

## The relationship between reading attitude and reading achievement in L2 English and L1 Tetun by Timor-Leste university students

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### Introduction

Attitudes toward reading can have a profound influence on reading achievement in the first language (L1) and second language (L2). However, research to date has yet to specify the exact nature of reading attitude and achievement link. This study examines the relationship between reading attitude and reading achievement by Timor-Leste university students when reading in their L1 Tetun and L2 English. It also examines differences between female and male students on these variables. A survey reading attitudes was administered along with reading tests in the respective languages. The results showed no statistically significant relationship between reading attitude and reading achievement in either the L1 or the L2. There was also no significant difference between L1 reading achievement and L2 reading achievement or between the female and male students. Methodological and theoretical reasons of the observed lack of a significant relationship between attitude and reading achievement are identified and discussed.

### Background of study

As is typical of developing counties, students in the Timor Leste education system struggle to develop adequate reading skills in both the L1 Tetun and L2 English. The reasons attributed to this problem are varied. They include ineffective teaching methods, the classroom environment, family income socio-economic status, and individual differences in intelligence, motivation, confidence and other individual-based factors (Brown 1991; Suggate 2009; Jones 2006; Wilbourn et al. 2011). The learner's attitude to reading has also been proposed as an important contributor to reading achievement (McKenna & Kear 1990; McKenna et al. 1995).

No research to date has examined the potential relationship between reading attitudes and reading outcomes in Timor-Leste. The current study aims to fill this gap. It will attempt to answer two questions: Is there an overall relationship between reading attitude and reading proficiency in Timor-Leste university students? Does the attitude-achievement link differ between L1 Tetun and L2 English performance and between female and male readers?

### Literature Review

#### *Reading attitudes*

Attitudes are defined here as feelings and dispositions of persons, objects, situations, or issues that may include positive and negative emotions (Wood et al. 2007). Alexander & Filler (1976, 1) defined reading attitude as "a system of feelings related to reading that causes the learner to approach or avoid a reading situation." It has also been considered to be "a state of mind, accompanied by feelings and emotions that make reading more or less probable" (Smith 1990, 215), or simply as the readers' or students' affect (feeling) toward reading (Mathewson 1994; McKenna et al. 1995). McKenna and colleagues classify reading attitudes into two types; one is recreational reading attitude and the other one is academic reading attitude (McKenna et al. 1995). Recreational reading attitude refers to reading for pleasure, while academic reading attitude refers to school related subjects. There are many factors that may influence students' positive or negative attitude toward reading, especially academic reading. These include the teachers' reading attitude, availability of reading materials, classroom environment, literacy culture or perhaps parents' reading attitudes (Miller 2012; Au 2006; Krashen 2004; Gibbson 2003). A central question concerns how reading attitudes affect achievement – and vice versa. There are mixed findings concerning the relationship between these two variables. Some studies revealed that positive reading attitudes are a predictor of reading achievement (McKenna et al.

1995; Walberg & Tsai 1985; Martínez et al. 2008; Ghaith & Bouzeineddine 2003; Petscher 2010; Kush et al. 2005) while others report no significant relationship between reading attitudes and achievement (Kush et al. 2005, Ward 2013, and Elliot 1983). The study here examines this question in the Timor Leste context.

One factor that has been regularly related is the individual's enjoyment in reading. This can have an effect on the length of time students spend on reading the text, which in turn may be linked to motivation and text outcomes. Text content can play a role in the reader's engagement in the text (Moore & Lemons 1982). Chua (2008) did a longitudinal study on the effects of Sustained Silent Reading (SSR) on students in the first year of secondary school. Results showed that students who felt that leisure reading was pleasurable and enjoyable showed an increase in positive reading attitudes, while students who felt leisure reading was useful and meaningful did not exhibit much change in reading attitudes. Positive reading attitudes result when learners have access to a variety of interesting reading materials (Krashen 2004). When students access a range of reading materials that they like, their motivation to read and time spent reading will increase. Studies showed that the amount of time students are engaged in reading can contribute to their reading achievement (Byrnes 2000; Taylor et al. 1990). For example, Yamashita (2013) researched extensive reading (ER) and its effects on L2 reading attitudes. She found that the ER positively increased students' feelings of comfort and reduced anxiety toward EFL reading attitudes. In addition, findings also reported three cognitive aspects in L2 learning: intellectual, practical and linguistic values. Results of data analysis showed that ER had a positive effect on the students' intellectual value in learning English. At the same time, it negatively increased the practical value.

