

## Validity and Reliability of the Malay-Translated Version of the EPOCH Measure of Adolescent Well-Being Questionnaire

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### Abstract

The aim of this study is to assess the validity and reliability of the translated version of the EPOCH Measure of the Adolescent Well-Being by Kern et al. (2016). The EPOCH Measure of the Adolescent Well-Being was developed from theoretical models of happiness proposed by Martin Seligman known as PERMA model or Well-being theory that helps in measuring adolescents flourishing based on five positive characteristics; engagement, perseverance, optimism, connectedness and happiness. This questionnaire consists of 20 items. For the purpose of translating the scale, back-translation method was used. Then, the final translated version of this questionnaire was reviewed via six experts in the psychological and social sciences fields for the content validity. Meanwhile, the internal reliability was analysed using Cronbach's Alpha involving 132 participants. The respondents were members of Kafe @TEEN Adolescent Centre, Pulau Pinang aged from 13 years old to 18 years old from various backgrounds. Content Validity Index (CVI) value was 0.88 which is considered as good content validity. Overall reliability of this questionnaire was high at  $\alpha=0.90$ , with the values of each dimension are; engagement  $\alpha= 0.76$ , perseverance  $\alpha= 0.68$ , optimism  $\alpha= 0.74$ , connectedness  $\alpha=0.73$  and happiness  $\alpha=0.80$ . The measured reliability and validity of the translated questionnaire were sufficient to ratify its use among Malaysian adolescents.

**Keywords:** *Validity and Reliability, EPOCH Measure of the Adolescent Well-being, Flourishing, Well-Being, Adolescents*

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### Introduction

In 1990, Martin Seligman proposed a new branch in the psychological field known as positive psychology. Positive psychology focuses on what makes a life worth living, positive institutions, character strength and bringing out the best in the people. On other hand, traditional psychology focuses on curing or reducing mental illness or disease (Seligman, 2011). In simple words, positive psychology easily be understood as the study of happiness that examined how ordinary people can become happier and live more fulfilled lives (Vaughn, 2015).

The goal of positive psychology is to increase human flourishing and Seligman (2011) believed that human flourishing rests on five pillars which are positive emotions, engagement, relationships, meaning and accomplishment. These five pillars commonly known as PERMA Model or Well-being theory. Seligman (2011), adds that the five pillars which is chosen for their own sake in our efforts to flourish, are the rock-bottom fundamentals to human well-being.

In the well-being theory, it is explained that positive emotions (P) means feeling good while engagement (E) is described as being completely absorbed in activities. Relationships (R) means being authentically connected to others and meaning (M) interpreted as meaningful existence while achievement (A) define as a sense of accomplishment and success (Seligman, 2011).

Based on the PERMA Model, when an individual focus on those five elements, it aids in the individual's flourishing towards achieving the happiness they want. Complementing the model, Butler and Kern (2013) design a measure that helps people to monitor their well-being so that they can understand themselves better, note their

strength and weaknesses and find ways to more fully flourish in life. It is known as PERMA-Profilers that consists of 23 items where different profile may better suit different people.

To better suit the measure of adolescent's development Kern et al. (2016) adapted the PERMA-Profilers and design the EPOCH Measure of Adolescent Well-being questionnaire. The questionnaire tests for five positive characteristic that can help to foster adolescents well-being which are engagement, perseverance, contentedness, optimism and happiness or known as EPOCH. Engagement (E) refers to fully involved in an activity, perseverance (P) means determination to achieve goal despite any challenge, optimism (O) is described as positive thinking about the future, connectedness (C) is feeling close to others and happiness (H) is the feeling of happiness.

This current study will focus on translating the English version of the EPOCH Measure of the Adolescent Well-being into Malay version. The importance of the translation is to make the questionnaire easily be understood by the adolescents in Malaysia as children learn better with their mother tongue, in this case, Malay (UNESCO,2005). Other than that, this study also serves the purpose to validate and test the reliability of the translated questionnaire to ensure the language used and the content used are compatible with the Asian context especially for the Malaysia adolescents.

In addition, this translated questionnaire will help in enhance the study of adolescents well-being in Malaysia. In Malaysia, there are *Indeks Belia Malaysia 2015* that are used in measuring well-being among youth (15 years old to 30 years old) conducted by the government in larger scale (Yusof et al., 2015). *Indeks Belia Malaysia (IBM)* was used as an indicator to publish youth policy at the national

level. In contrast, the Malay version of the EPOCH Measure of Adolescent Well-being will be helpful in measuring adolescent well-being more precisely design to adolescents that are aged between 10 to 18 years old. By the adolescents aware of their well-being, they will be guide towards achieving flourishing life thus flourishing generation will born.

**Literature review**

There are lots of study about adolescents well-being conducted in Malaysia. However, most of the study use psychological well-being questionnaire by Ryff (1989) (Naeemi et al., 2015; Roslan et al., 2017; Mariani, Abu Samah & Filzah Nasuha, 2017; Nabilla et al., 2018). However, the EPOCH Measure of the Adolescent Well-being never been used in the study of adolescents well-being in Malaysia.

