

## **PSYCHOMETRIC PROPERTIES OF THE MALAY VERSION OF SELF-EFFICACY FOR WRITING SCALE**

**\*Harris Shah Abd Hamid<sup>1</sup>**

**Muhammad Hakimi Tew Abdullah<sup>2</sup>**

**Arifuddin Abdullah<sup>3</sup>**

<sup>1</sup>Department of Educational Psychology and Counseling, Faculty of Education, Universiti Malaya, Kuala Lumpur, Malaysia

Department of Education and Psychology, Faculty of Management, Education, and Humanities, University College MAIWP International, Kuala Lumpur, Malaysia

<sup>2</sup>Faculty of Communication and Media Studies, Universiti Teknologi MARA, Negeri Sembilan, Malaysia

<sup>3</sup>Faculty of Language Studies and Human Development, Universiti Malaysia Kelantan, Kelantan, Malaysia

*\*drharris@ucmi.edu.my*

The study aimed to translate and examine the psychometric properties of the Self-Efficacy for Writing Scale (SEWS), designed for use with school students, among Malaysian students in tertiary level education institutions. The SEWS was back-translated and satisfactory internal consistency indices were obtained in a pilot study. An online survey was conducted with responses from 636 students at a public university in central Malaysia. The data yielded the three-factor structure of the original SEWS. A four-week test-retest reliability was acceptable and highest for the convention subscale. The correlations with convergent measures (General Self-efficacy Scale and Self-Perceived Writing Competency measure) were significant and in the expected direction. An online survey with 533 respondents replicated the factor-structure findings. The SEWS-Malay is found to be suitable for use with students in tertiary education and can facilitate the expansion of research on writing self-efficacy. Further research could expand the scale to examine context-specific writing.

**Keywords:** *psychometric properties, SEWS, validation, writing self-efficacy measure, writing motivation.*

## **INTRODUCTION**

Writing is one of the communication skills recognized as an essential soft skill to be mastered before graduation. Practical efforts to improve the performance of students in tertiary education require attention to their writing performance. Therefore, understanding the antecedents of writing behaviours and performance is crucial. Among the antecedents, motivational aspects of writing have been the focus of much research and it has been dominated by writing self-efficacy (Latif, 2019). Given the established link between self-

efficacy and task performance, researchers' attention to writing self-efficacy is justified and necessary to fulfil the need to improve students' writing performance.

Self-efficacy is a personal belief in the ability to perform tasks successfully and a sense of competence, efficiency and ability to cope with life (Bandura, 1997). Students with higher self-efficacy are more likely to set higher goals, use more effective learning strategies, express lower anxiety (Bong, 2006), and use better learning and memorizing strategies (Heidari et al., 2012). These benefits could be due to higher self-efficacy encouraging the cognition that challenging problems are tasks to be mastered (Zimmerman & Bandura, 1994). The advantageous cognition thus elicited perhaps explains the findings that self-efficacy is able to differentiate low and high-academic-achieving students (Yip, 2012).

### ***Writing Self-Efficacy***

The conceptualization of writing self-efficacy can be categorized into three orientations which refers to the "writers' beliefs about their ability to: perform particular language-specific skills and tasks, regulate their composing processes and activities, and execute some cognitive, linguistic, self-regulatory or learning actions" (Latif, 2019, p5). Reviews of past studies concluded that writing self-efficacy influences writing outcomes (Pajares, 2003) and performance (Klassen, 2002) among school students. Positive relationships between writing self-efficacy and writing outcomes were also found among undergraduate students taking educational psychology course in English (Sanders-Reio et al., 2014) and undergraduate EFL students in Iraq (Sabti et al., 2019), Turkey (Erkan & Saban, 2011) and Thailand (Hetthong & Teo, 2013).

Experimental studies have also helped to establish a causal relationship between writing self-efficacy and writing performance. For example, interventions to improve the quality of narrative writing were found to also improve writing self-efficacy (Grenner *et al.*, 2020). The intervention used (based on observational learning protocols) may have improved self-efficacy by exposing the students to vicarious sources of writing self-efficacy beliefs. Thus, the improvement in writing quality could be due to improved writing self-efficacy. Meanwhile, an intervention purposely designed to improve writing self-efficacy found that the intervention was successful in improving both writing self-efficacy and word production in writing tasks (Daniels et al., 2020). Therefore, it can be concluded that writing self-efficacy is an important predictor of writing performance.