The linguistic value was removed from the measurement. Camiciottoli (2001) also found that students who read more books in their free time in their native Italian were more willing to find time to read books in English. This indicated that there is a positive correlation between attitude to extensive reading in English and reading in the native language (Italian) in a study examining the effect of ER in English on the reading habits and attitudes of EFL students who were enrolled in a Business Administration degree at an Italian university. External factors like the physical setting of instruction can also affect reading attitudes Gibbson (2003). Attitudes to reading can also change over time. Smith (1990) did a longitudinal study on the development of attitudes from childhood to adulthood. Findings revealed that adult attitudes to reading cannot be predicted from those of childhood. The results also demonstrated that attitudes to reading are generally a "stable construct over time" among children (p. 219). The study also stressed the importance of developing positive attitudes toward reading early in the lives of children. Sainsbury & Schagen (2004) investigated whether there were any changes in students' reading attitudes in the five-year period since the introduction of the National Literacy Strategy in the UK. Findings suggested that children's reading attitudes were generally positive. However, there were some declines in both younger and older age groups. Reading enjoyment fell significantly over the five years, but their confidence as readers significantly increased.

The foregoing indicates that attitudes toward reading can affect that amount of time an individual will spend reading, which in turn will result in more positive reading outcomes. Attitudes toward reading and the time spent doing it is also influenced by the individual's interest in the text and the intrinsic enjoyment he or she experiences when reading. This study will examine the relationship between attitudes and reading outcomes in university students in a Timor Leste university.

### **Relationship between reading attitudes, gender and achievement in First Language (L1)**

Reading achievement can also be affected by other factors such as socioeconomic status, gender, literacy background, teacher, intelligence of student, and reading disability (Ward 2013; Elliot 1983; Schofield 1980). Several studies have examined performance difference between female and male readers Martínez et al. (2008), McKenna et al. (1995), Lazarus & Callahan (2000), Kush & Watkins (1996), Ghaith & Bouzeineddine (2003), Petscher (2010) and Ward (2013). Some of these studies found female readers better than male readers Martínez et al. (2008) while others indicated that male were better than female readers Ward (2013). The various studies provide mixed results for the relationship between positive reading attitudes and reading achievement outcomes in the L1. In

instances where a link was established, females regularly had more positive attitudes and a higher level of reading achievement. The potential effect of gender on the reading attitude-outcome in the L2 will be examined here. It is the first such study to do so.

#### *L1 and L2 reading attitudes*

Another factor that may affect readings attitudes toward reading in the L2 may be the individual's attitude to reading in his or her L1. Several studies have been conducted on L1 and L2 reading attitudes. Yamashita (2004) investigated the relationship between L1 and L2 reading attitudes and their influence on L2 extensive reading (ER). She found that reading attitude variables such as comfort, anxiety, value and self-perception in both L1 and L2. Furthermore, findings also demonstrated that L1 reading attitude is one of the factors that support L2 reading attitude. Findings also suggested that transfer from L1 to L2 not only occurs in the cognitive domain, but also in affective domains such as attitude.

The L2 research on reading attitudes is very limited compared to that in the L1. The studies examined here indicate that there is a positive link between attitudes and achievement and that student attitudes can be developed in the classroom.

This section has provide a brief review of the limited research that has examined the relationship between reading attitudes and reading practices. Various factors contributing to positive reading attitudes and reading outcomes were identified. The possible effect that gender might play in this relationship was also noted. The next section will report on a study that addresses these issues in a Timor Leste university.

