

VALIDATION OF INSTRUMENT IN MEASURING ENGLISH LANGUAGE READING ANXIETY AMONG FOREIGN LANGUAGE LEARNERS

Kalthom Husain¹, Puziah Abd Wahab¹, Aishah Amirah Zainal Abidin¹, Haniza Othman¹,
Mohd Salihin Hafizi Mohd Fauzi¹, Aida Nasirah Abdullah²

¹Faculty of Education, Kolej Universiti Islam Antarabangsa Selangor (KUIS), Bandar Seri Putra, 43000Kajang, Selangor MALAYSIA

² Faculty of Management and Leadership, Universiti Pertahanan Malaysia, Kem Sungai Besi, 57000 Kuala Lumpur, MALAYSIA

*For correspondence; E-mail: kalthom@kuis.edu.my

ABSTRACT: Anxiety is associated as a state of uneasiness and apprehension about uncertainties. This paper describes the validation process of an instrument to measure reading anxiety among English Foreign Language Learners (EFL). This instrument is adopted and adapted from English Language Foreign Language Anxiety Instrument (ELFRAI) developed by Masoudzoughi. However, some of the items in ELFRAI were reconstructed to reduce ambiguity. It is a non-verbal self-reported instrument measure to measure English Language reading anxiety. The instrument is structured into two parts namely demography and causes of reading anxiety and contains eight items and 27 items respectively. To identify reading anxiety among EFL, a total of 366 responses at two states private universities colleges located Selangor and Kedah were analyzed. This study adopts the quantitative approach as its research methodology. It uses SPSS version 22 to analyze the findings gathered. The results of the study depict a reliability Cronbach's Alpha, hence it supports the validity of the instrument

Keywords: Validation, Instrument, Reading Anxiety, Foreign Language, ELFRAI

1. INTRODUCTION

Foreign language educators are very much concerned with the difficulties faced by learners when learning a foreign language. Past research on engaging affective variables such as attitude, motivation, anxiety, and beliefs about foreign language learning has been impacted foreign language acquisition [1] and [2] suggest that anxiety are underlying sources of learners' fears and anxieties in the study process. In learning a foreign language, reading anxiety is a specific phobia, situational type, toward the act of reading. It has been defined as an unpleasant emotional reaction toward reading that results when the student's intellectual drives of curiosity, aggression, and independence become associated either singularly or in combination with significant other disapproval and the reading process [3].

2. LITERATURE REVIEW

This section encompasses the related previous studies that shall serve as the backdrop of the study. The studies are structured into three main subsections namely language learning and anxiety, variables affecting anxiety and studies on the validation of reading anxiety instrument.

Language Learning and Anxiety

Language anxiety is a type of anxiety specifically associated with second/foreign language learning contexts. Three components of language anxiety are identified: communication apprehension, test anxiety, and fear of negative evaluation [4]. People with communication apprehension are shy about communicating with others and have difficulty speaking in public and listening to spoken messages. In language classes, students are required to communicate with each other and sometimes asked to speak in dyads, in groups, or in public. Students with communication apprehension tend to develop language anxiety. Anxiety has been studied by psychologists from many different perspectives and its effects on cognitive, affective and behavioral functioning are well established [5]. Language anxiety is explained [6] as a psychological construct, has been an intriguing subject for research for the past 4 decades, and various definitions have been proposed describe Foreign Language Classroom Anxiety (FLCA) has

been described [1] as “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process”

Learning anxiety is generally viewed as the manifestation of feelings of incompetence in doing any task. If this kind of feeling is recurrent, then students may routinely expect to have the same difficulty in all situations and accordingly get nervous even if the task is not very challenging. Burden (2004) argued that anxious students have negative self-concepts and they always underestimate their efforts when speaking or conducting any task when they are compared to other students.

Anxious learners may develop more anxiety if they feel that their behavior is always scrutinized, judged and compared with other students. This type of tension might be softened by encouraging various activities such as group work and/or pair work where the students' product is viewed as the outcome of collective cooperative work.

B. Variables Affecting Anxieties

A study [7] examined whether teachers' attitudes were related to the language anxiety of 67 EFL students. He found that students were less anxious if the teachers' attitude toward them was more supportive. As for “learners' gender”, the study too, identified gender as a predictor of language anxiety with female students showing higher anxiety than male students. Another study [8] indicated similar findings with females being more anxious than males. Yet, [9] investigated language anxiety in 252 university students majoring in English and found no significant effect of gender on students' anxiety. In sum, studies examining the variables of language proficiency levels and teacher's role yield similar results, which are that students with higher language proficiency tend to have lower language anxiety, and teacher's supportive attitude helps decrease students' language anxiety. However, inconsistent results have been found in the studies exploring the variables of the length of language learning and learners' gender. Hence, further exploration of how language anxiety changes with the two variables is needed.

