11.05 (approximately 33 minutes of interview )

Pedro: this is the first interview with the participant by the name of Ela the time now is 10.32 in the morning and today date is Nov 9, 2014.

Question (Pedro) : What are the languages that you know?
Answer (Ela) : The first language that I know is my mother tongue. My mother tongue is Fataluku. Second is Tetum, however I am not very proficient in Tetum, because in our region since we were little we only spoke our mother tongue, so when I entered the school system, that is where I first learned Tetum. Futhermore, we nerver spoke tetum in our home up to my senior high school period. Only when I moved to Dili to study at the university that was when I started to communicate with my friends in Tetum language. I also know Indonesian language and I can speak the language, I understand Portuguese, I understand English and also able to talk in English.
Pedro : Just want to confirm one thing, so when you're born, the first language that you spoke was Fataluku, your mother tongue?

Ela : Yes
Pedro : When you started your schooling year, what language did you speak?
Ela : when we started our primary school (year 1 to year 5), our teachers taught us using a mixture of Indonesian language and Tetum, however our interactions among ourselves (among friends) even during the classes were in our mother tongue (Fataluku). When we reached $6^{\text {th }}$ grade we started to learn Portuguese, every material available was in Portuguese, this situation remained until we finished senior high school. Now in university, we have a mix language situation with Portuguese, Indonesian language, Tetum and English. Some lecturers do use English but very rare.

Pedro : What do you mean by rare ?

Ela : yes.
Pedro : so you began to speak tetum since your $1^{\text {st }}$ grade of primary school?
Ela : No, I didn't understand tetum at that time.
Pedro : In what grade did you more or less begin to understand Tetum ?
Ela : For me personally, It was in $6^{\text {th }}$ Grade.
Pedro : How about Indonesian Language, in what grade year did you begin to understand Indonesian language ?

Ela : Well, we could follow Indonesian language through TV programs, so it was rather easy to pick up and I believed that at $4^{\text {th }}$ year I began to understand Indonesian language

Pedro : So you understood Indonesian language before Tetum ?. And how about Portuguese, how did you start to learn the language, and in what age ?

Ela : We started to learn Portuguese since primary school so we understood only a little, only on $6^{\text {th }}$ grade that all material (lessons) was taught in Portuguese. During this time our teachers required us to speak only Portuguese during the classroom. Because of that, we forced ourselves to learn and speak the language even though we didn't understand the language at all.

Pedro : How about English, when did you start to learn English ?
Ela : I started to learn English when I was in pre-secondary school, that was when I was about 12 years old. I also enrolled myself in English course available in my school. Although I started to learn English at primary school, it wasn't before I entered university that I began to speak the language. It was because I took English as my Major for my first uni at UNDIL (Dili University). I fell like I am more confident now with my English and I'm able to apply it.

Pedro : In your opinion, is it important to learn multiple language?
Ela : For me it's important because although we are from various districts in Timor-Leste but many people from other countries come to Timor-Leste. We need to know many languages in order to communicate with other people. Personally English is the most important language, because it facilitates our communication with foreigners. In addition to that we could easily access scholarships, as most of the scholarship require you to understand English.

Pedro : How about Portuguese, do you think it is important?
Ela : It is important, but for me it's not. However our country use two official languages therefor it's also important to us to learn.

Pedro : But for yourself, which one is the most important?
Ela : For me personally English is the most important.
Pedro : How about Tetum, is it important?
Ela : It's important but comes in second.
Pedro : Can you tell me a little bit about the dynamics during the lessons specially in regard to the language use ? can you tell me a little from your time in high school to now in university?

Ela : Alright, During high school all the subject were taught in Portuguese language but the explanations were in Tetum so it was easy for us to understand. When we reached university, lecturers mainly use Indonesia language with the explanations in Tetum.

Pedro : How about Portuguese, is it used in university?
Ela : Only some of them use Portuguese.
Pedro : From what I understand of the language policy in UNTL, Portuguese language has to be used, however based on your explanations it's not being properly implemented ?

Ela : No, it isn't. In UNTL only faculty of law that uses Portuguese in all their lessons and also faculty of medicine, but in faculty of Agriculture we use 4 languages. Some of the lecturers prepare their slides in Indonesian language and explain them in Tetum, some have both in Tetum, some have the slides in Portuguese but the explanations still in Tetum. English is only used as a reference especially in regard to other sources of reference. So most of the explanations are in Tetum only some in Portuguese with most of the slides in Indonesian language. From my $1^{\text {st }}$ year up to $4^{\text {th }}$ year now, only one lecture had the slides in Portuguese and the explanations in Portuguese.

Pedro : Do you fell happy with the current situation having many languages being used in the classroom?

Ela : I don't feel very happy, because they explain in Tetum but the content (slides) is in English or Bahasa Indonesia so when it comes to the exam the questions would be in Indonesia or Tetum. As student we can choose to use either tetum or Bahasa Indonesia . Personally I'm not very happy, it'd better off to use just one language that everyone understands rather then to use many languages but with only few understand the language.

Pedro : How do you use the languages that you know; and in what situations?

Ela : For example, at school among friends from different district we'd use Tetum but within friend from the same district we'd use our mother tongue (Fataluku). But overall we use Tetum mostly.

Pedro : How about in classroom ?, how do you communicate with your lecturer?
Ela : With Lecturer we use Tetum to communicate
Pedro : Can you rate your language proficiency in your repertoire
Ela : Among five (5) languages that I know, I'm more confident with my mother tongue Fataluku, then followed by English, Indonesia, Tetum and Portuguese
Pedro : And why is that? (having different language proficiency ) What may have been the cause?

Ela : Well it's like this, people say "once you're Moko you're always be Moko" so even when we have been living in Dili, every time we meet each other we'd never speak in Tetum, we'd always use our mother tongue Fataluku because we feel more comfortable with it. And then English because during my time in uni, I had many friends from abroad so we speak English, and then Indonesian language, which we use between out close circle friends. And then Tetum, we use it to communicate with people in general and very little engagement with Portuguese, because we never use it at uni and very rarely used in our daily conversations.

Pedro : For your future like in term of employment, study and future career what language is most important to you? and why?

Ela : For me it'd be English. Because English is the international language of communication and also because it facilitates to have many friends from other countries.

Pedro : How about Portuguese ? Is it important or not? And why
Ela : For me it's not very important, because we know that although our country has become part of CPLP however the recent developments saw many Portuguese speaking judges employed by the government from CPLP countries have been sent home. I also had a friend from Spain, who had worked in Portugal before came to Timor, telling us stories about Portuguese people being so stingy and can be a bit unfriendly. Which we found to be of some truths, because we have many Portuguese in our university, but only few would respond to your greetings, many would not even care to respond back. So for me their language is not very important, but English is.

Pedro: ladun importante ida. Tamba seda ?, ita bot bele elabora liu tan tamba seda mak ladun importante.

Pedro : How about Indonesian language? is it important for your future?
Ela : For me it isn't very important as I'm not intending to pursue my studies in Indonesia, instead I want to go to countries that use English language.

Pedro : In regard to employment, which language is more important? and Why?
Ela : For employment purposes English still the most important language. Because personally I'd like to work with international staff/ international companies investing in Timor-Leste.

Pedro : How about Tetum, Is it important? and why?
Ela : Tetum is important because it's our official language, so we need to know . In addition to that, in our university (faculty) commencing in 2014 onward, all thesis would need to be written in Tetum language. So Tetum becomes very important to understand.