In Malaysia, research on writing self-efficacy would benefit from measures with good psychometric properties. The extant literature shows that researchers tend to use non-validated adapted measures with limited reports of psychometric properties like those of Wong (2005) Shah et al. (2011), Singh and Rajalingam (2012), Jalaluddin (2013), Jalaluddin et al. (2015), Jalaluddin et al. (2010), and Jalaluddin (2017). Research on writing self-efficacy in Malaysia had mostly relied on existing measures without performing robust validation. The studies suffer from an over-reliance on Cronbach's Alpha as a measure of reliability. The limited range of validity evidence hampers the possibility of promoting the research in higher quality journals as "(v)alid measurement is a nonnegotiable [sic] characteristic of good research" (Hair et al., 2017, p7). Indeed, some of the reviewed Malaysian papers were published in journals whose credibility is questionable. Additionally, the instruments used were also in the English language; this is an assumption made based on the lack of statement that they were in other locally used languages. None of the studies explicitly reported using an instrument in the Malay language. These limitations of the

existing body of research in Malaysia justify a study on the psychometric properties of an instrument to measure writing self-efficacy.

### ***Measurement of Writing Self-Efficacy***

There exist different measures of writing self-efficacy, which are attributable to the types of items and the writing tasks included in the measures (Latif, 2019). Mitchell et al., (2017) summarized 11 measures of writing self-efficacy for the post-secondary level with six of them based on Bandura's theoretical foundation. The earliest measure in their summary is the Efficacy Expectation Scale (Meier et al., 1984) and the latest is the Self-Efficacy Scale for Academic Writing (Mitchell et al., 2017). Golombek et al., (2019) published the Self-Efficacy for Self-Regulation of Academic Writing.

Self-Efficacy for Writing Scale (SEWS; Bruning et al., 2013) consists of 16 items organized into three dimensions of writing: ideation, conventions, and self-regulation. It was developed based on previous studies on writing skills by Pajares (2003), Shell et al. (1989), Zimmerman and Bandura (1994) and Zimmerman and Kitsantas (2007). A study of college students had previously used some of these items, which are mainly from the ideation and conversation strategies (Dempsey *et al.*, 2010). This measure was developed to provide a more comprehensive instrument to measure writers' self-efficacy by covering more dimensions of the writing process, taking into account the psychological, linguistic, and behavioural aspects of it. Besides linguistics, it is crucial that learners' psychological and behavioural aspects are also explored since writing is a productive skill. Bruning et al. (2013) believe that the addition of cognitive and behavioural aspects in the instrument will help represent self-efficacy in a more comprehensive manner beyond the focus on writing-related skills and tasks (McCarthy et al., 1985; Pajares & Johnson, 1994; Shell et al., 1989;) and beliefs in writing ability (Erkan, & Saban, 2011).

SEWS' first dimension is ideation which involves a cognitive process of idea generation and is part of the domains of semantics and schematic knowledge (Schraw, 2006). According to Cruse (2004), Evans and Green (2006) and Langacker (2008) the process of generating ideas for writing is within the domain of semantics as it involves the writers' ability to produce the content and to structure their thoughts. Hence, in the dimension of ideation, the self-efficacy items focus on writers' judgements on the availability, quality and structuring of their ideas and thoughts.

The second dimension in SEWS is writing conventions which can be viewed as the representation of ideas in the writing forms and are related to Flower and Hayes' concept of translation (Flower & Hayes, 1984; Hayes, 2012). In other words, it is a set of commonly recognized standards for conveying ideas through writing in a specific language. In English and many other languages like Malay, this includes the correct ways to spell, punctuate, capitalize, and structure sentences.

The third dimension is self-regulation which involves the writers' belief that they can successfully navigate through the writing dimensions and subtasks (Zimmerman & Bandura, 1994; Zimmerman & Kitsantas, 2007). It involves the process of managing, monitoring, and evaluating throughout the writing process. The writing process may prove to be difficult, tedious and may invoke a high level of anxiety for some learners. Hence, self-regulation is crucial not only to produce relevant ideas and writing strategies but also to reduce the level

of anxiety or manage other emotions that accompany the writing process. According to Zimmerman and Bandura (1994), some examples of writing self-regulation can be seen in the writer's ability to find appropriate topics, capture readers' attention, rewrite sentences to make them clearer, find and correct any grammatical errors as well as adjust their writing style to fit different audiences.

The original SEWS was developed and tested with high school students. The Convention sub-scale was found to predict writing performance among high school students (Yilmaz Soyly et al., 2017). A Spanish translation by Ramos-Villagrasa et al., (2018) was tested on undergraduate students which yielded the same three original factors.

## **AIM, OBJECTIVES AND HYPOTHESES**

The aim of this study is to facilitate further research on writing self-efficacy among the Malay-speaking population by producing a validated Malay version of SEWS. Towards this aim, the first objective is to translate SEWS into Malay translation by using the back-translation method. The second objective is to test its factor structure. The literature points to a three-factor structure. Therefore, it is hypothesized that SEWS-Malay also has three factors. The third objective is to test the convergent validity. Based on the literature, the following two hypotheses were generated: (1) the SEWS-Malay scores are positively correlated with General Self-Efficacy scores, and (2) the SEWS-Malay scores are positively correlated with self-perceived writing competency scores. The fourth objective is to test its temporal stability. The hypothesis for the fourth objective is that the score of SEWS at Time 1 and Time 2 (four weeks after Time 1) are positively correlated.