## **Methodology**

### *Participants*

Participants in the study were university students (N=62) studying at the Universidade Nacional Timor Lorosa'e (UNTL) a university in Timor-Leste. They were at fifth semester of the undergraduate major in English teaching. Thirty-one females and 31 males took part in the study. Ages ranged from 18 to 25 years old.

### *Data Collection Instruments*

A reading attitudes survey and reading achievement test were the two sources for data in the study. These are described below. Ethical clearance for the research was obtained from the Ethics Review Committee in the School of Languages and Comparative Cultural Studies at the University of Queensland.

### *Reading attitudes survey*

Student reading attitudes were measured using a questionnaire adapted from the Programme for International Student Assessment (PISA) 2009. The instrument contained 11 items eliciting student reading attitudes to both the L1 and L2. A four-point Likert scale format was used for all items. Six of the items elicited agreement judgements for positive attitudes toward reading. The other five elicited agreement judgements about negative attitudes toward reading. The researcher prepared a paper-based version of the questionnaire for two classes. These questions are in English.

### *IELTS reading test*

The reading test was adapted from IELTS test preparation materials (Cambridge 2005). The researcher (the first author) selected four reading texts for use in this study. Each reading text had 27 items. The four texts were translated into the students' L1 Tetun by the researcher and colleagues. Type of reading that was used for this study is academic reading. This type of reading was chosen because participants are learning academic language to be used in their future career as the English teacher.

Each student completed all four texts, two in L1 Tetun and two in L2 English. Presentation was counter-balanced so that half the students did two of the readings in Tetun and two in English and the other half did the same texts in the other language.

### *Data Collection Procedures*

To facilitate the counterbalancing of texts across the two languages the data collection was carried out in two intact class groups, n=29 and n=33, respectively. The researcher, a Timor Leste nationality, collected the data in both classes during class time. In each session, he was first introduced to students by the classroom teacher and then explained the aims and process of data collection. The students were then asked to answer based on their normal practice in, and feelings about, reading in both the L1 and L2. The researcher collected all the questionnaires when all students had completed them. The process took approximately 30 minutes.

The reading achievement test was administered to both groups in a following class session. The first group did the test later in the same day while the second group completed it the following morning. Both reading tests were administered in a paper-based format in a single session of 90 minutes. The researcher, distributed and explained the testing procedure, and then remained in the classroom while the students did the test. All the answer sheets were collected by the researcher as soon as students finished. The research then scored the tests using the answer key provided with the readings (Cambridge 2005). This study was carried in July 2014

## Results

### *Test of reliability*

The L1 and L2 reading tests were assessed for reliability for the respective data collection groups using Cronbach's alpha. Group 1 had extremely low reliability values for both the L2 reading test,  $\alpha = .14$ , and the L1 reading test,  $\alpha = .30$ . In contrast, Group 2 reached a satisfactory level of reliability result for the L2 test,  $\alpha = 0.73$ , and the L1 reading test,  $\alpha = 0.71$ . Based on these results, only the results for the second group will be analysed further. The low of reliability value for group 1 may be caused by several factors, including language proficiency and the time of the test. Although participants were at the same level of study, they may have differences in language proficiency. Another reason for low reliability for group one may be caused by the time of doing the test. Group one did the test at 1pm while group two did the test at 9am. Students may feel sleepy, stressed from the previous class or less motivated to do the test in the afternoon. These are possible reasons for the low reliability results for group one.

### *Reading performance*

Table 1 presents reading performance for L1 and L2 and gender. Overall mean performance on the L1 test was better than that on the L2. Normality assumptions were met so the mean difference was tested using a paired t-test. The difference was statistically significant,  $t(32) = 3.46, p = .002$ . The female students had better mean scores than male students for the L1 reading test, while the male students had slightly better scores in L2 reading. Neither differences were statistically significant.