Pedro : In your own opinion, do you satisfied with the current language policy in education?

Ela: Yes and No. Yes, because we can learn many languages and also because the language policy gives way to the use of mother tongue which facilitates the student comprehension. However it might pose some problems it students want to pursue further studies. If the language policy adopted only the use of mother tongue then student would only understand tetum and not Indonesian language.

Pedro : It there was anything you could do to modify the current language policy what would that be ?

Ela : In my opinion it is better to use just one language for the learning process, because if the teacher could speak and present the lessons in Tetum I believe we would have more comprehension in general. Rather than having the presentation in Indonesian language but with the explanations in Tetum language, because we would need to divide our concentrations in two languages. Not only that we have to try to understand the presentation in Indonesian language, which sometimes is already hard to understand, we also need to digest the explanations in other language, in this case Tetum. So for me, if the lesson is presented in Tetum then the explanations should be also in Tetum

Pedro : If you could choose an official language, what would that be ?

Ela : Tetum as the official language with Portuguese. Although personally I prefer English, but I believe many people don't share my opinion. So in this case I'll go with the majority of the people.

Pedro : Do you use social network ? and if yes what language do you use ?
Ela : Yes, I use Facebook. I mostly use Tetum and English.
Pedro : how about Portuguese?
Ela : I rarely use Portuguese.
Pedro : Do you listen to music? If you do, in what language?
Ela : I mostly listen to English music.
Pedro : When you watch television ? In what language do you prefer your program to be ?

Ela : I like English speaking TV channels. Especially U channel
Pedro : How do you see the future of our language situation in future? Probably in 10 to 20 years from now?

Ela : We can see that nowadays more people speak Tetum, because for example in the past when I was in Primary school my family only spoke in out mother tongue, very rarely we used tetum. So my vision for the future is more people use Tetum and English because we know that many young children like to take English language course compared to other languages.

Pedro : Thank you so Ela for giving your time. Before we stop is there anything you'd like to add or inquire?

Ela : You're welcome. And also thank you so much for taking me into your research project. I wish you all the best.

Pedro : Thank you.

## APPENDIX 5

## Explanatory Factor Analysis (EFA)

## I. Attitude toward Tetum

1.1. Ten items EFA

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .878 |  |
| :--- | :--- | ---: |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1167.341 |
|  | df | 45 |
|  | Sig. | .000 |

Total Variance Explained

| Factor | Initial Eigenvalues |  |  |  | Extraction Sums of Squared Loadings |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | \% of Variance | Cumulative \% | Total | \% of Variance | Cumulative \% |
|  | 4.232 | 42.323 | 42.323 | 3.656 | 36.564 | 36.564 |
| 2 | 1.150 | 11.496 | 53.819 | .655 | 6.553 | 43.116 |
| 3 | .941 | 9.411 | 63.230 |  |  |  |
| 4 | .760 | 7.598 | 70.828 |  |  |  |
| 5 | .620 | 6.200 | 77.028 |  |  |  |
| 6 | .603 | 6.030 | 83.058 |  |  |  |
| 7 | .519 | 5.189 | 88.247 |  |  |  |
| 8 | .452 | 4.524 | 92.771 |  |  |  |
| 9 | .386 | 3.859 | 96.630 |  |  |  |
| 10 | .337 | 3.370 | 100.000 |  |  |  |

Extraction Method: Alpha Factoring.


Factor Matrix ${ }^{\text {a }}$

|  | Factor |  |
| :--- | ---: | ---: |
|  | 1 | 2 |
| I like hearing Tetum Spoken | .515 | -.143 |
| Tetum should be taught to all pupils in Timor-Leste | .605 | -.081 |
| Tetum is a language worth learning | .648 | .128 |
| Studying Tetum is important because it will allow me to meet and converse with more | .648 | .357 |
| and varied people. |  |  |
| Studying Tetum is important because I will be able to interact more easily with | .626 | -.182 |
| speakers of Tetum | .660 | .506 |
| Studying Tetum is important because it will allow me to further my study | .334 | -.193 |
| Tetum is an easy language to learn | .641 | .341 |
| Studying Tetum is important because it will be useful in getting a good job | .710 | -.097 |
| I really enjoy learning Tetum | .575 | -.181 |
| I Like speaking Tetum |  |  |

Extraction Method: Alpha Factoring.
a. 2 factors extracted. 10 iterations required.

### 1.2. Twelve items EFA

## KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .846 |  |
| :--- | :--- | ---: |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1305.236 |
|  | df | 66 |
|  | Sig. | .000 |

Total Variance Explained

| Factor | Initial Eigenvalues |  |  | Extraction Sums of Squared Loadings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | \% of Variance | Cumulative \% | Total | \% of Variance | $\begin{gathered} \text { Cumulative } \\ \% \\ \hline \end{gathered}$ |
| 1 | 4.275 | 35.624 | 35.624 | 3.716 | 30.969 | 30.969 |
| 2 | 1.601 | 13.341 | 48.965 | 1.104 | 9.202 | 40.171 |
| 3 | 1.130 | 9.419 | 58.384 | . 661 | 5.504 | 45.676 |
| 4 | . 899 | 7.494 | 65.878 |  |  |  |
| 5 | . 744 | 6.202 | 72.080 |  |  |  |
| 6 | . 616 | 5.132 | 77.212 |  |  |  |
| 7 | . 601 | 5.009 | 82.221 |  |  |  |
| 8 | . 534 | 4.446 | 86.667 |  |  |  |
| 9 | . 454 | 3.787 | 90.454 |  |  |  |
| 10 | . 445 | 3.705 | 94.158 |  |  |  |
| 11 | . 361 | 3.012 | 97.171 |  |  |  |
| 12 | . 340 | 2.829 | 100.000 |  |  |  |

Extraction Method: Alpha Factoring.
Scree Plot


Factor Matrix ${ }^{\text {a }}$

|  | Factor |  |  |
| :--- | ---: | ---: | ---: |
|  | 1 | 2 | 3 |
| I like hearing Tetum Spoken | .514 | -.025 | -.161 |
| Tetum should be taught to all pupils in Timor-Leste | .616 | .127 | -.149 |
| Tetum is a language worth learning | .646 | .118 | .050 |
| Studying Tetum is important because it will allow me to meet and | .648 | .216 | .266 |
| converse with more and varied people. |  |  |  |
| Studying Tetum is important because I will be able to interact more | .624 | .015 | -.218 |
| easily with speakers of Tetum |  |  |  |
| Studying Tetum is important because it will allow me to further my | .662 | .076 | .489 |
| study | .346 | -.217 | -.132 |
| Tetum is an easy language to learn | .651 | .002 | .412 |
| Studying Tetum is important because it will be useful in getting a good |  |  |  |
| job | .701 | -.045 | -.039 |
| I really enjoy learning Tetum | .608 | -.099 | -.150 |
| I Like speaking Tetum | -.045 | .591 | -.204 |
| Learning Tetum is a waste of time | .009 | .783 | -.022 |

## Extraction Method: Alpha Factoring.

a. 3 factors extracted. 22 iterations required.

