

Validation of Instrument in Measuring English Language Reading Anxiety among Undergraduates in Two Private Universities

Pengesahan Instrumen untuk Mengukur Kebimbangan Bacaan Bahasa Inggeris sebagai Bahasa Asing (EFL) dalam Kalangan Mahasiswa di Dua Universiti Swasta

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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 the English as a Foreign Language Learners (EFL). This instrument is adopted and adapted from English Language Foreign Language Anxiety Instrument (ELFRAI) developed by Masoud Zoghi (2012). However, some of the items in ELFRAI were reconstructed to reduce ambiguity. It is a non-verbal self-reported instrument measures to measure English Language reading anxiety. The instrument is structured into two parts namely demography and causes of reading anxiety and contains 8 items and 27 items respectively. To identify reading anxiety among EFL learners, a total of 366 responses at two states private universities colleges located in Malaysia were analysed. This study adopts the quantitative approach as its research methodology. It uses SPSS version 22 to analyse the findings gathered. The results of the study depicts a reliability Cronbach's Alpha 0.927, hence it supports the validity of the instrument

Keywords: Validation; instrument; reading anxiety; foreign language; ELFRAI

ABSTRAK

Kebimbangan dikaitkan sebagai keadaan keresahan dan kebimbangan mengenai ketidakpastian. Makalah ini menerangkan proses pengesahan instrumen untuk mengukur kebimbangan bacaan Bahasa Inggeris sebagai Bahasa Asing (EFL) dalam kalangan pelajar. Instrumen ini diterima pakai dan disesuaikan dengan Instrumen Kecemasan Bahasa Asing Bahasa Inggeris (ELFRAI) yang dikembangkan oleh Masoud Zoghi (2012). Walau bagaimanapun, beberapa item dalam ELFRAI telah dibina semula untuk mengurangkan kekaburan. Ia adalah langkah instrumen yang dilaporkan sendiri tanpa lisan untuk mengukur kebimbangan membaca Bahasa Inggeris. Instrumen ini disusun menjadi dua bahagian iaitu demografi dan punca kebimbangan membaca dan mengandungi 8 item dan 27 item masing-masing. Untuk mengenal pasti kebimbangan membaca di kalangan pelajar EFL, sebanyak 366 jawapan di dua negeri kolej swasta di Malaysia dianalisis. Kajian ini mengamalkan pendekatan kuantitatif sebagai metodologi penyelidikannya. Ia menggunakan versi SPSS 22 untuk menganalisis hasil yang dikumpul. Hasil kajian menggambarkan kebolehpercayaan Cronbach's Alpha 0.927, dengan itu ia menyokong kesahihan instrumen

Kata kunci: Pengesahan; instrumen; kegelisahan membaca; bahasa asing; ELFRAI

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 have 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 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].

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 sub sections namely language learning and anxiety, variables affecting anxiety and studies on the validation of reading anxiety instruments.

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 behavioural functioning are well established [5].

Language anxiety is explained [6] as a psychological construct, has been an intriguing subject for research for the past four decades, and various definitions have been proposed to describe Foreign Language Classroom Anxiety (FLCA). It can be defined [1] as “a distinct complex of self-perceptions, beliefs, feelings, and behaviours 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 [7] argued that anxious students have negatively 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 behaviour 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.

VARIABLES AFFECTING ANXIETIES

A study [8] 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 [9] indicated similar findings with females being more anxious than males. Yet, [10] 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 [11] investigates 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 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 validity and reliability are two different criteria, both of them are intertwined in determining the quality of a 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 [12]. 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 a reliability result of Cronbach alpha score .70 or better to make it significant [13]

Some studies on instrument validation [14] and [15] 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 [16] of the Wilma delivery expectancy/experience questionnaire (WDEQ) had applied factor analysis test. The study had validated the EFL reading anxiety instrument using exploratory factor analysis to investigate the factor structure and to provide an indication of the internal consistency /reliability. However other statistical tests such as Cronbach alpha which was also deployed when validating research instruments such as [17] 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 Cronbach alpha statistical test to validate the present research ELFRAI instrument.