**Table 1** - Descriptive Statistics of L1 and L2 Reading Test

N	Gender	Reading Test	Min	Max	Mean	SD	95% CI	
							Lower	Upper
14	Female	L1	4	15	9.86	3.59	8.12	11.59
		L2	4	9	6.64	1.45	4.95	8.33
19	Male	L1	3	19	8.05	3.66	6.56	9.54
		L2	3	24	6.84	4.67	5.39	8.29
33	Total	L1	3	19	8.96	3.63	7.34	10.57
		L2	3	24	6.74	3.06	5.17	8.31

*L1= First language, SD= Standard deviation, CI= Confidence interval, Maximum possible score is 27*

The descriptive statistics for reading attitudes by gender summed across the positive and negative item types are reported in Table 2. Overall, female students had higher mean ratings than their male counterparts on both the positive and negative items.

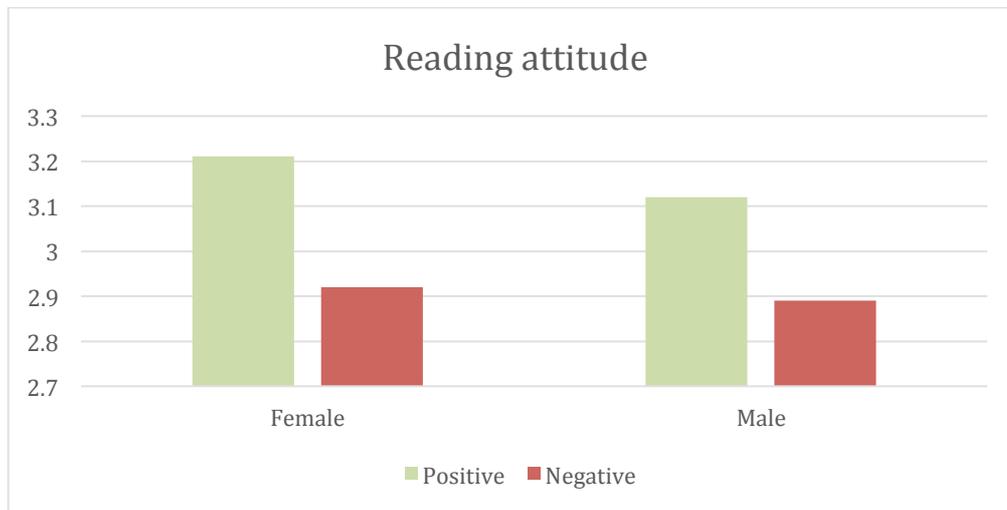
**Table 2** - Descriptive Statistics of Reading Attitude by Type (Positive and Negative) and Gender

Reading attitude	Gender	N	Mean	SD	95% CI	
					Lower	Upper
Positive reading attitude (6 items)	Female	14	3.21	0.38	3.00	3.43
	Male	19	3.12	0.33	2.96	3.28
	Total	33	3.16	0.35	3.04	3.29
Negative reading attitude (5 items)	Female	14	2.99	0.28	2.83	3.15
	Male	19	2.89	0.34	2.73	3.06
	Total	33	2.93	0.31	2.82	3.05

SD= Standard deviation, CI= Confidence interval, Maximum possible score is 4

The pattern of mean responses by type and gender are presented visually in Figure 1. Independent *t*-tests were conducted to test observed differences in the attitude means scores. There were no statistically significant differences evident.

**Figure 1** - Comparison positive and negative Reading Attitude by gender



Positive and negative reading attitudes between female and male readers were not statistically significant, however they are consistent with previous studies' findings e.g. Lazarus & Callahan (2000), Kush & Watkins (1996), McKenna et al. (1995), and Martinez et al. (2008). The strength of association between the reading and attitude scores were examined using Pearson's *r*. No statistical correlations were found among any of the variables.

## Discussion

The lack of statistically significant findings means that few hard conclusions can be drawn from the study. The higher mean scores for L1 Tetun reading achievement for the female students is consistent

with Lietz (2006) and many others who have found that girls outperform boys in reading (e.g. Lazarus and Callahan 2000; Kush and Watkins 1996; McKenna et al. 1995; and Martinez et al. 2008).