Kern et al. (2016), created the measure of EPOCH Measure of the Adolescent Well-being based on the well-being theory. In the study, 4,480 adolescents aged from 10 years old to 18 years old from United States and Australia was involved. This measure compressed 60 items into 20 items after the reliability and validity was tested throughout 10 series of study. Kern et al. (2016), had contributed hugely to the well-being theory by design a measure that address the positive psychological functioning of an adolescent. However, further validation of the measure is needed to better suit the other population groups and examine the extent to which it predicts long-term outcomes.

Hence, the translation of the questionnaire into Malay language is necessary so that it is compatible with the Malaysian context and to offer a new perspective to study adolescents flourishing in Malaysia. Zeng and Kern (2019), translated the EPOCH Measure of Adolescents Well-being should to the Chinese version as it will helps Chinese adolescents track their positive psychological functioning and plan towards flourishing life. The study of the Chinese EPOCH Measure of Adolescent Well-being involved 17,854 adolescents in primary and secondary school that test the internal and cross-time consistency and content, convergent and divergent validity. Then, the result of the study confirmed that EPOCH Measure of Adolescent Well-being are useful in measuring adolescents well-being across cultures.

**Methodology**

This descriptive study is meant to analyse the validity and reliability of the EPOCH Measure of Adolescent Well-being questionnaire. Thus, this section reviews the process of the study that was divided into three phase which are Phase 1: Translation procedure; Phase 2: Validation procedure and Phase 3: Reliability testing.

**Phase 1: Translation procedure**

The EPOCH Measure of Adolescent Well-being questionnaire will be translated into Malay language from English language. The translated version of the questionnaire will make it easier to understand and more relevant to the Malaysian adolescents. Hence, it is applicable to be used among adolescents in Malaysia. Back translation method was used for the translation purpose. Bradley (2013), said that back translation refers to the translation of the questionnaire from language X to language Y, which then translated back to language X. Then, both of this translation will be compared to ensure the translation use an appropriate word and does not alter the original meaning. This translation process involved two language experts which are Puan Nor Aziela and Puan Nur Azalina. At first, Puan Nor Aziela translated the English version of the questionnaire into Malay version, then it was translated back into English language by Puan Nur Azalina. In order, to strengthen the translation process, both of them discuss together to ensure the accuracy of the language used and it is aligned with the original meaning of the questionnaire.

After this process, the translated questionnaire was passed to the experts in psychological and social sciences field to be reviewed for the content accuracy.

**Phase 2: Validation procedure**

**Content validity**

Domino and Domino (2006), defines content validity as the whether the questions of the test adequately cover the dimension to be measured. De Vet et al. (2011), said that content validity should be assess by the experts in the related field. This process involved 6 panels which are experts in psychological and social sciences field.

All the experts were given an evaluation form to assess the Malay version of the questionnaire. In that form, they assessed based on three dimensions which are item consistency to the content area, item wording clarity and perceived usefulness of an item using the scale 1 = excellent and 0 = poor. They also can leave a comment on the provided space. Then, the content validity index calculated.

**Phase 3: Reliability testing**

For the reliability testing, internal consistency was analysed. Internal consistency reliability refers to how different items measure the same issue (Sharma & Petosa, 2014). In this study, there were 132 participants involved was chosen by purposive sampling technique. They were the members of Kafe@TEEN Adolescent Center, Pulau Pinang aged from 13 years old to 18 years old. In total, there 66 male and 66 female adolescents participated in this study.

Instrument used in this study is the EPOCH Measure of the Adolescent Well-being Malay version questionnaire. It consisted of 20 items that were divided into five domain which are Engagement (4 item), Perseverance (4 item), Optimism (4 item), Connectedness (4 item) and Happiness (4 item). For the analysis of the internal consistency reliability, Cronbach’s Alpha was used.

**Results**

**Phase 1: Translation procedure**

This questionnaire was successfully translated into the Malay version by the language experts. It consisted of 20 items that have five domains which are Engagement, Perseverance, Optimism, Connectedness and Happiness or known as EPOCH that purposely design to measure flourishing among adolescents specifically. Each item measured using 5-Likert scale range from 1= Almost Never (*Tidak pernah*) to 5= Almost Always (*Sangat Kerap*).

**Phase 2: Validation procedure**

**Content validity**

Table 1 showed that the value for the content validity index is 0.88. Polit, Beck and Owen (2007), suggest that Content Validity Index (CVI) of 0.78 or higher for three or more experts considered as good content validity. Thus, this clarify that this questionnaire is relevant to be used. However, there is recommendation suggest by the experts that had been duly modified by the researcher as shown in Table 2.