A study which [10] investigate the relationship between reading anxiety and motivation, and the effect of reading anxiety and motivation level on the choice of global, supportive and problem-solving reading strategies. The findings showed a significant low positive relationship between reading anxiety and motivation. It was also found that the motivation level influences EFL learners' choice of reading strategies. However, no statistically significant differences were found among the effects of reading anxiety levels on the choice of reading strategies

Validation of Instruments

Statistical tests were used to validate research instruments. Although the validity and reliability are two different criteria, both of them are intertwined in determining the quality of research. Generally, reliability in quantitative research refers to two situations (i) the consistency of a measure; despite repeated several times and (ii) a measure of stability at all times. The reliability of the measurement procedures can be defined as a measure of stability or consistency [11]. Cronbach's alpha is used to obtain the reliability index of the instruments. The reliability index range is between zero ($\alpha=0$) to one ($\alpha=1$). High alpha value means higher reliability. The index alpha of .7 or above is good for instruments that have ten or more items. An instrument used in basic research must have reliability of Cronbach alpha score .70 or better. must be significant [12]

Some studies on instrument validation [13] and [14] were to measure self-confidence and anxiety in nursing students had adopted exploratory factor analysis to examine the scales construct validity of the instrument. Another study which validated the Italian version [15] of the Wilma delivery expectancy/experience questionnaire (WDEQ) had applied factor analysis test. Another study [15] had validated the EFL reading anxiety instrument using explanatory factor analysis to investigate the factors structure and to provide an indication of the internal consistency /reliability. However,

the other statistical test such as Cronbach alpha which was also deployed when validating research instrument such as authors in [16] put forward that validity and reliability of an instrument can be measured using Cronbach's alpha analysis. Thus with this in view, the present research has embarked on the Cronbach alpha statistical test to validate the present research ELFRAI instrument.

3. RATIONALE FOR THE CURRENT STUDY

To date, literature posited three reading anxiety instruments that measure foreign language reading anxiety. Firstly, [17] studied on Reading Anxiety Scale' Horwitz, Horwitz, & Cope, known as Foreign Language Classroom Anxiety Scale (FLCAS) and has been widely used around the world, psychometric evidence has been established. FLCAS contains three categories of scales; firstly, Category 1: Communication apprehension – 11 items, category 2 Fear of feedback by peers and teachers – 7 items and category 3 Fear of language tests – 15 items. The second instrument [18] was the first Foreign Language Reading Anxiety Scale (FLRAS) was developed [19] to “elicit students’ self-reports of anxiety over various aspects of reading, their perceptions of reading in their target language, and their perceptions of the relative difficulty of reading as compared to other language skills”. It originally contains 20 items, but items 10 and 11 were eliminated on grounds of irrelevance. They referred to new symbols and writing system of the second language, but all the participants’ in the present study were familiar with the English writing system. Items were based on a 5-point scale which ranged from "strongly agree" to "strongly disagree". Thirdly, an instrument that measures Foreign Language Reading Anxiety [20] known as EFLRAI contains 27 items and include three major factors related to English Foreign Language (EFL) namely Top-Down Reading Anxiety (TRA) Bottom-Up Reading Anxiety (BRA) and Classroom Reading Anxiety (CRA as shown in Figure1.