RATIONALE FOR THE CURRENT STUDY

To date, literature posited three reading anxiety instruments that measures foreign language reading anxiety. Firstly, [18] 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 [19] was the first Foreign Language Reading Anxiety Scale (FLRAS) was developed [20] 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 contained 20 items, but items 10 and 11 were eliminated on grounds of irrelevance. They referred to new symbols and writing systems of the second language, but all the participants' in the present study were familiar with English writing

system. Items were based on a 5-point scale which ranged from “strongly agree” to “strongly disagree”. Thirdly, instrument that measures Foreign Language Reading Anxiety [20] known as ELFRAI 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 Figure 1).

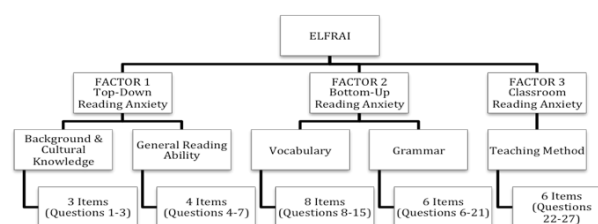


FIGURE 1. ELFRAI Factors in Measuring Foreign Reading Language Anxiety

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.

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 Private Institution A located in Kedah while 42.3% were respondents from Private Institution B located in Selangor. The demographic profile of the respondents were on the field of study, gender, level of English language proficiency, programme and number of years learning English Language.

INSTRUMENT

The ELFRAI instrument [21] was developed by Masoud Zoghi (2012). 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 from 1 to 4 which 1 correspond to totally disagree and 4 to totally agree.

PROCESS OF DATA COLLECTION

The questionnaire was posted through online media (check again). After the questionnaire was completed each item was analyzed and the score was considered as ordinal data. The duration required to complete the survey was only 45 minutes. The respondents were asked questions related to reading English foreign language anxiety.

DATA ANALYSIS

Descriptive statistics, reliability and validity estimates were calculated for the instrument. To measure reliability, Cronbach'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 Malaysia. One measure of reliability was analysed. 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 convergence between the different items hypothesized the same construct.

RESULTS AND DISCUSSION

DEMOGRAPHIC PROFILE OF THE RESPONDENTS

The respondents in the study were recruited from a Private Institution A (57.7%) and a Private Institution B (42.3%). 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 test the validity of the questionnaire and to verify the items. For the three factors in ELFRAI the construct validity were computed and is shown in Table 1 showing the Cronbach Alpha Analysis of ELFRAI Questionnaire (N=366). The computed value for Cronbach's alpha is 0.927. Table 2 below depicts the value Cronbach's Alpha 0.927 of the items contained in the instrument. The internal consistency of ELFRAI was measured with Cronbach's alpha. Table 2 depicts the computed

TABLE 1. Cronbach Alpha Analysis of ELFRAI Questionnaire (N=366)

Factors	Item	Item Deleted	Cronbach Alpha
Top-Down Reading Anxiety (TRA)	7	•	.825
Bottom-Up Reading Anxiety (BRA)	8	-	.913
Classroom Reading Anxiety (CRA)	12	-	.820

value of Cronbach Alpha of the three main factors (as in Table 1) that constituted the instrument.

The results are consistent with the Nunnally [20], which states that the instrument used in basic

TABLE 2. Reliability Statistics

Cronbach's Alpha	Nu of Items
.927	27

research must have a reliability of Cronbach alpha score 0.70 for it to be. Thus, the Cronbach alpha score 0.927 for this research indicated that the ELFRAI was consistent for validation and reliability, respectively.

VALIDATION OF THE TOP-DOWN READING ANXIETY (TRA)

The computed value for Cronbach's alpha value is 0.825. Therefore, this showed the existence of internal consistency of respondents for Background & Cultural Knowledge and General Reading Ability. It also indicates that respondents understood the constructions of the items built.

VALIDATION OF THE BOTTOM-UP READING ANXIETY (BRA)

In the BRA construct, the computed value for Cronbach's alpha is 0.913. Thus, this value was consistent for validation and reliability for vocabulary and grammar questions.

VALIDATION OF THE CLASSROOM READING ANXIETY (CRA)

In the CRA construct, the computed value for Cronbach's alpha is 0.820. Hence, this showed the existence of internal consistency of respondents for teaching methods.

CONCLUSION

The validation of ELFRAI instrument using Cronbach Alpha (α) of reliability was acceptable with 0.927. 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 retest in the related field.

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