

## Validating the Second Language Writing Anxiety Inventory for Korean College Students

So Young Jang<sup>1,1</sup>, Sunhee Choi<sup>2</sup>,

<sup>1</sup> Institute of Educational Development, Kunsan National University  
1170 Daehak-ro, Gunsan

573-701 Jeonbuk, Korea (clarasoyoung@daum.net)

<sup>2</sup> Department of English Education, Jeonju University

303 Choenjam-ro, Wansan-gu, Jeonju  
560-759 Jeonbuk, Korea (sunheech@jj.ac.kr)

**Abstract.** This study aims to validate a survey measuring second language writing anxiety. The survey, the Second Language Writing Anxiety Inventory (SLWAI), was originally developed based on the data collected from Taiwanese college students and consisted of 27 items with a 5-point Likert scale. The current study was conducted with a total of 204 college students, and the data were analyzed using Rasch measurement model. The results show that the overall content validity is adequate in terms of correlation analyses. However, eleven items seem to be problematic considering the fit values. Therefore, further analysis is necessary in the future.

**Keywords:** English writing anxiety, Rasch measurement model, Scale validation, Korean college EFL students

### 1 Introduction

There has been a recent surge of research on the relationship between affective variables and second language learning. One affective variable that has received attention in second language education is anxiety. Anxiety is a feeling of nervousness, worry, and uneasiness, which is a reaction to a situation or an event that is happening or might happen in the future. When placed in an anxiety-provoking situation, we often experience not being able to use the knowledge and skills that we do not have any trouble using at other times. However, it should be noted that anxiety does not always inhibit human performance, and it sometimes has facilitating effects. For example, with a little bit of anxiety we tend to focus better on a task and take a more proactive approach to problem solving than with no anxiety. In the field of second language education, a great deal of research has been conducted on state anxiety, an emotional reaction to a specific situation or event such as a L2 speaking test or singing in public. In particular, researchers are paying an increasing amount of attention to conceptualizing and assessing language skill specific anxiety such as

---

<sup>1</sup> So Young Jang: First Author, Sunhee Choi: Corresponding Author

speaking or listening anxiety.

Writing anxiety can be defined as a “fear of the writing process that outweighs the projected gain from the ability to gain” [1] and classified as a state anxiety in that it has little relationship with other types of anxiety [2]. It has been shown that writing anxiety has significant impact on the development of writing skills as well as writing performance [3]. However, it has not been long since the construct of second language writing anxiety started to attract second language researchers’ attention, and there are very few measuring instruments. One of them is ‘Second Language Writing Anxiety (SLWAI)’. Although a preliminary validation study provided evidence for satisfactory reliability and construct validity [4], further validation studies are warranted using various statistical procedures. Thus, the present study aims to validate the SLWAI using Rasch measurement model.

## 2 Research Method

The SLWAI was translated from English into Korean and cross-checked for accuracy and adequacy by the researchers, and then administered to the participants who were 204 college students from three universities located in Jeonbuk province, Korea. The sample consisted of 132 female (64.7%) and 72 male (35.3%) students. In order to obtain the validity of evidences of the SLWAI, WINSTEPS [5] was used for the analysis of the data.

## 3 Results

### 3.1 Person- Item Map

WINSTEPS provides graphical evidence by independently calculating two aspects, item difficulty and person ability. Figure1 presents graphical information regarding the person-item interaction on the same scale. The person ability estimates are presented on the left, on the other hands, the item difficulty measures are shown on the right side. For the item interpretation, Item 25 is located at the top, which means that it is seems to be a high anxiety item. Overall, the majority of person ability and item difficulty estimates fall between +2 and -2, which indicates that the distribution of the person ability is almost equivalent to that of the item difficulty.

