

Measurements of Validity, Factor Analysis and Reliability of the Self-Compassion Scale among School Counsellors

¹Nur Jannah Bali Mahomed, ^{*2}Ku Suhaila Ku Johari, ³Mohd Izwan Mahmud

ABSTRACT--- *Self-compassion is the ability of the individual to be kind and show compassion to oneself when facing difficulties. This study aims to evaluate the validity and reliability of the Self-Compassion Scale Neff (2003) which was translated into the Malay language and an exploratory factor analysis (EFA) was conducted. A total of 115 high school counsellors were involved in this study. This instrument was subjected to face validity and content validity assessment through the CVR (content validity ration) method of Lawshe (1975). A total of 9 experts in the field and languages evaluated the instrument and the CVR results were 0.98. Through EFA, the 8th item was identified for elimination from 26 items that constitute the dimensions of self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. The reliability of the instrument was calculated using Cronbach's Alpha coefficient with the result of 0.89. In conclusion, the Self-Compassion Scale in the Malay version meets the criteria of validity and reliability and can be used by researchers in the future to explore an individual's self-compassion.*

Keywords--- *Self-Compassion, Validation, Factor Analysis, Reliability, School Counsellors.*

I. INTRODUCTION

Self-compassion has a distinct significance in the field of counselling psychology where clients' concerns are often drawn based on the strength of well-being. Compassion is best understood as a way of communicating with oneself in times of suffering or distress. This element can be helpful especially for school counsellors who are often exposed to varieties of conflicting tasks at school. School counsellors often bear a huge responsibility where they also have to conduct counselling sessions for clients with serious issues and at the same time take care of their own needs. Therefore, self-compassion practices need to be prioritized and given attention to ensure that school counsellors can better deliver their services.

Self-compassion is an important element in human life and is a concern among Western scholars. Many studies have focused on the concept of self-compassion especially in observing and exploring the level of individual self-compassion from various backgrounds. However, the study on self-compassion is still relatively new in Malaysia. Neff (2003) explains that self-compassion is made up of three main elements in which self-kindness versus self-judgment, common humanity versus isolation and mindfulness rather than over-identification or excessive identification with self-emotion. These components interact to create a mind-set of self-compassion that is capable of accepting suffering as part of the experience of becoming a human being (Neff & Costigan, 2014).

¹Faculty of Education, National University of Malaysia.

^{2*}Faculty of Education, National University of Malaysia, suhaila@ukm.edu.my.

³Faculty of Education, National University of Malaysia.

Self-compassion is constructed based on Buddhist thought which refers to self-love when one experiences failure, uncertainty, or suffering. In addition, self-compassion can act as an effective response to painful emotions, and is also reflected as self-affection as one acts towards a loved one who is suffering. The first component of self-compassion is self-kindness, which is concerned and deals with suffering or pain when an individual is confronted with deficiencies, pressure as well as failure. Highly compassionate individuals are able to avoid harsh judgment, look at and treat themselves with kindness. Self-compassion can develop behaviours that enhance well-being, such as watching one's diet or taking a rest when needed (Neff, 2003). The second component is common humanity, which is the ability of individuals to help put their weaknesses into perspective which then acknowledges that humans share experiences of making mistakes and failures (Neff & Costigan, 2014). Meanwhile, mindfulness is the third component that engages the attention of the present without self-judgment (Kabat-Zinn, 1994) to which the purpose of mindfulness is to be aware of the present moment, and what it contains. Non-judgmental awareness allows practitioners to see pain or suffering without avoiding or exaggerating as well as calming themselves down with the practice of self-kindness when dealing with pain (Neff, 2011).