The result of the content validity index as in Table 1 below:

**Table 1: Content Validity Index**

Experts	Item consistency	Clarity	Usefulness	Total score
Lecturer 1	19/20	18/20	18/20	55/60
Lecturer 2	18/20	17/20	18/20	53/60
Lecturer 3	17/20	17/20	17/20	51/60
Lecturer 4	18/20	18/20	17/20	53/60
Lecturer 5	18/20	16/20	17/20	51/60
Lecturer 6	17/20	17/20	18/20	53/60
Total score				316/360
Content validity index				0.88



**Table 2:** Amendment of questionnaire based on experts' recommendation

Malay version		English version
Before Amendment	After Amendment	
Saya optimis tentang masa depan saya.	Saya optimis/ mengharapkan yang terbaik tentang masa depan saya.	I am optimistic about my future

**Phase 3: Reliability testing**

According to Rubin and Babbie (2010), the internal consistency reliability considered excellent when the Cronbach's Alpha value is 0.90 or above. Meanwhile, for the Cronbach's Alpha value range from 0.80 to 0.89 categorized as good and somewhat lower alphas are acceptable for short instruments (Rubbin & Babbie, 2010). Nunally (1978), said that the Alpha 0.70 considered moderate and acceptable.

**Table 3:** Analysis of the internal consistency reliability

Domains	Number of items	Cronbach's Alpha
Engagement	4	0.76
Perseverance	4	0.70
Optimism	4	0.74
Connectedness	4	0.73
Happiness	4	0.80
Overall	20	0.90

Based on Table 3, it showed that this instrument had an excellent reliability with Alpha value 0.90. Then, the happiness domain received a good reliability ( $\alpha=0.80$ ). In other hand, the other four domains were acceptable which are Engagement ( $\alpha=0.76$ ), Perseverance ( $\alpha=0.70$ ), Optimism( $\alpha=0.74$ ) and Connectedness ( $\alpha=0.73$ ). Hence, this result indicates that this questionnaire is reliable to be used in among Malaysian adolescents.

**Discussion**

The Malay version of the EPOCH Measure of Adolescent Well-being will add the toolbox measure in measuring adolescent flourishing in Malaysia. There are others measure that commonly used in the study of adolescents flourishing in Malaysia such as *Indeks Belia Malaysia (IBM)* and psychological well-being (Ryff,1989). However, those measure does not specifically design for adolescent group (13-18 years old). Sobri, Mohd Hashim and Mohammad (2008), found that recently the study of flourishing in Malaysia are more focused among workers.

As the content validity measure of this translated questionnaire, it showed that the Content Validity Index (CVI) value was 0.88 which is considered good. In other ways, it means that 88 percent the experts agreed on those content. Meanwhile, the reliability for this questionnaire measure using internal consistency reliability. The Cronbach's Alpha value showed that this questionnaire has high reliability with the value 0.90. Those result indicates this questionnaire are acceptable to be used in Malaysian context among adolescents and act as a new contribution to the psychology field in Malaysia.

**Conclusion**

In conclusion, the EPOCH Measure of the Adolescent Well-being questionnaire had been successfully translated into Malay language from English language. Throughout the three phases process of translation procedure, validation procedure and reliability testing it is proven that this translated questionnaire are valid and reliable to be used among adolescents in Malaysia. It had a good content and

excellent consistency. Lastly, it is suggested that this translated questionnaire will be used among other group of adolescents in Malaysia in order to enrich the study of adolescents flourishing in Malaysia.

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**Appendix**



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Malay version of the EPOCH Measure of Adolescent Well-Being Questionnaire

No	Sejauhmanakah anda bersetuju dengan pernyataan di bawah?	1 Tidak pernah	2 Kadang- kadang	3 Sederhana	4 Kerap	5 Sangat Kerap
1	Terdapat orang di sekeliling untuk saya berkongsi berita baik.					
2	Saya akan selesaikan apa yang saya mula.					
3	Saya optimis/mengharapkan yang terbaik tentang masa depan saya.					
4	Saya berasa gembira.					
5	Saya menikmati sesuatu aktiviti yang dilakukan sehingga tidak menyedari masa yang berlalu.					
6	Saya banyak berseronok.					
7	Saya dipengaruhi sepenuhnya apabila melakukan sesuatu.					
8	Saya suka akan kehidupan.					
9	Apabila melakukan kerja sekolah, saya akan lakukan hingga selesai.					
10	Terdapat orang di sekeliling untuk saya berkongsi masalah.					
11	Saya melibatkan diri saya sepenuhnya dalam aktiviti yang dilakukan sehingga melupakan perkara lain.					
12	Saya tidak sedar akan masa yang berlalu apabila mempelajari sesuatu yang baharu.					
13	Saya mengharapkan yang terbaik dalam situasi yang tidak menentu.					
14	Terdapat golongan yang mengambil berat tentang diri saya.					
15	Saya merasakan perkara yang baik akan berlaku,					
16	Saya mengambil berat tentang rakan-rakan saya.					
17	Saya melakukan sesuatu mengikut perancangan.					
18	Saya percaya terdapat penyelesaian bagi setiap perkara yang sukar.					
19	Saya seorang yang bekerja keras.					
20	Saya seorang yang ceria.					