## II. Attitude toward Portuguese

### 2.1. Ten items EFA

## KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .887 |  |
| :--- | :--- | ---: |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1109.625 |
|  | df | 45 |
|  | Sig. | .000 |


| Factor | Initial Eigenvalues |  |  | Extraction Sums of Squared Loadings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | \% of Variance | Cumulative \% | Total | \% of Variance | $\begin{gathered} \text { Cumulative } \\ \% \end{gathered}$ |
| 1 | 4.448 | 44.485 | 44.485 | 3.903 | 39.028 | 39.028 |
| 2 | 1.009 | 10.095 | 54.580 | . 546 | 5.461 | 44.489 |
| 3 | . 830 | 8.300 | 62.879 |  |  |  |
| 4 | . 715 | 7.152 | 70.031 |  |  |  |
| 5 | . 656 | 6.562 | 76.593 |  |  |  |
| 6 | . 584 | 5.840 | 82.433 |  |  |  |
| 7 | . 533 | 5.334 | 87.767 |  |  |  |
| 8 | . 479 | 4.789 | 92.556 |  |  |  |
| 9 | . 429 | 4.293 | 96.849 |  |  |  |
| 10 | . 315 | 3.151 | 100.000 |  |  |  |

Extraction Method: Alpha Factoring.


Factor Matrix ${ }^{\text {a }}$

|  | Factor |  |
| :--- | ---: | ---: |
|  | 1 | 2 |
| I like hearing Portuguese Spoken | .525 | -.034 |
| Portuguese should be taught to all pupils in Timor-Leste | .577 | .530 |
| Portuguese is a language worth learning | .732 | .285 |
| Studying Portuguese is important because it will allow me to meet and converse | .669 | -.041 |
| with more and varied people. |  |  |
| Studying Portuguese is important because I will be able to interact more easily | .575 | .032 |
| with speakers of Tetum | .639 | .175 |
| Studying Portuguese is important because it will allow me to further my study | .614 | -.179 |
| Portuguese is an easy language to learn | .685 | -.068 |
| Studying Portuguese is important because it will be useful in getting a good job | .648 | -.291 |
| I really enjoy learning Portuguese | .646 | -.166 |

Extraction Method: Alpha Factoring.
a. 2 factors extracted. 16 iterations required.

### 2.2. Twelve items EFA

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .856 |  |
| :--- | :--- | ---: |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1300.112 |
|  | df | 66 |
|  | Sig. | .000 |

Total Variance Explained

|  | Initial Eigenvalues |  |  |  |  | Extraction Sums of Squared Loadings |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | Total | \% of Variance | Cumulative $\%$ | Total | \% of Variance | Cumulative \% |  |  |
|  | 4.550 | 37.915 | 37.915 | 3.973 | 33.110 | 33.110 |  |  |
| 2 | 1.662 | 13.851 | 51.766 | 1.202 | 10.017 | 43.128 |  |  |
| 3 | .951 | 7.922 | 59.688 |  |  |  |  |  |
| 4 | .810 | 6.752 | 66.440 |  |  |  |  |  |
| 5 | .661 | 5.505 | 71.945 |  |  |  |  |  |
| 6 | .653 | 5.439 | 77.385 |  |  |  |  |  |
| 7 | .582 | 4.854 | 82.238 |  |  |  |  |  |
| 8 | .541 | 4.512 | 86.750 |  |  |  |  |  |
| 9 | .454 | 3.782 | 90.533 |  |  |  |  |  |
| 10 | .420 | 3.501 | 94.033 |  |  |  |  |  |
| 11 | .419 | 3.488 | 97.522 |  |  |  |  |  |
| 12 | .297 | 2.478 | 100.000 |  |  |  |  |  |

Extraction Method: Alpha Factoring.

Scree Plot


Factor Matrix ${ }^{\text {a }}$

|  | Factor |  |
| :---: | :---: | :---: |
|  | 1 | 2 |
| I like hearing Portuguese Spoken | . 536 | . 093 |
| Portuguese should be taught to all pupils in Timor-Leste | . 545 | . 196 |
| Portuguese is a language worth learning | . 734 | . 208 |
| Studying Portuguese is important because it will allow me to meet and converse with more and varied people. | . 657 | . 007 |
| Studying Portuguese is important because I will be able to interact more easily with speakers of Tetum | . 573 | . 062 |
| Studying Portuguese is important because it will allow me to further my study | . 649 | . 069 |
| Portuguese is an easy language to learn | . 541 | -. 301 |
| Studying TPortuguese is important because it will be useful in getting a good job | . 691 | -. 008 |
| I really enjoy learning Portuguese | . 626 | -. 062 |
| I Like speaking Portuguese | . 647 | . 070 |
| Learning Portuguese is a waste of time | -. 239 | . 799 |
| There are more useful languages to learn than Portuguese | -. 177 | . 605 |

Extraction Method: Alpha Factoring.
a. 2 factors extracted. 19 iterations required.

## III. Attitude towards English

### 3.1. Ten items EFA

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .887 |  |
| :--- | :--- | ---: |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1028.179 |
|  | df | 45 |
|  | Sig. | .000 |

Total Variance Explained

|  | Initial Eigenvalues |  |  |  | Extraction Sums of Squared Loadings |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Factor | Total | \% of Variance | Cumulative $\%$ | Total | \% of Variance | Cumulative \% |  |
| 1 | 4.144 | 41.440 | 41.440 | 3.623 | 36.229 | 36.229 |  |
| 2 | 1.123 | 11.232 | 52.672 | .516 | 5.160 | 41.388 |  |
| 3 | .934 | 9.345 | 62.017 |  |  |  |  |
| 4 | .818 | 8.183 | 70.200 |  |  |  |  |
| 5 | .645 | 6.451 | 76.651 |  |  |  |  |
| 6 | .579 | 5.794 | 82.445 |  |  |  |  |
| 7 | .528 | 5.275 | 87.720 |  |  |  |  |
| 8 | .486 | 4.863 | 92.583 |  |  |  |  |
| 9 | .411 | 4.109 | 96.692 |  |  |  |  |
| 10 | .331 | 3.308 | 100.000 |  |  |  |  |

Extraction Method: Alpha Factoring.


Factor Matrix ${ }^{\text {a }}$

|  | Factor |  |
| :--- | ---: | ---: |
|  | 1 | 2 |
| I like hearing English Spoken | .704 | .087 |
| English should be taught to all pupils in Timor-Leste | .627 | .319 |
| English is a language worth learning | .788 | .107 |
| Studying English is important because it will allow me to meet and converse with more | .580 | .330 |
| and varied people. |  |  |
| Studying English is important because I will be able to interact more easily with | .558 | .067 |
| speakers of Tetum | .755 | .067 |
| Studying English is important because it will allow me to further my study | .258 | -.240 |
| English is an easy language to learn | .344 | .000 |
| Studying English is important because it will be useful in getting a good job | .568 | -.411 |
| I really enjoy learning English | .622 | -.225 |

Extraction Method: Alpha Factoring.
a. 2 factors extracted. 9 iterations required.