While many studies on writing self-efficacy have focused on the English language among L2 learners, the present study aims to facilitate further research on Malay language writing. Malaysia has a significant proportion of people whose mother tongue is not Malay. Thus, they may learn Malay as a second language. Secondly, there is an increasing number of international students in Malaysian universities who may have to learn Malay as a foreign language. Thirdly, among native Malay speakers, the writing performance cannot be assumed to be acceptable and without the need for further research. These three are the main motivating factors to produce a validated measure of writing self-efficacy in Malay. Thus, the achievement of these objectives is significant to enhance research in the area of writing especially with the Malay-speaking and Malay-learning populations.

## **METHODOLOGY**

This research utilized quantitative method with online surveys were administered to examine writing self-efficacy among the Malay-speaking population at a public university in central Malaysia. The research design used in this study is aligned with the Classical Test Theory to validate a translated measure of writing self-efficacy. More specifically, the test development guidelines by Swerdlik and Cohen (2011) were applied. The psychometric properties examined are limited to face, factorial and convergent validities and test-retest reliability. The design is also informed by past studies that link writing self-efficacy to other variables.

**Participants**

Across three separate studies (pilot, test-retest, and validation (Study 1)), the respondents were students at a public university in central Malaysia. Convenience sampling was used in online surveys based on students’ willingness to participate. For the third study, students were given the option to be included in a lucky draw for their participation. They could opt in by leaving their email address. Three prizes with a value of RM20 (about US\$5) each were offered.

There were 68 undergraduate degree students (20 males, 48 females) with a mean age of 21.91 (SD=.78) in the pilot study. The Cronbach’s alpha for the overall scale was .951. The Cronbach’s alphas for the subscales were all excellent: .919 (Ideation), .849 (Convention) and .925 (Self-regulation).

For the test-retest reliability study, 58 students were involved in the first administration, and 57 were involved in the second administration. After matching the e-mail address in the two sets of data, it was found that 39 (9 males, 30 females) students with a mean age of 21.51 (SD=.64) completed the SEWS in both administrations.

The third sample comprised 636 students (468 females, 168 males) with a mean age of 20.53 (SD=1.76). Their background is presented in Table 1. The sample is close to being ethnically homogenous, where a large proportion of the students were of Malay identity (primary domestic language and ethnicity) as expected of this type of public university.

**Table 1. Students’ background information for Study 1**

<b>Variable</b>		<b>N</b>	<b>%</b>
Level of study	Diploma	497	78.14
	Bachelor’s degree	139	21.86
Ethnicity	Malay	624	98.11
	Borneo natives	14	2.20
Study program	Information management	177	27.83
	Media management	242	38.05
	Communication and media study	217	34.12
Primary domestic language	Malay	606	95.28
	English	19	2.99
	Malay and English	1	0.16
	Borneo native languages	9	1.42
	Chinese	1	0.16

For Study 2, there were 533 students (108 males, 425 females) with age ranging from 18 to 46 ( $M=25.02$ ,  $SD=7.60$ ) who responded to the online survey. While the age range is almost similar to the earlier sample (min=18, max=43), this second sample has a much higher SD. In the earlier sample, there were only two persons who were 40 and 43 and 99.5% of them

were 25 or younger compared to 70.9% for this Study’s sample. In other words, this sample is more heterogeneous regarding age. As presented in Table 2, this sample is also highly ethnically homogenous with less than 7% being non-Malay.

**Table 2. Students’ background information in Study 2**

<b>Variable</b>		<b>N</b>	<b>%</b>
Ethnicity	Malay	495	92.9
	Borneo natives	18	3.4
	Chinese	13	2.4
	Indian	7	1.3
Level of study	Pre-university	13	2.44
	Diploma	170	31.89
	Bachelor	186	34.90
	Master	118	22.14
	PhD	42	7.88

***Instruments***

For all instruments, higher scores mean a higher level of the construct being measured. All surveys were accompanied by an informed consent page as per American Psychological Association’s recommendation.

***SEWS-Malay***

The SEWS-Malay comprises 16 items rated on an 11-point rating scale. The respondents were instructed to indicate the percentage of their confidence in their writing skills. On the online form, the scales were labelled with the number 0 (no confidence) to 10 (full confidence) to represent the percentage of confidence.

***General Self-Efficacy***

The Malay GSE (Abdullah, 2003) which was translated from the GSE-10 (Schwarzer, 1992) was adapted for use in this study. One word in item 5 had its spelling revised (‘baru’ to ‘baharu’). The ten items are rated on a Likert-type 5-point rating scale (1= very untrue, 5= very true) to respond to the instruction “How true are the statements in describing you?”. The Malay GSE has an internal consistency index of .85 (Abdullah, 2003).