### *Research Question 1*

There were no statistically significant correlations between attitudes toward reading and reading achievement in either L1 or L2 reading. As a result, findings of the current study lends no support to a number of L1 studies (McKenna et al. 1995; Walberg & Tsai 1983; Kush et al., 2005; Elliot, 1983) and Ward (2013). These studies found that reading attitudes were significantly correlated with reading achievement. Differences in results between previous and current studies may be due to several factors such as level of participants in studying English, quality of test materials, or number of participants. The current study may best be considered a pilot study and a foundation for further research in Timor-Leste.

### *Research Question 2*

There was a statistically significant difference between L1 and L2 reading achievement. The L1 reading proficiency scores were higher compared to L2 English reading scores, which is not unexpected. The female students had higher positive mean attitudes to reading but the difference is not statistically significant. The results are thus inconsistent with the findings of McKenna et al. (1995) who did find a statistically significant effect for females. It should be noted that McKenna et al. focused on L1 primary school students while the current study involved university students and the language in the reading survey was L2.

## **Conclusion**

The study examined the potential relationship between reading attitude and achievement in Timor-Leste, with an interest in whether language and gender might affect this relationship. None of the results were significant, which means that one must be very cautious in interpreting the results. Results that showed no correlation between reading attitude and achievement may cause by several factors. Some of these factors are lack of interesting reading materials in L1 and L2, and Timor-Leste does not have culture of reading. More research still needed in future to find out if these factors may cause the relationship between reading attitude and achievement in Timo-Leste.

## **Limitations and further research**

The first possible limitation is the data collection instruments. The text used to measure reading proficiency may not have been appropriate for participants, as was evident from the fact that the reading test reliability for one group was extremely low. As a result, one group of students had to be excluded from the data analysis. The attitudes instrument also could benefit from piloting. Converging evidence from interviews might also shed light on the role of attitudes in the reading practices of these students. Similar studies may also be conducted at others levels of education in Timor-Leste.

## **Bibliography**

- Alexander, JE & Filler, RC 1976, *Attitudes and reading*, Del: International Reading Association, Newark.
- Au, KH 2006, *Multicultural issues and literacy achievement*. Mahwah, N.J: L. Erlbaum Associates
- Brown, BW 1991, 'How gender and socioeconomic status affect reading and mathematics achievement', *Economics of Education Review*, 10(4): 343-357.
- Byrnes, J 2000, 'Using instructional time effectively' in Baker, L., M. Dreher, & J. Guthrie (eds.) *Engaging Young Readers*, Guilford Press, New York, pp. 188-205.
- Cambridge 2005, *Cambridge IELTS 4*, Cambridge University Press, Cambridge.
- Chua, SP 2008, 'The effects of the sustained silent reading program on cultivating students' habits and attitudes in reading books for leisure', *The Clearing House*, 81(4): 180-184.