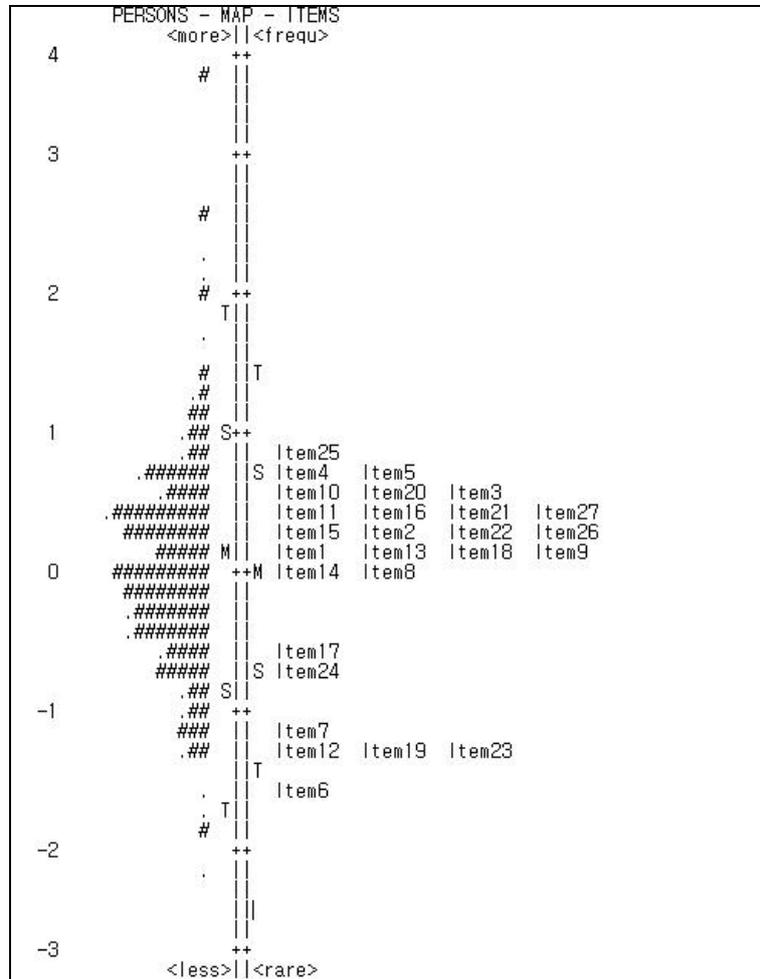


Fig. 1. Person-Item Interaction Map

### 3.2 Fit Statistics

Table 1 exhibits the fit statistics for items from a Rasch analysis of likert-type data. With respect to the fit statistics, acceptable infit value ranges 0.8 from 1.2 [6]. The acceptable values of a t-statistic are generally from -2 to +2. Misfit (greater than 1.2 or +2) or overfit (less than .8 or -2) indicators are likely to be less reliable and less valid. Any items with low (less than .3) or negative point biserial correlations are considered as a problematic item in terms of content validity [5]. According to table 1, item 4, item 5, item 8, item 22 and item 24 can be considered as a misfit item since they exceed the +2 in standardized t-values. Item 7, item 11, item 13 item 15, item 18, and item 20 are considered to be an overfit item by showing below -2. No items

below 0.3 were found in the analysis of correlations [6].

**Table 1.** Item Fit Measures

Items	Measure	St.error	Infit	t- statistics	Pt. measure Correlation
4	-.77	.09	1.20	2.0	.44
5	-.76	.09	1.30	2.9	.42
7	1.21	.09	.82	-2.0	.59
8	.00	.08	1.37	3.7	.35
11	-.50	.09	.82	-2.0	.58
13	-.11	.08	.72	-3.4	.60
15	-.32	.08	.74	-3.0	.62
18	-.09	.08	.72	-3.4	.75
20	-.56	.09	.74	-3.0	.52
22	-.31	.08	1.32	3.2	.41
24	.71	.08	1.39	3.9	.50

#### 4 Conclusions and Further Discussions

Rasch measurement model is a useful tool to validate the survey instrument and it provides evidence that any instrument would be sufficiently meaningful to measure the constructs [5][6]. First, Figure 1 directly reflected the spread of the person measures and item measures on the same scale. It was found that there are some overlapping items in the SLWAI which seem to be redundant in terms of content validity. Second, regarding the results of the fit statistics, the Rasch analysis detected that five items were misfit and six items have overfit patterns. It suggests that eleven items should be reviewed and a decision can be made by deleting or replacing items and further analyses should be done in the future.

#### References

1. Tahahashi, A.: Self-perception of English Ability: Is It Related to Proficiency and/or Class Performance? *Niigata Studies in Foreign Languages and Cultures*, 14, 39-48 (2009)
2. Horwitz, E. K.: Preliminary Evidence for the Reliability and Validity of a Foreign Language Anxiety Scale. *TESOL Quarterly*, 20, 559-562 (1986)
3. Daud, N. M., Abu Kassim, N. L.: Second Language Writing Anxiety: Cause or Effect. *Malaysian Journal of ELT Research* (2005)
4. Cheng, Y. S.: A Measure of Second Language Writing Anxiety: Scale Development and Preliminary Validation. *Journal of Second Language Writing*, 13, 313-335 (2004)
5. Linacre, J. M.: *A User's Guide to WINSTEPS Rasch Model Computer Programs*. Winsteps, Chicago (2009)
6. Bond, T. G., Fox, C. M.: *Applying the Rasch Model: Fundamental Measurement in the Human Science*. Lawrence Erlbaum Associates, Inc., Mahwah (2007)