***Self-Perceived Writing Competency***

Two items were written to measure self-perceived writing competency. The items are “*Apakah tahap kemahiran penulisan anda secara umum?*” (What is your general level of writing skills?) and “*Sejauh manakah kemahiran penulisan anda mencukupi untuk memenuhi keperluan pengajian?*” (To what extent is your writing skills sufficient to fulfil your study requirements?). The two questions are rated on a 7-point rating scale (1 = very poor, 7 = excellent) and (1 = not sufficient at all, 7 = more than enough respectively). The two scores are summed as a single writing competency index. The correlation between the two items in the validation sample is  $r(n = 636) = .782, p < .001$  which is strong enough to justify summing the scores into an index.

## **Procedures**

The permission to translate the SEWS was obtained via email from the lead author (Roger Bruning). The translation of SEWS was done using the back-translation method. A university lecturer with a background in psychology and 18 years of teaching experience translated the items into Malay. The items were then back-translated into English by two native Malay speakers with 11 and 10 years of English teaching experience. The former has professional translation and proofreading experiences while the latter is a certified Malay-English translator. At the same time, a native Malay speaker with a Malay-English certificate in translation produced another Malay version of the SEWS. The English versions were then compared for semantic equivalence. Discrepancies between the two versions were harmonized by the first two authors. This process resulted in the SEWS-Malay used in the next study.

A pilot study was done with an online form which comprises the SEWS-Malay and personal characteristics items. Additionally, the participants were encouraged to leave comments on the difficulties that they had in responding to the questions in the survey. The Cronbach's alpha for the overall scale was .951. The alphas for the subscale were all excellent: .919 (Ideation), .849 (Convention) and .925 (Self-regulation). No changes to the items were required based on the findings from the pilot study.

The full questionnaire set was then administered to a sample of university students to test its factor structure and convergent validity. The link to the online form was distributed to students through class representatives. At the same university, a group of students from one class was involved in a test-retest study. They were given the link to an online survey comprising the same instruments, except the GSE. This group was given the same questionnaire set four weeks later.

A second factorial validation study was conducted with another online survey. The link to the survey was distributed to post-secondary students via social media by post-graduate students taking a class with the first author. This convenience sampling is not targeting any university like in the earlier study.

The structural model of the SEWS was tested using confirmatory factor analysis in AMOS. Fit indices and their recommended cut-off point or range used in this study are based on Bruning et al. (2013): comparative fit index (CFI>.9), root-mean-square error of approximation (RMSEA<.10), and the standardized root-mean-square residual (SRMR<.05). Convergent validity and test-retest reliability are tested using Pearson correlation analysis.

## **RESULTS**

### ***Study 1***

The data has an acceptable fit to the original three-factor model with a slight model re-specification,  $\chi^2(100)=493.1$ ,  $p<.001$ , CFI=.958, SRMR=.046 and RMSEA=.079. The fit was achieved by covarying the error terms for items 6 and 9 from the Self-Regulation subscale. The standardized regression weights for each item and their respective factor are presented in Table 3.

The confirmed factors have excellent internal consistency. The Cronbach's alpha for Ideation, Self-Regulation and Convention were .949, .919 and .926 respectively. The average

score for Convention was the highest ( $M=7.86, SD=1.43$ ) followed by Self-Regulation ( $M=6.72, SD=1.57$ ) and Ideation ( $M=6.71, SD=1.53$ ). The distributions of all three sub-scales had negative skewness  $-.646, -.204,$  and  $-.191$  respectively (all  $SE=.097$ ). The Kurtosis statistic was positive for Convention (.058) and negative for Self-Regulation ( $-.250$ ), and Ideation ( $-.139$ ) and all three have  $SE=.194$ . Kolmogorov-Smirnov test for normality were all significant at  $.091(636), p<.001, .049(636), p=.001,$  and  $.057(636), p<.001$  respectively.

**Table 3. SEWS-Malay Standardized Regression Weights in Study 1**

Item	Estimate
SR11	.827
SR12	.847
SR13	.839
SR14	.788
SR15	.810
SR16	.776
CON6	.770
CON7	.873
CON8	.837
CON9	.889
CON10	.849
ID1	.901
ID2	.899
ID4	.876
ID3	.913
ID5	.853

The correlations of the SEWS-Malay sub-scales to GSE were significant and in the expected direction as presented in Table 4. This is evidence for convergent validity (both instruments measure self-efficacy) and, at the same time, there is not too much overlap among them. Additionally, the GSE was correlated to SWC with a weaker correlation indicating a lower degree of construct overlap.

