Adaptation of EPOCH Measure of Adolescent Well-being in Bahasa Indonesia

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Abstract—Research on psychological well-being has been done in many countries, including Indonesia. However, the instruments for psychological well-being measurement available in Bahasa Indonesia are limited. This study aimed to adapt the EPOCH Measure of Adolescent Well-being which was developed by Kern et.al. [1] in Bahasa Indonesia. The EPOCH Measure of Adolescents Well-being assesses five positive psychological characteristics, i.e. Engagement, Perseverance, Optimism, Connectedness, and Happiness [1]. The adaptation of the instrument was done through some stages as suggested by Beaton [2]. The adaptation process was done through translation, synthesis, back translation, experts review and pre-testing. The translated version of the instrument was distributed to 40 junior high school students to check the readability of the instrument. The final version of the translated instrument was then tested to 514 junior high school students in Yogyakarta, Indonesia. Item total correlation shows that there are 18 items that shows high correlation (r.t.t .360 - .505) and 2 items that shows low correlation (r.t.t .173 and .289). The translated version of the instrument shows reliability of the alpha coefficient .842. There is a need to do improvement on the translation on the items which has low item total correlations

Keywords—Psychological wellbeing, EPOCH Measure of Adolescent Well-being

I. INTRODUCTION

A healthy emotional and psychical condition is part of the health concept as a whole [3]. A whole healthy condition are defined as overall wellbeing conditions, both physically, mentally and socially and not only based on the absence of certain diseases or weaknesses [3]. Wellbeing is defined as a situation where individuals can manage stress experienced in everyday life, can work productively, and can contribute to the surrounding community [3]. Students’ psychological well-being has become an important topic in education. Measurement in education conducted by PISA (Program for International Student Assessment) has also considered the importance aspect of the psychological well-being of students in addition to abilities in the fields of science, reading and mathematics [4]. Research on wellbeing has been carried out in many countries, including in Indonesia. Karyani et.al. [5] has examined the well-being dimensions of high school students aged 12-15 years. Rachmayani & Ramdhani [6] have also adapted the language and culture of the Psychological Well-being (PWB) Scale from Ryff & Keyes.

II. LITERATURE REVIEW

EPOCH Measure of Adolescents Well-being is developed based on the theory of flourishing from Seligman which stated that well-being consists of 5 interrelated domains, namely positive emotion, engagement, positive relationship with others, a sense of meaning or purpose in life, and accomplishment (PERMA) [1]. Instrument for measuring well-being for adolescents need to be distinguished from instrument for measuring well-being for adults considering the peculiarities of individuals in this stage of life [1]. Adolescents is seen as a period of life which is susceptible to the emergence of deviant behavior. It is also seen as an important period to build foundations of behavior that can affect the mental health of adolescents [7]. EPOCH Measure of Adolescent Well-being measures five psychological characteristics in adolescents that can have a positive effect on adulthood later [1]. This measuring instrument is intended to be a measuring instrument used together with batteries to measure well-being in adolescents.

The EPOCH Measure of Adolescent Well-being measures five psychological positive characteristics, namely Engagement, Perseverance, Optimism, Connectedness, and Happiness (EPOCH) [1]. Engagement is defined as a person’s ability to be fully involved in the activity he is doing. This very high involvement is known as “flow”. Perseverance is the ability to be persistent in completing tasks despite facing obstacles. Optimism is a hope and confidence in a better future. Connectedness is explained as the belief that individuals have good relationships with others, feel cared for, valued and loved by others. Happiness is a positive inner situation and a feeling of satisfaction in an individual’s life.

Considering that the EPOCH Measure of Adolescents Well-being is developed in a country with a different cultural background from Indonesian culture, adaptation needs to be done in order to obtain an Indonesian version of this instrument. Adaptation
in this research is done using the adaptation stages of Beaton, et al [2]. The adaptation process is carried out by translating original items into Indonesian. The translation was carried out by two translators, the first translator had an understanding of the concept of psychological well-being while the second translator had no understanding of the concept of psychological well-being. The result of the two translations were then synthesized. It was then translated back into English (back translation) by two translators who have English education background. The result of back translation is then compared with the original version of the instrument. A review to the translation version of the instrument and necessary corrections to the translation was conducted. The instrument is then consulted to experts to get comments. The pre-final instrument was then trialed to know its readability and then tested on research subjects.

III. METHODOLOGY

A. Research Subjects

Subjects in this study were 514 students of the junior high school (12-13 years old) from five high schools in Sleman, Yogyakarta. The sampling technique used is convenience sampling. Fraenkel and Wallen [8] mentioned that convenience samples are a number of subjects available in a study. In this study, the subjects are students from five junior high schools in Sleman, Yogyakarta who are willing to be the subjects of this research.

B. Instrument

EPOCH Measure of Adolescent Well-being consists of 20 items that reveal aspects of Engagement, Perseverance, Optimism, Connectedness and Happiness. This instrument has 2 sets of response options. Response options for items number 1-11 are "Almost never", "Sometimes", "Often", and "Almost always" with a score of 1 to 5. While response options for items number 12-20 are "Not at all like me ", "A little like me","Somewhat like me", "Mostly like me", and "Very much like me ". The score of the response is 1 to 5. The item distribution of the instrument is presented in Table 1.

C. Data Analysis

Data analysis was carried out by testing the reliability of the adaptation version of the instrument with Alpha Cronbach reliability test. The analysis also calculates the correlation of items with total (item total correlation). The testing of reliability and item-total correlation are performed with SPSS Version 21. The list of original items and adaptation items as well as the item-total item correlation value are shown in Table 2.