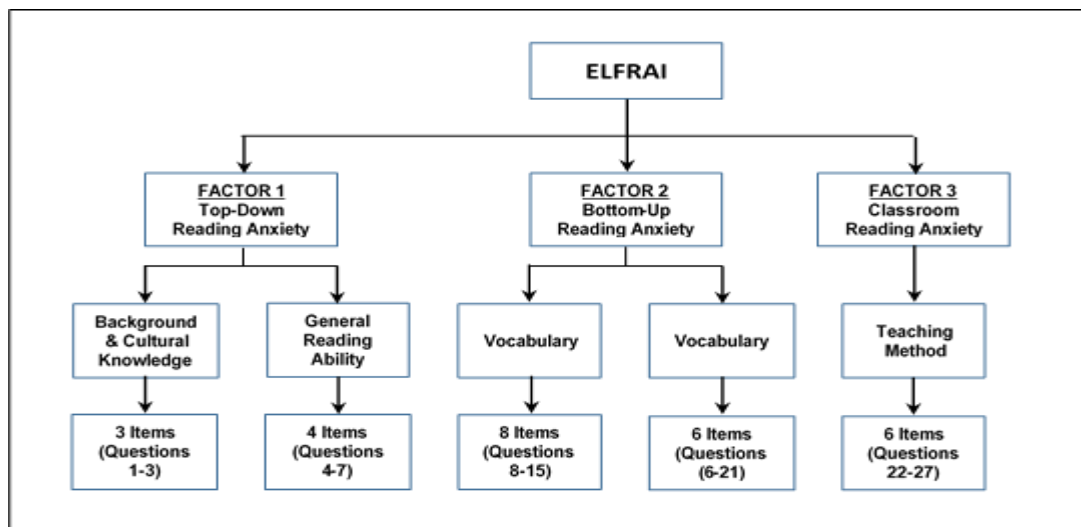


Figure 1: Elfrai Factors In Measuring Foreign Reading Language Anxiety

Although EFL Reading Anxiety instruments are available, to date there is still not many studies that focus on validating the instrument. Furthermore, validating the EFL Reading Anxiety instrument is deemed necessary due to the different time, context of foreign language learners.

4. METHODOLOGY

The method adopted in this paper includes the descriptions of respondents, instrument, the process of data collection and explanation of the method is described below:

Respondents

A total of 366 respondents voluntarily participated in this study. 57.7% of the respondents came from Universiti Islam Antabangsa Sultan Abdul Halim Mu'adzam Shah (UNISHAMS) located in Kedah whilst 42.3% were respondents from Kolej Universiti Islam Selangor (KUIS) located in Selangor. The demographic profile of the respondents was on the field of study, gender, level of English language proficiency, programme and number of years learning English Language.

Instrument

The ELFRAI instrument [20]. It was used as it measures English Foreign Language Anxiety. ELFRAI encompasses 3 factors namely TRA, BRA, and CRA and designed and constructed in 27 items. In this study, 24 items were reconstructed to depict syntax clarity in the items. For each item, there were four scales corresponding to 1 (totally disagree), 2 (somewhat disagree), 3 (somewhat agree), and 4 (totally agree).

The process of Data Collection

The questionnaire was put online. After the questionnaire was completed each item was analyzed and the score was considered as nominal data. The duration required to complete the survey was only 45 minutes. The respondents were asked questions related to reading English foreign language anxieties.

Data Analysis

Descriptive statistics, reliability, and validity estimates were calculated for the instrument. To measure reliability, Cronbrash's alpha coefficient was used to assess the degree of internal consistency of the measures obtained. This general

coefficient reflects the degree of covariance among the items, serving as an index of internal consistency of the instrument. In terms of validity, simultaneous and construct validations were conducted to assess the validity of the measures obtained with the instrument. These validations were used for psychometric analysis of instruments in recent studies. Content validation consisted of a systematic evaluation of the content of the instrument to assure its representativeness i.e. to guarantee that the various aspects of the construct were covered by the questionnaire items

Validation Process

In determining the final composition of ELFRAI instrument and to assess the psychometric characteristics (reliability and validity), the instrument was administered to 366 respondents (n=366) at two different university colleges in Kedah (UNISHAMS) and Selangor (KUIS). One measure of reliability was analyzed. Internal consistency was computed by Cronbach's alpha. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group or it is a coefficient of reliability (or consistency). It is considered to be a measure of scale reliability which informs the degree of convergences between the different items hypothesized the same construct.

5. RESULTS AND DISCUSSION

Demography profile of the Respondents

The respondents in the study were recruited from KUIS (42.3%) and from UNISHAMS (57.7%) The respondents were 69.4% Male and 30.6% Female. The levels of English language proficiency (25.7% Beginner, 64.8 % Intermediate and 9.5% Advanced).

Validation of the Questionnaire

The objective of the paper is to validate the ELFRAI instrument in measuring the reading anxiety Cronbach Alpha was used to tests the validity of the questionnaire and the items ≤ 0.3 were deleted. For the three factors in ELFRAI the construct validity was computed and is shown in Table1 showing the Cronbach Alpha Analysis of Elfrai Questionnaire (N=366). The computed value for Cronbach's alpha is .813

Table 1: Cronbach Alpha Analysis of Elfrai Questionnaire (N=366)

Factors	Item	Item Deleted	Cronbach Alpha
Top-Down Reading Anxiety (TRA)	7	-	.525
Bottom-Up Reading Anxiety (BRA)	8	-	.775
Classroom Reading Anxiety (CRA)	12	-	.887

The following table (Table 2) depicts the reliability statistics

Table 2: Reliability Statistics

Cronbach's Alpha	Nu of Items
.813	27

The internal consistency of ELFRAI was measured with Cronbach's alpha. Table 2 depicts the computed value of Cronbach Alpha of the three main factors that constituted to the instrument.