The correlations between GSE and the SEWS-Malay sub-scales (from .343 to .438) were lower than the correlation among the sub-scales themselves (from .656 to .774). In other words, the SEWS-Malay sub-scales are much more related to each other than to the GSE. The items in SEWS-Malay are indeed discriminable from the GSE items. Further evidence of convergent validity was observed in the correlations between SWC and the SEWS-Malay sub-scales. Their correlations (from .606 to .710) were almost as high as the correlations among the sub-scales.

**Table 4. Correlation among Variables in Study 1**

	1	2	3	4
1. GSE				
2. Convention	.343**			
3. Self-Regulation	.438**	.679**		
4. Ideation	.417**	.656**	.774**	
5. Self-Perceived Writing Competence	.320**	.606**	.610**	.717**



Note: \*\*  $p < .001$

The test-retest study yields an acceptable level of the scores' temporal stability. The correlation between the measures are as follows: SWC ( $r = .581, p < .001$ ), Ideation ( $r = .576, p < .001$ ), Convention ( $r = .665, p < .001$ ), Self-regulation ( $r = .740, p < .001$ ). The Cronbach's alpha for SEWS-Malay from the first and second administrations were .956 and .975 respectively.

**Study 2**

Like the findings from Study 1, the data has an acceptable fit to the three-factor model.  $\chi^2(100) = 410.14, p < .001, CFI = .953, SRMR = .054$  and  $RMSEA = .076$ . The fit was achieved by co-varying the error terms of Convention items 6 and 7. The regression weights for the items presented in Table 5 are comparable to those in Study 1.

**Table 5. SEWS-Malay Standardized Regression Weights in Study 2**

Item	Estimate
ID1	.849
ID2	.869
ID3	.885
ID4	.798
ID5	.831
SR11	.751
SR12	.796
SR13	.824
SR14	.769
SR15	.760
SR16	.790
CON6	.698
CON7	.846
CON8	.864
CON9	.891
CON10	.775

The Cronbach's alpha for Ideation, Self-Regulation and Convention were .926, .903 and .912 respectively. The average scores for Convention were the highest ( $M = 7.18, SD = 1.43$ ) followed by Self-Regulation ( $M = 6.66, SD = 1.70$ ) and Ideation ( $M = 6.57, SD = 1.57$ ). The distributions of all three sub-scales had negative skewness  $-.818, -.429$  and  $-.217$  (all  $SE = .106$ ) respectively. The Kurtosis statistic was positive for Convention (.208) and negative for Self-Regulation (-.161) and Ideation (-.226) (all  $SE = .211$ ). Kolmogorov-Smirnov test for normality were all significant at  $.105(533), p < .001, .072(533), p < .001,$  and  $.059(533), p = .003$  respectively. The scores, skewness, kurtosis and normality indices echo the findings from Study 1.

As described in the Participants section, the range of the participant's age is wider compared to in Study 1, making it appropriate to include age in the correlation analysis. As presented in Table 6, the correlations among the sub-scales are strong, albeit lower than those found in

Study 1. Age does not correlate with any of the sub-scales. A non-linear relationship between age and Ideation is also not demonstrated. A similar pattern is also observed with the other two sub-scales.

**Table 6. Correlation among Variables in Study 2**

	1	2	3
1. Age			
2. Ideation	-.008		
3. Convention	-.043	.563**	
4. Self-Regulation	.012	.721**	.610**

Note: \*\*  $p < .001$

## DISCUSSION

The study was successful in translating the SEWS into Malay with good psychometric properties. Thus, the present study has extended the validity of evidence of SEWS from the original English and Spanish translations. The SEWS scores in this study are negatively skewed and similar to the findings with students in middle school and high school (Bruning et al., 2013). The consistent skewness and the lack of correlation between age and the SEWS-Malay scores raise the question of how much writing self-efficacy changes as students get older. Perhaps the difference could be more attributable to the level of study. Frank Webb et al., (2016) noted that younger students reported higher self-efficacy than older students. This idea was tested by comparing respondents with Diploma and Bachelor qualifications in Study 2. The selection of these groups is based on their size being roughly similar compared with other available groups.

Independent samples t-tests reveal findings that are consistent with Webb et al.'s (2016) observations: respondents with a Diploma had significantly higher writing self-efficacy than respondents with a Bachelor for Ideation ( $M=6.63$ ,  $SD=1.56$  vs  $M=6.12$ ,  $SD= 1.62$ ),  $t(286)=2.72$ ,  $p=.007$ ) and Self-Regulation ( $M=6.73$ ,  $SD=1.57$  vs  $M=6.26$ ,  $SD=1.77$ ,  $t(286)=2.36$ ,  $p=.019$ ). Future research could also examine the differences across types of tertiary education institutions. For example, universities and community colleges tend to attract students with different academic abilities and have different academic writing demands that may affect the attainment of writing mastery experience, which is a source of self-efficacy belief. Environmental differences, prior academic achievement, and attainment of mastery experience could help us understand the developmental trajectory of writing self-efficacy.