Therefore, self-compassion needs to be emphasised and become an important element in developing individual's well-being, especially for the school counselling profession that faces various challenges and student-related issues. Thus, self-compassion scale introduced by Neff (2003) is a potential instrument to measure self-compassion of school counsellors. The self-compassion scale has been widely used in the West in various target populations (Jay Miller et al., 2019; Norris, 2018). The reliability of this instrument is also high at .92 and therefore, original version of Neff (2003) shows that this measuring instrument is appropriate to measure school counsellors' self-compassion. This study aimed to translate the Self-Compassion Scale into the Malay language as there is still no study in Malaysia testing the validity and reliability of the instrument using exploratory factor analysis (EFA). Furthermore, this study could lead to new insight in measuring the counsellor's level of self-compassion in Malaysia in order to enhance the quality of their personnel and professionalism.

II. LITERATURE REVIEW

Self-compassion was derived from Theory of Social Mentality 1989 (Gilbert, 2016), which shows that individuals are connected to themselves through a system that initially evokes relationships with others. Social mentality is an internal system that produces patterns of cognition, influence and behaviour that enable social roles to be created. Based on previous studies, self-compassion is able to reduce stress and burnout (Norris, 2018; Jay Miller et al., 2019). Recently, Kim (2019) studied the effects of work environment factors and self-compassion on school counsellor burnout. The study on 312 school counsellors found out that the influence of self-compassion on burnout was stronger than organizational factors (i.e., type of job, work timing, job satisfaction) and personal factors (i.e. age, health status, hobbies) and, in addition, self-compassion is perceived to be able to significantly reduce burnout levels, although personal and organizational factors have a significant impact on burnout. Meanwhile, the study of Shinaberry (2019) highlighted the need for counsellors and counselling students to foster self-compassion and suggested to include the need of self-compassion discussion in school counselling student orientation sessions and during their internship supervision. In addition, students and professional counsellors need to practise self-compassion practices as set out in the code of ethics of professional organizations.

From other perspectives, a descriptive phenomenological study by Norris (2018) explored the life experiences of 11 counsellors in training that engaged them in compassionate intervention as part of their supervisory group training course. The results of the study concluded that self-compassion training was able to increase self-awareness and experience of participants wanting to engage in activities that could act as self-care. Self-compassion practices are important when school counsellors provide services to students, especially in times of crisis and school counsellors should practise self-compassion (Todd & Chehaib, 2019). This conflict is due to work stress such as high student counselling ratio and poor job clarity. Furthermore, with self-compassion practices, school counsellors may have more awareness of self-help in handling their own distress and have specific strategies to be incorporated into their daily work. In addition, self-compassion practices focusing on well-being can also reduce compassion fatigue and burnout. Mental health professionals have the tendency to get caught up in the suffering of their clients, which in turn negatively affects their psychological well-being and can lead to negative conditions, such as compassion fatigue (Schaafsma, 2018). It is found that self-compassion was negatively associated with stress, compassion fatigue, and positively related to compassion satisfaction. Therefore, self-compassion is a component that can help individuals, especially school counsellors, in dealing with the many crises of professional counselling services.

Self-compassion was measured using the Self-Compassion Scale questionnaire (Neff, 2003) and the measuring instrument was widely used and contained 26 items and six constructs namely self-kindness, common humanity, mindfulness, self-judgment, isolation and over-identified. This measure of self-compassion was translated using Brislin's back-to-back translation method in 1970. Brislin's (1970) model of translation approach is using translated instruments and it is a valid and reliable method for cross-cultural research. According to this model, a bilingual expert translates the text from the source or original language into the target language or language to be used and the second bilingual member without reference to the original language version again translates to the source language. If an error is found in the translated version after being compared to the original, then it needs to be retranslated without reference to the original version by another language specialist. This process is repeated until no error is found. According to Jones et al. (2001), this process is not the most efficient or most accurate with multiple dialects or regional interpretations of the same language. Therefore, he proposes the adaptation of the model by initially ensuring that there are two or more translators (from different regions where the language is used) independently but simultaneously developing the desired translation version. Holding group discussions with all translators reaching an agreement on the most accurate and easy-to-understand terms is recommended.