### 3.2. Twelve items EFA

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .836 |  |
| :--- | :--- | ---: |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1373.302 |
|  | df | 66 |
|  | Sig. | .000 |

Total Variance Explained

|  | Initial Eigenvalues |  |  |  | Extraction Sums of Squared Loadings |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Total | \% of Variance | Cumulative $\%$ | Total | \% of Variance | Cumulative \% |  |
|  | 4.238 | 35.319 | 35.319 | 3.745 | 31.208 | 31.208 |  |
| 2 | 1.966 | 16.382 | 51.701 | 1.602 | 13.349 | 44.557 |  |
| 3 | 1.015 | 8.456 | 60.157 | .509 | 4.245 | 48.803 |  |
| 4 | .880 | 7.334 | 67.491 |  |  |  |  |
| 5 | .788 | 6.566 | 74.057 |  |  |  |  |
| 6 | .627 | 5.221 | 79.279 |  |  |  |  |
| 7 | .562 | 4.687 | 83.966 |  |  |  |  |
| 8 | .484 | 4.030 | 87.995 |  |  |  |  |
| 9 | .474 | 3.950 | 91.946 |  |  |  |  |
| 10 | .390 | 3.251 | 95.197 |  |  |  |  |
| 11 | .329 | 2.744 | 97.941 |  |  |  |  |
| 12 | .247 | 2.059 | 100.000 |  |  |  |  |

Extraction Method: Alpha Factoring.

Scree Plot


Factor Matrix ${ }^{\text {a }}$

|  | Factor |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
| I like hearing English Spoken | . 705 | . 101 | -. 075 |
| English should be taught to all pupils in Timor-Leste | . 631 | . 210 | -. 244 |
| English is a language worth learning | . 791 | . 109 | -. 020 |
| Studying English is important because it will allow me to meet and converse with more and varied people. | . 609 | . 250 | -. 245 |
| Studying English is important because I will be able to interact more easily with speakers of Tetum | . 576 | -. 050 | -. 233 |
| Studying English is important because it will allow me to further my study | . 755 | . 072 | . 035 |
| English is an easy language to learn | . 261 | -. 306 | . 039 |
| Studying English is important because it will be useful in getting a good job | . 347 | . 046 | . 092 |
| I really enjoy learning English | . 581 | -. 194 | . 426 |
| I Like speaking English | . 645 | -. 109 | . 246 |
| Learning English is a waste of time | -. 073 | . 886 | . 169 |
| There are more useful languages to learn than English | -. 061 | . 732 | 217 |

Extraction Method: Alpha Factoring.
a. 3 factors extracted. 16 iterations required.

## IV. Attitude towards Indonesian

### 4.1. Ten items EFA

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .913 |  |
| :--- | :--- | ---: |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2053.852 |
|  | df | 45 |
|  | Sig. | .000 |

Total Variance Explained

| Factor | Initial Eigenvalues |  |  |  | Extraction Sums of Squared Loadings |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Total | \% of Variance | Cumulative \% | Total | \% of Variance | Cumulative \% |  |
|  | 5.553 | 55.532 | 55.532 | 5.093 | 50.933 | 50.933 |  |
| 2 | .948 | 9.479 | 65.012 |  |  |  |  |
| 3 | .747 | 7.474 | 72.486 |  |  |  |  |
| 4 | .685 | 6.846 | 79.331 |  |  |  |  |
| 5 | .575 | 5.749 | 85.080 |  |  |  |  |
| 6 | .382 | 3.825 | 88.905 |  |  |  |  |
| 7 | .346 | 3.460 | 92.365 |  |  |  |  |
| 8 | .319 | 3.190 | 95.556 |  |  |  |  |
| 9 | .236 | 2.362 | 97.917 |  |  |  |  |
| 10 | .208 | 2.083 | 100.000 |  |  |  |  |

Extraction Method: Alpha Factoring.

Scree Plot


## Factor Matrix ${ }^{\text {a }}$

|  | Factor |
| :--- | ---: |
|  | 1 |
| I like hearing bahasa Indonesia Spoken | .706 |
| bahasa Indonesia should be taught to all pupils in Timor-Leste | .743 |
| bahasa Indonesia is a language worth learning | .807 |
| Studying bahasa Indonesia is important because it will allow me to meet and converse with | .759 |
| more and varied people. |  |
| Studying bahasa Indonesia is important because I will be able to interact more easily with | .606 |
| speakers of Tetum | .793 |
| Studying bahasa Indonesia is important because it will allow me to further my study | .370 |
| bahasa Indonesia is an easy language to learn | .769 |
| Studying bahasa Indonesia is important because it will be useful in getting a good job | .709 |
| I really enjoy learning bahasa Indonesia | .767 |

Extraction Method: Alpha Factoring.
a. 1 factors extracted. 4 iterations required.

### 4.2. Twelve items EFA

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .896 |  |
| :--- | :--- | ---: |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2235.613 |
|  | df | 66 |
|  | Sig. | .000 |

Total Variance Explained

|  | Initial Eigenvalues |  |  |  |  | Extraction Sums of Squared Loadings |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | Total | \% of Variance | Cumulative $\%$ | Total | \% of Variance | Cumulative \% |  |  |
|  | 5.728 | 47.733 | 47.733 | 5.280 | 44.004 | 44.004 |  |  |
| 2 | 1.484 | 12.371 | 60.103 | 1.173 | 9.773 | 53.776 |  |  |
| 3 | .927 | 7.722 | 67.825 |  |  |  |  |  |
| 4 | .731 | 6.094 | 73.919 |  |  |  |  |  |
| 5 | .689 | 5.740 | 79.659 |  |  |  |  |  |
| 6 | .572 | 4.764 | 84.423 |  |  |  |  |  |
| 7 | .430 | 3.583 | 88.006 |  |  |  |  |  |
| 8 | .356 | 2.965 | 90.971 |  |  |  |  |  |
| 9 | .341 | 2.843 | 93.814 |  |  |  |  |  |
| 10 | .305 | 2.540 | 96.354 |  |  |  |  |  |
| 11 | .234 | 1.952 | 98.306 |  |  |  |  |  |
| 12 | .203 | 1.694 | 100.000 |  |  |  |  |  |

Extraction Method: Alpha Factoring.

Scree Plot


Factor Matrix ${ }^{\text {a }}$

| Factor Matrix | Factor |  |
| :--- | ---: | ---: |
|  | 1 | 2 |
| I like hearing bahasa Indonesia Spoken | .702 | .063 |
| bahasa Indonesia should be taught to all pupils in Timor-Leste | .743 | .197 |
| bahasa Indonesia is a language worth learning | .807 | .166 |
| Studying bahasa Indonesia is important because it will allow me to meet and | .752 | .165 |
| converse with more and varied people. |  |  |
| Studying bahasa Indonesia is important because I will be able to interact more | .613 | .013 |
| easily with speakers of Tetum | .784 | .139 |
| Studying bahasa Indonesia is important because it will allow me to further my | .379 | -.067 |
| study | .765 | .080 |
| bahasa Indonesia is an easy language to learn | .712 | -.046 |
| Studying bahasa Indonesia is important because it will be useful in getting a |  |  |
| good job | .768 | -.029 |
| I really enjoy learning bahasa Indonesia | -.318 | .510 |
| I Like speaking bahasa Indonesia | -.318 | .884 |

Extraction Method: Alpha Factoring.
a. Attempted to extract 2 factors. More than 25 iterations required. (Convergence=.007).

Extraction was terminated.