Based on the findings from this study, it is recommended that future research keep using the three sub-scale scores of SEWS-Malay instead of a total score. While not part of the objective of the study, it was found that a one-factor structure yields a poor fit,  $\chi^2(104)=2154.543$ ,  $p<.001$ , CFI=.781, SRMR=.09, and RMSEA=.176. Moreover, it was found that the three SEWS factors have different prediction performances for writing grades and teachers' ratings of students' self-regulation (Zumbrunn et al., 2020). Therefore, using a total score is not empirically supported.

The differences in the scores of the sub-scales deserve further examination. It is intuitively sensible, in retrospect, that Convention (technical knowledge) has a higher score than Self-Regulation (personal control) and Ideation (a creative cognitive process). Among L2 learners, it was found that linguistic self-efficacy (similar to Convention) was higher than self-regulatory self-efficacy (Golparvar & Khafi, 2021).

It would be important to examine whether these differences in the factors of writing self-efficacy are a real practical effect as predicted by the theory, or an artefact of the items used. Therefore, it is recommended to subject the SEWS-Malay to Rasch analysis which will allow the identification of how 'easy' or 'difficult' it is to endorse the items. If the Convention sub-scale has more easy items compared to the other two, then the items need to be revised to get a more accurate measure. The need for the item targeting analysis is supported by the skewed distribution (are there more easy items in the measure?) and the small number of items for each dimension (are there enough items to cover the whole range of ability?). Tests of convergent and divergent validities for SEWS-Malay are limited due to the lack of relevant instruments already validated. Even the Malay GSE used in this study has limited validation. The use of self-created two-item SWC has helped towards this effort.

### ***Limitations***

In both samples tested, the male to female ratio is about 2:8. The unequal group size does not facilitate comparison of scores between males and females. The gender differences tend to favour girls, although the difference could disappear at later school grade or when other variables like gender role and prior achievement are controlled (Webb et al., 2016). Given the complexity of gender differences, a meaningful analysis would require the inclusion of other variables that are beyond the scope of this study.

From the perspective of measurement, equal group size would be advantageous for measurement invariance analyses. This is a more pertinent analysis to be done. However, the invariance analyses could not have been done based on gender. Future studies could examine the measurement invariance by recruiting balanced groups. Rasch analysis could also be used to examine the item functioning by gender and other relevant personal characteristics.

### **CONCLUSION**

The SEWS-Malay is shown to have good psychometric properties for use in research. This is the first effort of its kind to the authors' knowledge. Additionally, a newly created brief measure of self-perceived writing competency (SWC) is shown to be useful in validating the SEWS-Malay. Research on students' writing in the Malay language could make use of these practical measures. While the current evidence is satisfactory for the stated research objectives, further work could focus on theory-based validation. Specifically, the effects of age and the type of educational institution deserve further attention to refine validation strategies. Moreover, the instrument could be expanded to measure writing self-efficacy in context-specific tasks like scientific writing.

### **REFERENCES**

- Abdullah, H. S. L. (2003). *A study of Malaysian school counselor resilience* (Doctoral dissertation, University of Malaya).
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman and Company.