The validity of the instrument is proven when the interpretation of the test matches the objective of measurement and validity can also refer to suitability, effectiveness, accuracy and usefulness (Fraenkel et al., 2011). Furthermore, Wilson et al. (2012) explain the methodology of content validation using Lawshe's (1975) approach, which brings together a group of experts in the field to evaluate each instrument item on a 3-point scale: (a) "important," (b) "useful, but not essential," and (c) "not necessary." The content validity ratio or CVR, is a linear transformation of the ratio of the number of experts in the field that considers the item to be "important" to the number of experts in the field involved as panels. Especially

$$CVR = \frac{n_e - (N/2)}{N/2},$$

The number of experts, n_e in the field indicates the item is "important," and N is the number of experts in the field involved as panels. When all experts in the field rate the item as "important," the CVR value will be calculated as 1; when measuring item numbers as "important" is more than half but less than all, CVR values will be between 0 and 1; and when less than half of experts in the field rate items as "important," their CVR value will be negative. While these statistics are nothing more than a linear transformation of expert ratings in areas that condemn such things as "important," Lawshe's real contribution is to provide a critical table of values, founded by his colleague Lowell Schipper, to determine whether expert evaluations in the field exceed expectations levels at a given level. alpha-one alpha .05. CVR numerical values range from -1 to 1 (Lawshe, 1975). A high CVR score indicates a member's agreement on the item's requirements. The Lawshe (1975) method has been widely used to determine and measure the validity of content in various fields including education, healthcare, personnel psychology, organisational development and market research (Ayre & Scally, 2014).

III. METHODOLOGY

This study is to translate the Self-Compassion Scale from the English version into the Malay version. The researcher examines the validity and uses Exploratory Factor Analysis (EFA) to test the reliability of the instrument. The Self-Compassion Scale was developed by Neff (2003) which contained 26 items and six dimensions namely self-kindness, common humanity, mindfulness, self-judgment, isolation and over-identification. A total of 115 high school counsellors were involved in the study and researchers developed an online questionnaire for them to respond to the questionnaire. This instrument can measure the level of individual's compassion.

Table 1: Details of items for Self-Compassion Scale (SCS)

<i>Dimension In SCS</i>	<i>Positive Question Item</i>	<i>Negative Question Item</i>	<i>Total Item</i>
Self-Kindness	5,12,19,23,26		5
Self-Judgement		1,8,11,16,21	5
Common Humanity	3,7,10,15		4
Isolation		4,13,18,25	4
Mindfulness	9,14,17,22		4
Over-Identification		2,6,20,24	4
Total Item			26

IV. VALIDITY AND RELIABILITY

Validity and reliability are crucial for the instrument in ensuring the accuracy of any measurement. Reliability is the regularity and consistency of response scores from one instrument administration to the next (Fraenkel et al., 2011). The self-compassion scale has been translated from the English version into Malay version by four panels who are experts in both languages (Malay and English). The Malay questionnaire and the original version were given to a specialist in the field of counselling and psychological in order to check its face validity. Content validity, in turn, refers to the ability of a measuring instrument to measure what is intended to be based on a research theory framework (Tuckman, 1999). In this study, the researcher tested the validity of the self-compassion content scale by consulting with experts in the field to validate the items in the instrument. Researchers selected 9 experts in line with Polit et al. (2007) views, who estimated that three to ten experts should be selected to assess the validity of

the study instrument. Appointed experts were lecturers of psychology and counselling and excellent teachers in the Malay language. Researchers use CVR or Content Validity Ratio strategy using the following formulas;

$$CVR = \frac{n_e - (N/2)}{N/2},$$

n_e is the number of experts who valued the item and N is the number of experts. The CVR results show that the content validity for the self-compassion scale is 0.983. Items were refined and modified according to expert's suggestions and feedback prior to administering this questionnaire. Finally, the questionnaire Self-Compassion Scale Malay language version were distributed to the participants.