## APPENDIX 6 <br> Reliability analysis (RA)

## I. Attitude towards Tetum

### 1.1. Ten items RA



Item-Total Statistics

|  | Scale Mean <br> if Item <br> Deleted | Scale <br> Variance if <br> Item <br> Deleted | Corrected <br> Item-Total <br> Correlation | Squared <br> Multiple <br> Correlation | Cronbach's <br> Alpha if Item <br> Deleted |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I like hearing Tetum Spoken | 37.45 | 33.429 | .447 | . 262 | . 839 |
| Tetum should be taught to all pupils in Timor-Leste | 37.49 | 31.130 | . 528 | . 347 | . 831 |
| Tetum is a language worth learning | 37.69 | 30.462 | . 608 | . 414 | . 824 |
| Studying Tetum is important because it will allow me to meet and converse with more and varied people. | 37.94 | 28.182 | . 622 | . 461 | . 822 |
| Studying Tetum is important because I will be able to interact more easily with speakers of Tetum | 37.58 | 31.304 | . 535 | . 333 | . 831 |
| Studying Tetum is important because it will allow me to further my study | 38.26 | 27.364 | . 634 | . 519 | . 822 |
| Tetum is an easy language to learn | 37.50 | 34.059 | . 283 | . 137 | . 849 |
| Studying Tetum is important because it will be useful in getting a good job | 38.22 | 27.906 | . 631 | . 505 | . 821 |
| I really enjoy learning Tetum | 37.98 | 29.016 | . 637 | . 447 | . 820 |
|  | 37.63 | 31.801 | . 496 | . 305 | . 834 |

### 1.2. Twelve items RA

Reliability Statistics

| Cronbach's <br> Alpha | Cronbach's Alpha Based on <br> Standardized Items | N of Items |
| ---: | ---: | ---: |
| .769 |  | .798 |

Item-Total Statistics

|  | Scale Mean <br> if Item <br> Deleted | Scale <br> Variance if Item Deleted | Corrected <br> Item-Total <br> Correlation | Squared <br> Multiple <br> Correlation | Cronbach's <br> Alpha if Item <br> Deleted |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I like hearing Tetum Spoken | 43.16 | 39.385 | . 397 | . 273 | . 758 |
| Tetum should be taught to all pupils in Timor-Leste | 43.20 | 36.484 | . 532 | . 366 | . 742 |
| Tetum is a language worth learning | 43.39 | 36.227 | . 569 | . 413 | . 739 |
| Studying Tetum is important because it will allow me to meet and converse with more and varied people. | 43.65 | 33.402 | . 624 | . 476 | . 726 |
| Studying Tetum is important because I will be able to interact more easily with speakers of Tetum | 43.29 | 36.986 | . 506 | . 346 | . 745 |
| Studying Tetum is important because it will allow me to further my study | 43.98 | 33.441 | . 562 | . 514 | . 734 |
| Tetum is an easy language to learn | 43.21 | 40.372 | . 209 | . 174 | . 771 |
| Studying Tetum is important because it will be useful in getting a good job | 43.93 | 34.103 | . 551 | . 507 | . 736 |
| I really enjoy learning Tetum | 43.68 | 34.762 | . 588 | . 451 | . 733 |
| I Like speaking Tetum | 43.32 | 37.669 | . 468 | . 339 | . 750 |
| Learning Tetum is a waste of time | 44.44 | 39.697 | . 072 | . 282 | . 803 |
| There are more useful languages to learn than Tetum | 45.22 | 38.390 | . 149 | . 289 | . 793 |

## II. Attitude towards Portuguese

### 2.1. Ten items RA

Reliability Statistics

| Cronbach's <br> Alpha | Cronbach's Alpha Based on <br> Standardized Items | N of Items |  |
| ---: | ---: | ---: | ---: |
| .852 |  | .860 |  |

Item-Total Statistics

|  | Scale Mean <br> if Item <br> Deleted | Scale <br> Variance if Item Deleted | Corrected <br> Item-Total <br> Correlation | Squared <br> Multiple <br> Correlation | Cronbach's <br> Alpha if Item Deleted |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I like hearing Portuguese Spoken | 39.06 | 22.071 | . 493 | . 278 | . 844 |
| Portuguese should be taught to all pupils in Timor-Leste | 38.96 | 22.132 | . 489 | . 427 | . 844 |
| Portuguese is a language worth learning | 39.05 | 20.977 | . 662 | . 538 | . 832 |
| Studying Portuguese is important because it will allow me to meet and converse with more and varied people. | 39.26 | 20.191 | . 620 | . 437 | . 833 |
| Studying Portuguese is important because I will be able to interact more easily with speakers of Tetum | 39.07 | 20.902 | . 534 | . 300 | . 840 |
| Studying Portuguese is important because it will allow me to further my study | 39.13 | 20.676 | . 583 | . 406 | . 836 |
| Portuguese is an easy language to learn | 39.78 | 19.755 | . 472 | . 261 | . 852 |
| Studying Portuguese is important because it will be useful in getting a good job | 39.26 | 20.324 | . 632 | . 413 | . 832 |
| I really enjoy learning Portuguese | 39.41 | 20.069 | . 578 | . 388 | . 837 |
|  | 39.26 | 20.098 | . 589 | . 394 | . 835 |

### 2.2. Twelve items RA

Reliability Statistics

| Cronbach's <br> Alpha | Cronbach's Alpha Based on <br> Standardized Items | N of Items |
| ---: | ---: | ---: |
| .690 | .789 |  |

Item-Total Statistics


## III. Attitude towards English

### 3.1. Ten items RA

Reliability Statistics

| Cronbach's <br> Alpha | Cronbach's Alpha Based on <br> Standardized Items | N of Items |
| ---: | ---: | ---: |
| .766 |  | .830 |

## Item-Total Statistics

|  | Scale Mean if Item Deleted | Scale <br> Variance if Item Deleted | Corrected Item- <br> Total <br> Correlation | Squared <br> Multiple <br> Correlation | Cronbach's <br> Alpha if Item Deleted |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I like hearing English Spoken | 40.08 | 20.020 | . 607 | . 501 | . 733 |
| English should be taught to all pupils in Timor-Leste | 40.07 | 20.186 | . 514 | . 409 | . 740 |
| English is a language worth learning | 40.06 | 19.722 | . 667 | . 560 | . 728 |
| Studying English is important because it will allow me to meet and converse with more and varied people. | 40.12 | 20.309 | . 473 | . 353 | . 744 |
| Studying English is important because I will be able to interact more easily with speakers of Tetum | 40.23 | 19.251 | . 485 | . 299 | .739 |
| Studying English is important because it will allow me to further my study | 40.09 | 19.479 | . 642 | . 481 | . 727 |
| English is an easy language to learn | 40.74 | 18.394 | . 229 | . 105 | . 813 |
| Studying English is important because it will be useful in getting a good job | 40.08 | 19.186 | . 305 | . 129 | . 772 |
| I really enjoy learning English | 40.31 | 19.470 | . 483 | . 305 | . 740 |
|  | 40.23 | 19.406 | . 542 | . 348 | . 733 |

### 3.2.Twelve items RA

Reliability Statistics

| Cronbach's <br> Alpha | Cronbach's Alpha Based on <br> Standardized Items | N of Items |  |
| :---: | ---: | ---: | ---: |
| .652 |  | .785 |  |