- Bong, M. (2006). Asking the right questions: How confident are you that you can successfully perform these tasks? In F. Pajares & T. Urdan. (Eds.). *Self-efficacy beliefs of adolescents* (287 – 305). Information Age.
- Bruning, R., Dempsey, M., Kauffman, D., McKim, C., & Zumbunn, S. (2013). Examining dimensions of Self-Efficacy for Writing. *Journal of Educational Psychology, 105*, 25-38. <http://doi.10.1037/a0029692>
- Cohen, R. J., & Swerdlik, M. E. (2010). *Test development. Psychological testing and assessment* (7th ed.). Mc-Graw Hill.
- Cruse, A. (2004). *Meaning in language: An introduction to semantics and pragmatics*. Oxford University Press.
- Daniels, S., McCurdy, M., Whitsitt, L., Skinner, C. H., Schwartz-Micheaux, J., & White, J. (2020). Evaluating the effects of a writing self-efficacy intervention on writing quantity in middle school students. *Reading & Writing Quarterly, 36*(1), 48-64. <https://doi.org/10.1080/10573569.2019.1618226>
- Dempsey, M., Bruning, R., & Kauffman, D. (2010). *An empirical test of a new model of self-efficacy for writing*. Poster presented at the Annual Meeting of the American Educational Research Association, Denver, CO.
- Erkan, D. Y., & Saban, A. İ. (2011). Writing performance relative to writing apprehension, self-efficacy in writing, and attitudes towards writing: A correlational study in Turkish tertiary-level EFL. *The Asian EFL Journal Quarterly, 13*(1), 164-192.
- Evans, V., & Green, M. (2006). *Cognitive linguistics: An introduction*. Erlbaum.
- Flower, L., & Hayes, J. R. (1984). The representation of meaning in writing. *Written Communication, 1*, 120 –160. <http://doi.10.1177/0741088384001001006>
- Frank Webb, A., Vandiver, B. J., & Jeung, S. (2016). Does completing an enriched writing course improve writing self-efficacy of talented secondary students?. *Gifted Child Quarterly, 60*(1), 47-62. <https://doi.org/10.1177/0016986215605359>
- Golombek, C., Klingsieck, K. B., & Scharlau, I. (2019). Assessing self-efficacy for self-regulation of academic writing development and validation of a scale. *European Journal of Psychological Assessment, 35*(5), 751-761. <http://doi:10.1027/1015-5759/a000452>
- Golparvar, S. E., & Khafi, A. (2021). The role of L2 writing self-efficacy in integrated writing strategy use and performance. *Assessing Writing, 47*, 100504.
- Grenner, E., Johansson, V., van de Weijer, J., & Sahlén, B. (2020). Effects of intervention on self-efficacy and text quality in elementary school students' narrative writing. *Logopedics Phoniatrics Vocology, 1-10*. <https://doi.org/10.1080/14015439.2019.1709539>
- Hair, J. F., Jr, Babin, B. J., & Krey, N. (2017). Covariance-based structural equation modelling in the Journal of Advertising: Review and recommendations. *Journal of Advertising, 46*(1), 163-177.
- Hayes, J. R. (2012). Evidence from language bursts, revision, and transcription for translation and its relation to other writing processes. In M. Fayol, D. Alamargot, & V. W. Berninger (Eds.), *Translation of thought to written text while composing* (pp. 15–25). Psychology Press.
- Heidari, F., Izadi, M., & Ahmadian, M. V. (2012). The relationship between Iranian EFL learners' self-efficacy beliefs and use of vocabulary learning strategies. *English Language Teaching, 5*(2), 174-182. <http://dx.doi.org/10.6007/IJARPED/v8-i4/6519>
- Hetthong, R., & Teo, A. (2013). Does writing self-efficacy correlate with and predict writing performance? *International Journal of Applied Linguistics and English Literature, 2*(1), 157-167. <http://dx.doi.org/10.7575/ijalel.v.2n.1p.157>

- Jalaluddin, I. (2013). Predicting writing performance outcome via writing self-efficacy and implication on L2 tertiary learners in Malaysia. *World Applied Sciences Journal*, 26(5), 643-652. [http://www.idosi.org/wasj/wasj26\(5\)13/14.pdf](http://www.idosi.org/wasj/wasj26(5)13/14.pdf)
- Jalaluddin, I. (2017). Rural Area Learners' Writing Self-efficacy Development: A Qualitative and Quantitative Approaches. *Al-Ta'lim Journal*, 24(3), 255-265. <http://10.15548/jt.v24i3.336>
- Jalaluddin, I., Paramasivam, S., Husain, S., & Bakar, R. A. (2015). The consistency between writing self-efficacy and writing performance. *Journal of Language Teaching and Research*, 6(3), 545-552.
- Jalaluddin, I., Yunus, M. M., Yamat, H., & Jusoff, H. (2010). A case study on teacher's assistance in the writing classroom: a look at the effects on rural learners' writing self-efficacy. *International Journal of Learning*, 17(9), 27-42.
- Klassen, R. (2002). Writing in early adolescence: A review of the role of self-efficacy beliefs. *Educational Psychology Review*, 14(2), 173-203. <https://doi.org/10.1023/A:1014626805572>
- Langacker, R. (2008). *Cognitive grammar*. Oxford University Press. doi:10.1093/acprof:oso/9780195331967.001.0001
- Latif, M. M. A. (2019). Unresolved issues in defining and assessing writing motivational constructs: A review of conceptualization and measurement perspectives. *Assessing Writing*, 42, 100417. <https://doi.org/10.1016/j.asw.2019.100417>
- McCarthy, P., Meier, S., & Rinderer, R. (1985). Self-efficacy and writing: A different view of self-evaluation. *College Composition and Communication*, 36, 465-471. doi:10.2307/357865
- Meier, S., McCarthy, P. R., & Schmeck, R. R. (1984). Validity of self-efficacy as a predictor of writing performance. *Cognitive Therapy and Research*, 8(2), 107-120. <https://doi.org/10.1007/BF01173038>
- Mitchell, K. M., Harrigan, T., Stefansson, T., & Setback, H. (2017). Exploring self-efficacy and anxiety in first-year nursing students enrolled in a discipline-specific scholarly writing course. *Quality Advancement in Nursing Education*, 3(1), Article 4. <http://dx.doi.org/10.17483/2368-6669.1084>
- Mitchell, K. M., Rieger, K. L., & McMillan, D. E. (2017). A template analysis of writing self-efficacy measures. *Journal of Nursing Measurement*, 25(2), 205-223.
- Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading & Writing Quarterly*, 19(2), 139-158. <http://10.1080/10573560390143085>
- Pajares, F., & Johnson, M. J. (1994). Confidence and competence in writing: The role of writing self-efficacy, outcome expectancy, and apprehension. *Research in the Teaching of English*, 28, 313-331
- Ramos-Villagrasa, P. J., Sánchez-Iglesias, I., Grande-de-Prado, M., Oliván-Blázquez, B., & Martín-Peña, J. (2018). Spanish version of "Self-Efficacy for Writing Scale" (SEWS). *Anales de Psicología/Annals of Psychology*, 34(1), 86-91.
- Sabti, A. A., Md Rashid, S., Nimehchisalem, V., & Darmi, R. (2019). The impact of writing anxiety, writing achievement motivation and writing self-efficacy on writing performance: a correlational study of Iraqi tertiary EFL learners. *SAGE Open*, 9(4), 1-13. <https://doi.org/10.1177/2158244019894289>
- Sanders-Reio, J., Alexander, P. A., Reio, T. G., Jr., & Newman, I. (2014). Do students' beliefs about writing relate to their writing self-efficacy, apprehension, and performance? *Learning and Instruction*, 33, 1-11.
- Schraw, G. (2006). Knowledge: Structures and processes. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (2nd ed., pp. 245-264). Academic Press.