- Crawford Camiciottoli, B, 2001, 'Extensive reading in English: Habits and attitudes of a group of Italian university EFL students' *Journal of Research in Reading*, 24(2): 135-153.
- Elliott, PL 1983, *An investigation into the relationship between reading achievement and attitudes toward reading of third and sixth grade students*. (Masters thesis) Memorial University of Newfoundland, Ottawa, Canada. Available from: ProQuest, UMI Dissertations Publishing.
- Ghaith, GM & Bouzeineddine, AR 2003, 'Relationship between reading attitudes, achievement, and learners perceptions of their jigsaw II cooperative learning experience', *Reading Psychology*, 24(2).
- Gibbons, AC 2003, *Effects of the physical classroom environment on the reading attitudes of fourth graders*. Ph.D Thesis, University of Houston. Available from: ProQuest Dissertations and Theses.
- Jones, CK 2006 *The relationship of language proficiency, general intelligence, and reading achievement with a sample of low performing, limited English proficient students*. ProQuest, UMI Dissertations Publishing.
- Krashen, SD 2004, *The power of reading: Insights from the research*, N.H: Heinemann, Portsmouth.
- Kush, JC & Watkins, MW 1996, 'Long-term stability of children's attitudes toward reading', *The Journal of Educational Research*, 89(5): 315-319.
- Kush, JC, Watkins, MW & Brookhart, SM 2005, 'The temporal-interactive influence of reading achievement and reading attitude', *Educational Research and Evaluation*, 11(1): 29-44.
- Lao, CY & Krashen, SD 2000, 'The impact of popular literature study on literacy development in EFL: More evidence for the power of reading', *System*, 28(2): 261-270.
- Lazarus, BD & Callahan, T 2000, 'Attitudes toward reading expressed by elementary school students diagnosed with learning disabilities', *Reading Psychology*, 21(4): 271-282.
- Lietz, P 2006, 'A meta-analysis of gender differences in reading achievement at the secondary school level', *Studies in Educational Evaluation*, 32(4): 317-344.
- Mathewson, GC 1994, 'Model of attitude influence upon reading and learning to read' in Ruddell, R. et al. (eds) *Theoretical models and processes of reading*, 4<sup>th</sup> edn, International Reading Association, DE, pp. 1131-1161.
- Martínez, RS, Arıcak, OT & Jewell, J 2008, 'Influence of reading attitude on reading achievement: A test of the temporal-interaction model', *Psychology in the Schools*, 45(10): 1010-1023.
- McKenna, MC & Kear, DJ 1990, 'Measuring attitude toward reading: A new tool for teachers', *The Reading Teacher*, 43(9): 626-639.
- McKenna, MC, Kear, DJ & Ellsworth, RA 1995, 'Children's attitudes toward reading: A national survey', *Reading Research Quarterly*, 30(4): 934-956.
- Miller, SJ 2012 *Literacy practices as predictors of reading achievement*. ProQuest, UMI Dissertations Publishing).
- Moore, SC & Lemons, R 1982, 'Measuring reading attitudes: Three dimensions', *Reading World*, 22(1): 48-57.
- OECD, 2009, *PISA 2009 Assessment framework*, OECD, Paris.
- Petscher, Y 2010, 'A meta-analysis of the relationship between student attitudes towards reading and achievement in reading', *Journal of Research in Reading*, 33(4): 335.
- Sainsbury, M & Schagen, I 2004, 'Attitudes to reading at ages nine and eleven', *Journal of Research in Reading*, 27(4): 373-386.
- Schofield, HL 1980, 'Reading attitude and achievement teacher-pupil relationships', *The Journal of Educational Research*, 74(2): 111-119.
- Smith, MC 1990, 'A longitudinal investigation of reading attitude development from childhood to adulthood', *The Journal of Educational Research*, 83(4): 215-219.
- Suggate, SP 2009, 'School entry age and reading achievement in the 2006 programme for international student assessment (PISA)', *International Journal of Educational Research*, 48(3): 151-161.
- Taylor, BM, Frye, BJ & Maruyama, GM 1990, 'Time spent reading and reading growth', *American Educational Research Journal*, vol. 27, no. 2, pp. 351-362. Available from: <http://www.jstor.org/stable/1163013>
- Walberg, HJ & Tsai, SL 1983, 'Reading achievement and attitude productivity among 17-year olds', *Journal of Literacy Research*, 15(3): 41-53.
- 1985, 'Correlates of reading achievement and attitude: A national assessment study', *The Journal of Educational Research*, 78(3): 159-167.
- Ward, SL 2013, *An examination of a relationship between reading attitudes and reading achievement for a group of sixth grade students*. ProQuest, UMI Dissertations Publishing.
- Wilbourn, MP, Gottfried, AW & Kee, DW 2011 'Consistency of hand-preference across the early years: Long-term relationship to verbal intelligence and reading achievement in girls', *Developmental Psychology*, 47(4): 931-942.
- Wood, SE, Wood, EG & Boyd, D 2007, *The world of psychology, social & applied psychology*. Riverside, Rolling Meadows, IL.
- Yamashita, J, 2004 'Reading attitudes in L1 and L2, and their influence on L2 extensive reading', *Reading in a Foreign Language*, 16(1): 1-19.

--- 2013, 'Effects of extensive reading on reading attitudes in a foreign language', *Reading in a Foreign Language*, 25(2): 248–263.