## Item-Total Statistics

|  | Scale Mean if Item Deleted | Scale <br> Variance if <br> Item <br> Deleted | Corrected <br> Item-Total <br> Correlation | Squared <br> Multiple <br> Correlation | Cronbach's <br> Alpha if Item Deleted |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I like hearing English Spoken | 46.48 | 24.991 | . 568 | . 508 | . 608 |
| English should be taught to all pupils in Timor-Leste | 46.48 | 24.931 | . 520 | . 422 | . 610 |
| English is a language worth learning | 46.47 | 24.732 | . 612 | . 569 | . 603 |
| Studying English is important because it will allow me to meet and converse with more and varied people. | 46.52 | 25.118 | . 498 | . 410 | . 613 |
| Studying English is important because I will be able to interact more easily with speakers of Tetum | 46.64 | 24.706 | . 384 | . 319 | . 619 |
| Studying English is important because it will allow me to further my study | 46.50 | 24.582 | . 576 | . 499 | . 603 |
| English is an easy language to learn | 47.14 | 25.573 | . 056 | . 159 | . 700 |
| Studying English is important because it will be useful in getting a good job | 46.49 | 24.112 | . 285 | . 130 | . 635 |
| I really enjoy learning English | 46.71 | 24.979 | . 376 | . 339 | . 621 |
| I Like speaking English | 46.62 | 24.930 | . 453 | . 393 | . 614 |
| Learning English is a waste of time | 47.81 | 24.798 | . 125 | . 575 | . 680 |
| There are more useful languages to learn than English | 47.97 | 24.415 | . 139 | . 554 | . 680 |

## IV. Attitude towards Indonesian

### 4.1. Ten items RA

Reliability Statistics

| Cronbach's <br> Alpha | Cronbach's Alpha Based on <br> Standardized Items | N of Items |
| ---: | ---: | ---: |
| .902 |  | .907 |

Item-Total Statistics


### 4.2.Twelve items RA

Reliability Statistics

| Cronbach's <br> Alpha | Cronbach's Alpha Based on Standardized <br> Items | N of Items |
| ---: | ---: | ---: | ---: |

Item-Total Statistics


## APPENDIX 7

## Normal distribution analysis (attitude towards languages)

## I. Z Skewness and Kurtosis

## Statistics



## II. Normal distribution graph



Sum value of 10 items of attitude toward Portuguese



Sum value of 10 items of attitude toward Bahasa Indonesia


Sum value of 10 items of attitude toward Bahasa Indonesia

## III. Test of Kolmogorov-Smirnov

Case Processing Summary

|  | Cases |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Valid |  | Missing |  | Total |  |
|  | N | Percent | N | Percent | N | Percent |
| Sum value of 10 items of attitude toward Tetum | 280 | 70.7\% | 116 | 29.3\% | 396 | 100.0\% |
| Sum value of 10 items of attitude toward Portuguese | 280 | 70.7\% | 116 | 29.3\% | 396 | 100.0\% |
| Sum value of 10 items of attitude toward English | 280 | 70.7\% | 116 | 29.3\% | 396 | 100.0\% |
| Sum value of 10 items of attitude towards Indonesian | 280 | 70.7\% | 116 | 29.3\% | 396 | 100.0\% |

Tests of Normality

|  | Kolmogorov-Smirnov ${ }^{\text {a }}$ |  |  | Shapiro-Wilk |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| Sum value of 10 items of attitude toward Tetum | . 095 | 280 | . 000 | . 929 | 280 | . 000 |
| Sum value of 10 items of attitude toward | . 103 | 280 | . 000 | . 937 | 280 | . 000 |
| Portuguese |  |  |  |  |  |  |
| Sum value of 10 items of attitude toward English | . 128 | 280 | . 000 | . 922 | 280 | . 000 |
| Sum value of 10 items of attitude Indonesian | . 121 | 280 | . 000 | . 938 | 280 | . 000 |

a. Lilliefors Significance Correction

## IV. Descriptive Analysis

| Descriptives |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Statistic | Std. Error |
| Sum value of 10 items of attitude toward Tetum | Mean |  | 42.0893 | . 36136 |
|  | 95\% Confidence Interval for Mean | Lower <br> Bound <br> Upper <br> Bound | 41.3780 42.8006 |  |
|  | 5\% Trimmed Mean |  | 42.5317 |  |
|  | Median |  | 43.0000 |  |
|  | Variance |  | 36.562 |  |
|  | Std. Deviation |  | 6.04664 |  |
|  | Minimum |  | 16.00 |  |
|  | Maximum |  | 50.00 |  |
|  | Range |  | 34.00 |  |
|  | Interquartile Range |  | 8.00 |  |
|  | Skewness |  | -1.046 | . 146 |
|  | Kurtosis |  | 1.644 | . 290 |
|  | Mean |  | 43.7250 | . 30134 |
| Sum value of 10 items of attitude toward Portuguese |  | Lower | 43.1318 |  |
|  | 95\% Confidence Interval | Bound |  |  |
|  | for Mean | Upper | 44.3182 |  |
|  |  | Bound |  |  |
|  | 5\% Trimmed Mean |  | 44.0595 |  |
|  | Median |  | 44.0000 |  |
|  | Variance |  | 25.426 |  |
|  | Std. Deviation |  | 5.04241 |  |
|  | Minimum |  | 28.00 |  |
|  | Maximum |  | 52.00 |  |
|  | Range |  | 24.00 |  |
|  | Interquartile Range |  | 8.00 |  |
|  | Skewness |  | -. 726 | . 146 |
|  | Kurtosis |  | . 092 | . 290 |
|  | Mean |  | 44.9143 | . 27205 |
| Sum value of 10 items of attitude toward English |  | Lower | 44.3787 |  |
|  | 95\% Confidence Interval | Bound |  |  |
|  | for Mean | Upper | 45.4498 |  |
|  |  | Bound |  |  |
|  | 5\% Trimmed Mean |  | 45.1587 |  |
|  | Median |  | 46.0000 |  |
|  | Variance |  | 20.724 |  |


|  | Std. Deviation |  | 4.55234 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Minimum |  | 27.00 |  |
|  | Maximum |  | 58.00 |  |
|  | Range |  | 31.00 |  |
|  | Interquartile Range |  | 8.00 |  |
|  | Skewness |  | -. 622 | . 146 |
|  | Kurtosis |  | . 295 | . 290 |
|  | Mean |  | 40.2786 | . 46084 |
|  |  | Lower |  |  |
|  | 95\% Confidence Interval | Bound | 39.3714 |  |
|  | for Mean | Upper |  |  |
|  |  | Bound | 41.1857 |  |
|  | 5\% Trimmed Mean |  | 40.7937 |  |
| Sum value of 10 | Median |  | 40.0000 |  |
| items of attitude | Variance |  | 59.463 |  |
| toward Bahasa | Std. Deviation |  | 7.71125 |  |
|  | Minimum |  | 10.00 |  |
|  | Maximum |  | 58.00 |  |
|  | Range |  | 48.00 |  |
|  | Interquartile Range |  | 9.75 |  |
|  | Skewness |  | -. 898 | . 146 |
|  | Kurtosis |  | 1.158 | . 290 |

## APPENDIX 8

Summary of statistical methods used in the analysis

| No | Description | Statistics tools |  |
| :--- | :--- | :--- | :--- |
| 1. | Socio demographic analysis (age, <br> gender, socio economic status, | Descriptive statistics <br> mother tongue, district of origin, <br> age at learning language | - |
| Central tendency (mean, mode, median) |  |  |  |
| 2. |  |  |  |
| Language use and preference |  |  |  |$\quad$| Dispersion (range, variance, standard deviation) |
| :--- | :--- | :--- |