- Schwarzer, R. (1992). *Self-efficacy: Thought control action*. Hemisphere.
- Shah, P. M., Mahmud, W. H., Din, R., Yusof, A., & Pardi, K. M. (2011). Self-efficacy in the writing of Malaysian ESL learners. *World Applied Sciences Journal of Innovation and Pedagogy for Lifelong Learning*, 15, 08-11.
- Shell, D., Murphy, C., & Bruning, R. (1989). Self-efficacy and outcome expectancy mechanisms in reading and writing achievement. *Journal of Educational Psychology*, 81, 91-100.
- Singh, T. K. R., & Rajalingam, S. K. (2012). The relationship of writing apprehension level and self-efficacy beliefs on writing proficiency level among pre-university students. *English Language Teaching*, 5(7), 42-52. <http://doi.10.5539/elt.v5n7p42>
- Wong, M. S. L. (2005). Language learning strategies and language self-efficacy: Investigating the relationship in Malaysia. *RELC Journal*, 36(3), 245-269. <https://doi.org/10.1177/0033688205060050>
- Yilmaz Soylu, M., Zeleny, M. G., Zhao, R., Bruning, R. H., Dempsey, M. S., & Kauffman, D. F. (2017). Secondary students' writing achievement goals: Assessing the mediating effects of mastery and performance goals on writing self-efficacy, affect, and writing achievement. *Frontiers in Psychology*, 8, 1406.
- Yip, M. C. W. (2012). Learning strategies and self-efficacy as predictors of academic performance: a preliminary study. *Quality in Higher Education*, 18(1), 23-34. <http://doi:10.1080/13538322.2012.667263>
- Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, 31(4), 845-862. <http://dx.doi.org/10.3102/00028312031004845>
- Zimmerman, B. J., & Kitsantas, A. (2007). A writer's discipline: The development of self-regulatory skill. In S. Hidi & P. Boscolo (Eds.), *Motivation and writing: Research and school practise* (pp. 51-69). Kluwer.
- Zumbrunn, S., Broda, M., Varier, D., & Conklin, S. (2020). Examining the multidimensional role of self-efficacy for writing on student writing self-regulation and grades in elementary and high school. *British Journal of Educational Psychology*, 90(3), 580-603.

## APPENDIX

### The SEWS-Malay

#### Ideation (Penghasilan Idea)

1. Saya boleh memikirkan banyak idea untuk penulisan saya
2. Saya boleh menzahirkan idea saya dalam bentuk penulisan
3. Saya boleh memikirkan banyak perkataan untuk menghuraikan idea saya
4. Saya boleh memikirkan banyak idea yang asli
5. Saya tahu secara tepat di mana hendak meletakkan idea saya dalam penulisan

#### Convention (Konvensi)

6. Saya boleh mengeja dengan betul
7. Saya boleh menulis ayat-ayat yang lengkap
8. Saya boleh menggunakan tanda baca dalam ayat dengan betul
9. Saya boleh menulis ayat-ayat dengan nahu yang betul
10. Saya boleh memulakan perenggan-perenggan saya di tempat yang betul

**Self-Regulation (Pengaturcaraan Kendiri)**

11. Saya boleh fokus kepada penulisan saya sekurang-kurangnya untuk satu jam
12. Saya boleh mengelakkan sebarang gangguan semasa menulis
13. Saya boleh mula menulis tugas-tugas dengan cepat
14. Saya boleh mengawal kekecewaan saya semasa menulis
15. Saya boleh memikirkan tujuan penulisan saya sebelum menulis
16. Saya boleh terus menulis walaupun sukar