V. CONSTRUCT VALIDITY

Self-compassion scales through the EFA (Explanatory Factor Analysis) process and PCA (Principle Component Analysis) were used to assess construct validity to see if the dimensions of each item changed from previous studies. According to Hair et al. (2010), factor analysis (EFA) can be a very useful and effective multivariate statistical technique in compiling relevant data from larger sources, when variables are related, researchers need to gather variables that are highly correlated within a group and name the group. According to Hair et. al. (2010), in the process of EFA, several factors must be taken into account including the following: (a) Factor loading value for an item greater than or equal to 0.5 should be maintained (b) Kaiser value -Meyer-Olkin (KMO) was at a level greater than .50 to be taken to ensure that the sample size was sufficient to carry out EFA analysis and the KMO values also showed that the data did not involve serious multicollinearity; (c) The Bartlett's Test of Sphericity must be less than .05 to show the correlation between variables and items appropriate for EFA analysis; (d) Eigen values should be greater than 1 (> 1); (f) The cumulative value of the total variance is greater than 50 percent; (g) the value of communalities extraction is greater than .30; (h) Item overlapping factors are also eliminated as shown in the Rotated Component Matrix showing the correlation between the items and their factors after varimax rotation; and (i) the number of factors can be determined by the suitability of the item, the scree plot can indicate the number of major factors contributing to the variance of the overall variance of the tested variables, both theory and previous studies.

The Cronbach Alpha coefficient can indicate consistency at each scale and items can measure the same construct and can detect correlations among high items. According to Hair et al. (2010), each item contributing to the construct can be identified by looking at the correlation value of the item to the score (item-to-total correlation) and a range greater than 0.30 is acceptable. Reliability of a construct increases if items less than 0.30 are removed.

VI. RESULTS AND DISCUSSION

Factor loadings exceeded .5 per item except for item 8 showing negative values. In Table 2, the KMO test shows a .865 value for the self-compassion variable and indicates that the items are fit to perform factor analysis. While the Bartlett's Test of Sphericity is significant where $p = .00$ as shown in Table 2, this proves that the

correlation between items is appropriate for factor analysis. Subsequent communality items ranged from .58 to .78. The rotation of the 'varimax' method resulted in six factors with Eigen values greater than 1. Meanwhile, the item-to-total correlation value ranged from .33 to .77 which was greater than .3 except for the item 8. The Cronbach Alpha coefficient of these six factors was greater than .67 to .87, indicating that internal consistency values were within acceptable range ((Nunnally & Bernstein, 1994). Item 8 was eliminated from 26 items because factor loadings were less than .5. The total number of items for the Self-Compassion Scale is 25 items.

Table 2: KMO and Bartlett's Test

<i>KMO and Bartlett's Test</i>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.865
Bartlett's Test of Sphericity	Approx. Chi-Square	1723.611
	Df	325
	Sig.	.000

Whereas Cronbach Alpha's value for the Self-Compassion Scale Neff (2003) was .92 and the translated version was .89. Furthermore, Cronbach Alpha's reliability for each of the self-compassion factors for the Self-Compassion Scale in original language Neff (2003) and the translated Self-Compassion Scale are shown in Table 3. This finding shows that the Compassion Scale is suitable to be used in the Malaysian context and can measure school counsellor's self-compassion.

Table 3: Alpha Cronbach's Reliability of the English Version and the Translated Version

<i>No.</i>	<i>Factors/Sub-scale</i>	<i>English Version (n=391)</i>	<i>Translated Version (n=115)</i>
1	Self-Kindness	.78	.76
2	Self Judgement	.77	.67
3	Common Humanity	.80	.67
4	Isolation	.79	.80
5	Mindfulness	.75	.87
6	Over -identification	.81	.83

VII. CONCLUSION

School counselors are often exposed to various challenges including tension, stress and burnout (Kim & Lambie, 2018). Many past studies have shown that self-compassion can help to cope with stress or burnout or the stresses faced by professional counselling services. Therefore, the translated Self-Compassion Scale instrument can help counsellors to identify self-compassion levels and address service-related challenges and provide more efficient service to school students. The translated Self-Compassion Scale is easy to understand and can be a scale of instruments that can be used by the Malaysian Ministry of Education in developing high-quality and successful school counsellors. In addition, the Self-Compassion scale can be used at the training level in the Institutes of Higher Education to produce counsellors who are skilled in improving their personnel and professional development.