APPENDIX 9

## Inferential analysis (non-parametric analysis)

I. cross-tabulation general language proficiency based on type of school (secondary/university)

| Language | Type of Institution | Missing | None/Do n't know | A little | Average | good | Very good | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Portuguese | University | 0.70\% | 2.10\% | 25.70\% | 29.30\% | 40.00\% | 2.10\% | 140 |
|  | Secondary |  |  |  |  |  |  |  |
|  | School | 1.60\% | 6.60\% | 27.00\% | 21.50\% | 35.50\% | 7.80\% | 256 |
| English | University | 1.40\% | 4.30\% | 50.70\% | 22.10\% | 18.60\% | 2.90\% | 140 |
|  | Secondary |  |  |  |  |  |  |  |
|  | School | 0.00\% | 8.20\% | 32.00\% | 23.80\% | 28.90\% | 7.00\% | 256 |
| Indonesian | University | 0.70\% | 0.70\% | 19.30\% | 16.40\% | 46.40\% | 16.40\% | 140 |
|  | Secondary |  |  |  |  |  |  |  |
|  | School | 0.00\% | 6.60\% | 23.40\% | 17.20\% | 38.70\% | 14.10\% | 256 |

## II. Relationships between attitudes toward language (non-parametric

## Spearman and kendall's tau)

### 1.1. For university students

| Correlations |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Attitude toward Tetum | Attitude toward Portuguese | Attitude toward English | Attitude toward Indonesian |
| Kendall's tau_b | Attitude toward Tetum | Correlation Coefficient | 1.000 | . $254{ }^{* *}$ | . $217 * *$ |  |
|  |  | Sig. (2-tailed) |  | . 000 | . 001 | . 002 |
|  |  | N | 134 | 116 | 116 | 124 |
|  | Attitude <br> toward <br> Portuguese | Correlation Coefficient | . $254{ }^{* *}$ | 1.000 | . $403{ }^{* *}$ | . 179 ** |
|  |  | Sig. (2-tailed) | . 000 |  | . 000 | . 008 |
|  |  | N | 116 | 121 | 109 | 115 |
|  | Attitude toward English | Correlation Coefficient | . $217^{* *}$ | .403** | 1.000 | . $306{ }^{* *}$ |
|  |  | Sig. (2-tailed) | . 001 | . 000 |  | . 000 |
|  |  | N | 116 | 109 | 122 | 116 |
|  | Attitude toward Indonesian | Correlation Coefficient Sig. (2-tailed) N | .195** | . $179{ }^{* *}$ | . $306{ }^{* *}$ | 1.000 |
|  |  |  | . 002 | . 008 | . 000 |  |
|  |  |  | 124 | 115 | 116 | 129 |
| Spearman's rho | Attitude toward Tetum | Correlation Coefficient Sig. (2-tailed) N | 1.000 | . 323 ** | . $299{ }^{* *}$ | . $262{ }^{* *}$ |
|  |  |  | [ $\begin{array}{r}134 \\ .323 *\end{array}$ | . 000 | . 001 | . 003 |
|  |  |  |  | 116 | 116 | 124 |
|  | Attitude <br> toward <br> Portuguese | Correlation <br> Coefficient <br> Sig. (2-tailed) |  | 1.000 | . $521{ }^{* *}$ | . 229 * |
|  |  |  | .000116 | 121 | .000109 |  |
|  |  | N |  |  |  | .014 115 |
|  | Attitude toward <br> English | Correlation Coefficient Sig. (2-tailed) N | . $299{ }^{* *}$ | . $521^{* *}$ | 1.000 | . 387 ** |
|  |  |  | . 001 | . 000 |  | . 000 |
|  |  |  | 116 | 109 | 122 | 116 |
|  | Attitude toward Indonesian | Correlation Coefficient Sig. (2-tailed) N | . $262{ }^{* *}$ | . $229^{*}$ | . $387{ }^{* *}$ | 1.000 |
|  |  |  | . 003 | . 014 | . 000 |  |
|  |  |  | 124 | 115 | 116 | 129 |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

### 1.2. For secondary students

| Correlations |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Attitude toward Tetum | Attitude toward Portuguese | Attitude toward English | Attitude toward Indonesian |
| Kendall's <br> tau_b | Attitude toward Tetum | Correlation Coefficient | 1.000 | . 280 ** | . 205 ** | . 360 ** |
|  |  | Sig. (2tailed) |  | . 000 | . 000 | . 000 |
|  |  | N | 233 | 206 | 207 | 222 |
|  | Attitude toward Portuguese | Correlation Coefficient | . 280 ** | 1.000 | . 436 ** | . 372 ** |
|  |  | Sig. (2tailed) | . 000 |  | . 000 | . 000 |
|  |  | N | 206 | 216 | 194 | 205 |
|  | Attitude toward English | Correlation | . $205^{* *}$ | . $436{ }^{* *}$ | 1.000 | . $269{ }^{* *}$ |
|  |  | Sig. (2tailed) | . 000 | . 000 |  | . 000 |
|  |  | N | 207 | 194 | 218 | 206 |
|  | Attitude toward Indonesian | Correlation Coefficient | . 360 ** | . $372{ }^{* *}$ | . 269 ** | 1.000 |
|  |  | Sig. (2tailed) | . 000 | . 000 | . 000 |  |
|  |  | N | 222 | 205 | 206 | 234 |
| Spearman's rho | Attitude toward Tetum | Correlation Coefficient | 1.000 | . 370 ** | . 275 ** | . $481{ }^{* *}$ |
|  |  | Sig. (2tailed) | . | . 000 | . 000 | . 000 |
|  |  | N | 233 | 206 | 207 | 222 |
|  | Attitude toward Portuguese | Correlation Coefficient | . 370 ** | 1.000 | . $547 * *$ | . $476{ }^{* *}$ |
|  |  | Sig. (2tailed) | . 000 |  | . 000 | . 000 |
|  |  | N | 206 | 216 | 194 | 205 |
|  | Attitude toward English | Correlation Coefficient | . $275{ }^{* *}$ | . $547^{* *}$ | 1.000 | . 353 ** |
|  |  | Sig. (2tailed) | . 000 | . 000 |  | . 000 |
|  |  | N | 207 | 194 | 218 | 206 |
|  | Attitude toward Indonesian | Correlation Coefficient | . $481{ }^{* *}$ | . $476{ }^{* *}$ | . 353 ** | 1.000 |
|  |  | Sig. (2tailed) | . 000 | . 000 | . 000 |  |
|  |  | N | 222 | 205 | 206 | 234 |

**. Correlation is significant at the 0.01 level (2-tailed).

## III. Relationship between students' age and attitude toward language

### 3.1. For university students

|  |  |  | Attitude toward Tetum | Attitude toward Portuguese | Attitude toward English | Attitude toward Indonesian |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kendall's tau b | Age of respondent | Correlation Coefficient | -. 036 | -. 087 | . 018 | .145* |
|  |  | Sig. (2-tailed) | . 573 | . 198 | . 792 | . 026 |
|  |  | N | 130 | 118 | 118 | 125 |
| Spearman's rho | Age of respondent | Correlation Coefficient | -. 042 | -. 129 | . 020 | .198* |
|  |  | Sig. (2-tailed) | . 632 | . 163 | . 833 | . 027 |
|  |  | N | 130 | 118 | 118 | 125 |