The results are consistent with the Nunnally [20] that the instrument used in basic research must have reliability of Cronbach alpha score .70 or better. must be significant. Thus the ELFRAI was consistent for validation and reliability, respectively.

6. CONCLUSION

The validation of ELFRAI instrument using Cronbach Alpha (α) of reliability was acceptable with. 813. Based on this result, the three factors Top-Down Reading Anxiety (TRA), Bottom Up Reading Anxiety (BRA) and Classroom Reading Anxiety (CRA) associated with foreign language anxiety support the validity of the instrument. The instrument is valid and is suggested for future reteach in the related field.

ACKNOWLEDGMENT

Authors would like to express their gratitude to KUIS for granting a sum of research fund to execute this particular research. Authors would like to extend our gratitude to UNISHAMS for their lending hand in compiling the data

REFERENCES

- [1] Horwitz, E. K., Horwitz, M. B., & Cope, J. (2007). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–32
- [2] Prima Vistari, Muhamad Nubli Abdul Wahab, Tutut Herawan, Ahmad Othman and Suriya Kumar Sinnadurai (2011). *Procedia Social and Behavioural Sciences* Vol 15 pp3831-3836
- [3] Zbornik (2001) Foreign Language Reading Anxiety among Yemeni Secondary School Students. *International of English Language*. Vol 6 Issue 11 pp57-65.
- [4] Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986) Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125- 132
- [5] Gardner, R. C. & MacIntyre, P. D. (1991). An instrumental motivation in language study: Who says it isn't effective. *Studies in Second Language Acquisition*, 13, 57-72.
- [6] Atay, D. & Kurt, G. (2006). Prospective teachers and L2 writing anxiety. *Asian EFL Journal*, 8 (4), 100-118.
- [7] Abu-Rabia, S. (2004). Teachers' role, learner's gender difference, and FL Anxiety among seventh student's studying English as a FL. *Educational Psychological* 24(5), 711 -721
- [8] Elkhafaifi, H. (2005). Listening Comprehension and Anxiety in the Arabic language Classroom. *The modern language Journal*. 89(2)206-220
- [9] Matsuda, S. & Gobel, P. (2004). Anxiety and predictors of performance in the foreign language classroom. *System*, 32 (1), 21-36
- [10] Abbas Ali Zarei and Mahboubeh Gilanian (2014) On the Relationship between Cognitive Self-Regulated Learning and Language Learning Strategies. *Journal of Social Issues & Humanities*, Volume 2, Issue 12, December 2014 pp 200-209
- [11] Kirk, J., & Miller, M. L. (1986). Reliability and validity in qualitative research. Beverly Hills: Sage Publications.
- [12] Pallant, J.F. (2000), Development and validation of a scale to measure perceived control of internal states. *Journal of personality assessment* Vol 72 Issue 5 pp307 -338
- [13] Krista Alaine White (2011); The Development And Validation Of A Tool To Measure Self-Confidence And Anxiety In Nursing Students While Making Clinical Decisions. University of Nevada, Las Vegas Unpublished Thesis. Retrieved from [<https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=2384&context=thesisdissertations>]
- [14] Liew Lee Chan, and Noraini Idris (2017) Validity and Reliability of The Instrument Using Exploratory Factor Analysis and Cronbach's alpha. *International Journal of Academic Research in Business and Social Sciences* 2017, Vol. 7, No. 10 pp 400-410.
- [15] Fenaroli Emanuela Saita (2013) Trajectories of Postpartum Depression in Italian First-Time Fathers. *American Journal of Men's Health*. Vol 11 Issue 12 pp 880-887
- [16] Mimi Mohaffyz, Mohamad, Nor Lisa Sulaiman, Lai Chee Sern, Kahirol Mohd Salleh (2015) Measuring the Validity and Reliability of Research Instruments. *Procedia - Social and Behavioral Sciences* Volume 204, 24 August 2015, Pages 164-171
- [17] Nunnally, J. C. (1978). *Assessment of Reliability*. In: *Psychometric Theory* (2nd ed.). New York: McGraw-Hill
- [18] Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986) Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-
- [19] Abbas Ali Zarei, Mahboubeh Gilanian (2014). On the Relationship between Cognitive Self-Regulated Learning and Language Learning Strategies. *Journal of Social Issues & Humanities*, Volume 2, Issue 12, December 2014 pp 200 – 209
- [20] Masoudzoghi (2012) An Instrument for EFL Reading Anxiety: Inventory Construction and Preliminary Validation. *The Journal Of ASIA TEFL* Vol. 9, No. 1, pp. 31-56