VIII. LIMITATIONS AND FUTURE STUDIES

The sample used only involved 115 people and their findings may not be generalised to all school counsellors. In the future, more counsellors should be involved in the study. Besides that, the sample of this study only involve high school counsellors and further research should focus on counsellors working in primary schools.

REFERENCES

1. Ayre, C., & Scally, A. J. (2014). Critical values for Lawshe's content validity ratio: Revisiting the original methods of calculation. *Measurement and Evaluation in Counseling and Development*, 47(1), 79-86.
2. Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185-216.
3. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2011). *How to design and evaluate research in education*. New York: McGraw-Hill.
4. Gilbert, P. (2016). *Human nature and suffering*. Abingdon: Routledge.
5. Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective*. New Jersey: Pearson.
6. Jay Miller, J., Lee, J., Shalash, N., & Poklembova, Z. (2019). Self-compassion among social workers. *Journal of Social Work*, 2019, 1-15.
7. Jones, P. S., Lee, J. W., Phillips, L. R., Zhang, X. E., & Jaceldo, K. B. (2001). An adaptation of Brislin's translation model for cross-cultural research. *Nursing Research*, 50(5), 300-304.
8. Kabat-Zinn, J. (1994). *Where you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion.
9. Laranjo, J., Bernier, A., & Meins, E. (2008). Associations between maternal mind-mindedness and infant attachment security: Investigating the mediating role of maternal sensitivity. *Infant Behavior and Development*, 31, 688-695.
10. Kim, H. J. (2019). The effects of work environmental factors and self-compassion on burnout of school counselors. *Journal of the Korea Academia-Industrial Cooperation Society*, 20(5), 343-351.
11. Kim, N., & Lambie, G. W. (2018). Burnout and Implications for Professional School Counselors. *Professional Counselor*, 8(3), 277-294.
12. Lawshe, C. H. (1975). A quantitative approach to content validity 1. *Personnel Psychology*, 28(4), 563-575.
13. Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223-250.
14. Neff, K. (2011). *Self-compassion: The proven power of being kind to yourself*. New York: Harper Collins.
15. Neff, K. D., & Costigan, A. P. (2014). Self-compassion, wellbeing, and happiness. *Psychologie in Österreich*, 2(3), 114-119.
16. Norris, C. A. (2018). *Counselor-in-training experiences of self-compassion training in group supervision*. PhD thesis, Corpus Christi: Texas A&M University.
17. Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York: McGraw-Hill.
18. Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in Nursing & Health*, 30(4), 459-467.
19. Schaafsma, J. L. (2018). *Compassion-Fatigue and Satisfaction: The Stress Buffering Effects of Mindfulness and Self-Compassion for Mental Health Professionals*. PhD thesis, University of Missouri-Kansas City.
20. Shinaberry, M. L. (2019). *Self-Compassion and Licensed Professional School Counselors: A Phenomenological Study*. PhD thesis, Athens: Ohio University.

20. Todd, A., & Chehaib, H. (2019). Exploring How School Counselors Practice Self-Compassion. *Journal of School Counseling*, 17(9), 1-27.
21. Tuckman, B. W. (1999). *Conducting educational research*. Texas: Harcourt Brace College Publishers.
22. Wilson, F. R., Pan, W., & Schumsky, D. A. (2012). Recalculation of the critical values for Lawshe's content validity ratio. *Measurement and Evaluation in Counseling and Development*, 45(3), 197-210.