### 3.2. For secondary students

|  |  |  | Attitude toward Tetum | Attitude toward Portuguese | Attitude toward English | Attitude toward Indonesian |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kendall's <br> tau b | Age of respondent | Correlation Coefficient | . $134 * *$ | . 100 | . 006 | . 047 |
|  |  | Sig. (2-tailed) | . 006 | . 051 | . 906 | . 341 |
|  |  | N | 230 | 212 | 215 | 230 |
| Spearman' s rho | Age of respondent | Correlation Coefficient |  | . 134 | . 006 | . 064 |
|  |  | Sig. (2-tailed) | . 005 | . 052 | . 935 | . 332 |
|  |  | N | 230 | 212 | 215 | 230 |

## IV. Relationship between self-rate language proficiency and attitude toward language

### 4.1.For university students

|  |  |  | attitude <br> toward <br> Tetum | attitude <br> toward <br> Portuguese | attitude <br> toward <br> English | attitude <br> toward <br> Indonesian |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kendall's tau_b | Tetum | Correlation Coefficient | . 039 | . 123 | . 099 | . 113 |
|  |  | Sig. (2-tailed) | . 543 | . 070 | . 141 | . 082 |
|  |  | N | 132 | 119 | 120 | 127 |
|  | Portuguese | Correlation Coefficient | . 063 | . 107 | . 006 | -. 045 |
|  |  | Sig. (2-tailed) | . 318 | . 109 | . 926 | . 486 |
|  |  | N | 131 | 119 | 119 | 127 |
|  | English | Correlation | . 035 | -. 025 | . $224^{* *}$ | . 086 |
|  |  | Coefficient | .035 .585 | -.025 .710 |  | .086 180 |
|  |  | Sig. (2-tailed) | . 585 | . 710 | . 001 | . 180 |
|  |  | N | 131 | 119 | 119 | 127 |
|  | Bahasa <br> Indonesia | Correlation | . 079 | . 089 | . $185{ }^{* *}$ | .215** |
|  |  | Coefficient | . 079 | . 08 |  |  |
|  |  | Sig. (2-tailed) | . 214 | . 190 | . 006 | . 001 |
|  |  | N | 130 | 117 | 119 | 126 |
| Spearman's rho | Tetum | Correlation | . 054 | . 169 | . 141 | . 150 |
|  |  | Coefficient |  |  |  |  |
|  |  | Sig. (2-tailed) | . 540 | . 065 | . 125 | . 093 |
|  |  | N | 132 | 119 | 120 | 127 |
|  | Portuguese | Correlation |  |  |  |  |
|  |  | Coefficient | . 088 | . 145 | . 018 | -. 060 |
|  |  | Sig. (2-tailed) | . 319 | . 115 | . 849 | . 505 |
|  |  | N | 131 | 119 | 119 | 127 |
|  | English | Correlation |  |  | 299** |  |
|  |  | Coefficient | . 053 | -. 034 | . 299 | . 126 |
|  |  | Sig. (2-tailed) | . 547 | . 713 | . 001 | . 160 |
|  |  | N | 131 | 119 | 119 | 127 |
|  | Bahasa <br> Indonesia | Correlation |  | 1 | $245 * *$ | 299** |
|  |  | Coefficient | . 1 | . 1 | . 245 | . 299 |
|  |  | Sig. (2-tailed) | . 201 | . 206 | . 007 | . 001 |
|  |  | N | 130 | 117 | 119 | 126 |

### 4.2.For secondary students

| Self-rate language proficiency |  |  | Attitude toward Tetum | Attitude toward Portuguese | Attitude toward English | Attitude toward Indonesian |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kendall's tau_b | Tetum | Correlation Coefficient | -. 001 | -. 048 | . 055 | -. 065 |
|  |  | Sig. (2-tailed) | . 980 | . 336 | . 279 | . 175 |
|  |  | N | 227 | 212 | 213 | 228 |
|  | Portuguese | Correlation | -. 048 | .139** | . 072 | -. 002 |
|  |  | Coefficient Sig. (2-tailed) | . 311 | . 005 | . 150 | . 967 |
|  |  | N | 225 | 209 | 212 | 226 |
|  | English | Correlation | -. 077 | . 009 | . 166 ** | . 043 |
|  |  | Coefficient Sig. (2-tailed) | . 099 | . 853 | . 001 | . 356 |
|  |  | N | 231 | 214 | 216 | 232 |
|  | Bahasa Indonesia | Correlation | -. 058 | . 027 | .114* | . 033 |
|  |  | Coefficient | -. 058 | , |  |  |
|  |  | Sig. (2-tailed) | . 214 | . 581 | . 021 | . 483 |
|  |  | N | 231 | 214 | 216 | 232 |
| Spearman's rho | Tetum | Correlation | -. 003 | -. 068 | . 076 | -. 088 |
|  |  | Sig. (2-tailed) | . 970 | . 326 | . 272 | . 188 |
|  |  | N | 227 | 212 | 213 | 228 |
|  | Portuguese | Correlation | -. 068 | . $195{ }^{* *}$ | . 097 | -. 001 |
|  |  | Sig. (2-tailed) | . 312 | . 005 | . 158 | . 985 |
|  |  | N | 225 | 209 | 212 | 226 |
|  | English | Correlation |  |  |  |  |
|  |  | Coefficient | -. 110 | . 014 | . $220{ }^{* *}$ | . 061 |
|  |  | Sig. (2-tailed) | . 095 | . 836 | . 001 | . 358 |
|  |  | N | 231 | 214 | 216 | 232 |
|  | Bahasa <br> Indonesia | Correlation | -. 081 | 035 | 149* | . 046 |
|  |  | Coefficient | -. 081 | . 035 |  | . 046 |
|  |  | Sig. (2-tailed) | . 218 | . 606 | . 029 | . 488 |
|  |  | N | 231 | 214 | 216 | 232 |

## APPENDIX 10

## Modifications and adaptations of the Baker's original questionnaire

| No | Description | Items | Modifications from the original version |
| :---: | :---: | :---: | :---: |
| 1 | Socio demographic questions | 1-12 | Item 5: Parental occupation was modified accordingly to the context in Timor-Leste (refer to section 3.3.1.1) |
| 2. | Self-rate <br> language proficiency | 12-32 | Modifications on how items were displayed but no modifications on the content |
| 3. | Language use and background | 33-46 | - The structure was modified to simplify the questionnaire (as it was translated into local language) <br> - Some items from the original version were not included in this questionnaire to reflect the context in Timor-Leste |
| 4. | Attitude toward Tetum | 47-58 | - Eight of these twelve items were adopted from the original version. |
| 5. | Attitude toward Portuguese | 59-70 | the context were: <br> 1. I wouldn't mind marrying a ...language speaker. <br> 2. If I have children, I'd like them to be ...language speakers |
| 6. | Attitude toward English | 71-82 | regardless of other languages they may know. <br> - In addition to eight original items, four more items were added to capture two sub-constructs; instrumental attitude and integrative attitude (Gardner, 1985) |
| 7. | Attitude toward Indonesian | 83-94 | 1. Studying ...language is important because it will allow me to meet and converse with more and varied people (integrative attitude). <br> 2. Studying ...language is important because I will be able to interact more easily with speakers of Tetum (integrative attitude). <br> 3. Studying ...language is important because it will allow me to further my study (instrumental attitude). <br> 4. Studying ...language is important because it will be useful in getting a good job (instrumental attitude). |