### TABLE I. ITEMS DISTRIBUTION

<table>
<thead>
<tr>
<th>No</th>
<th>Domain</th>
<th>Item Number</th>
<th>Total Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Engagement</td>
<td>5,7,11,12</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Perseverance</td>
<td>2,9,17,19</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Optimism</td>
<td>3,13,15,18</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Connectedness</td>
<td>1,10,14,16</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Happiness</td>
<td>4,6,8,20</td>
<td>4</td>
</tr>
</tbody>
</table>

### TABLE II. ORIGINAL ITEMS, ADAPTATION ITEMS, AND ITEM-TOTAL CORRELATION VALUES.

<table>
<thead>
<tr>
<th>No</th>
<th>Item Number</th>
<th>Original Items</th>
<th>Adaptation Items</th>
<th>Item-total correlation</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>When something good happens to me, I have people who I like to share the good news with.</td>
<td>Aku merasa baik dalam hidupku</td>
<td>Apabila ada sesuatu yang menggembirakan saya, ada teman/orang dengan siapa saya dapat mengungkapkan perasaan saya.</td>
<td>.416</td>
<td>Item can be used</td>
</tr>
<tr>
<td>2</td>
<td>I finish whatever I begin</td>
<td>Kalau aku sudah memulai sesuatu, aku akan menyebutkannya sampai tuntas.</td>
<td>.445</td>
<td>Item can be used</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I am optimistic about my future</td>
<td>Aku memiliki harapan yang baik terhadap masa depan.</td>
<td>.454</td>
<td>Item can be used</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I feel happy</td>
<td>Aku merasa bahagia dalam hidupku.</td>
<td>.505</td>
<td>Item can be used</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>When I do an activity, I enjoy it so much that I lose track of time</td>
<td>Saat melakukan suatu kegiatan, aku sangat menyenangkan sampai-sampai aku lupa waktu.</td>
<td>.173</td>
<td>Item needs revision</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I have a lot of fun</td>
<td>Aku punya banyak pengalaman yang menyenangkan.</td>
<td>.503</td>
<td>Item can be used</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I get completely absorbed in what I am doing</td>
<td>Aku sungguh-sungguh asyik dalam menyelesaikan pekerjaan yang sedang dilakukan.</td>
<td>.385</td>
<td>Item can be used</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I love life</td>
<td>Aku mencintai hidupku.</td>
<td>.432</td>
<td>Item can be used</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I keep at my schoolwork until I am done with it</td>
<td>Aku menyelesaikan tugasan-tugasan sekolah sampai.</td>
<td>.454</td>
<td>Item can be used</td>
<td></td>
</tr>
</tbody>
</table>

The testing of reliability was carried out by testing the reliability of the adaptation version of the instrument with Alpha Cronbach reliability test. The analysis also calculates the correlation of items with total (item total correlation). The testing of reliability and item-total correlation are performed with SPSS Version 21.
10 When I have a problem I have someone who will be there for me.

When I have a problem, I have someone who will be there for me.

Item can be used

11 I get so involved in activities that I forget about everything else.

Aku sungguh-sungguh berkonsentrasi dalam kegiatan yang sedang kulakukan sampai-sampai aku melupakan hal lainnya.

Aku sungguh-sungguh berkonsentrasi dalam kegiatan yang sedang kulakukan sampai-sampai aku melupakan hal lainnya.

Item needs revision

12 When I am learning something new, I lose track of how much time has passed.

Saat mempelajari hal baru, tidak sadari lagi banyak waktu yang telah kugunakan.

Saat mempelajari hal baru, tidak sadari lagi banyak waktu yang telah kugunakan.

Item can be used

13 In uncertain times, I expect the best.

Dalam situasi yang tidak menentu, aku tetap berkeyakinan bahwa aku akan mendapatkan yang terbaik bagiku.

Dalam situasi yang tidak menentu, aku tetap berkeyakinan bahwa aku akan mendapatkan yang terbaik bagiku.

Item can be used

14 There are people in my life who really care about me.

Aku sungguh-sungguh peduli padaku.

Aku sungguh-sungguh peduli padaku.

Item can be used

15 I think good things are going to happen to me.

Aku berkeyakinan bahwa hal-hal terbaiklah yang akan terjadi padaku.

Aku berkeyakinan bahwa hal-hal terbaiklah yang akan terjadi padaku.

Item can be used

16 I have friends that I really care about.

Aku punya teman-teman yang sungguh-sungguh aku perhatikan.

Aku punya teman-teman yang sungguh-sungguh aku perhatikan.

Item can be used

17 Once I make a plan to get something done, I stick to it.

Apabila aku membuat rencana untuk mencapai sesuatu, aku akan memenuhi rencana tersebut.

Apabila aku membuat rencana untuk mencapai sesuatu, aku akan memenuhi rencana tersebut.

Item can be used

18 I believe that things will work out, no matter how difficult they may seem.

Aku yakin bahwa segala sesuatu akan berjalan dengan baik, meskipun kelihatannya sulit.

Aku yakin bahwa segala sesuatu akan berjalan dengan baik, meskipun kelihatannya sulit.

Item can be used

IV. RESULTS AND DISCUSSION

A. Adaptation Result of Instrument

The adaptation process is carried out following the scale adaptation steps of Beaton [2], which include:

1. Translation phase

Translation of instruments from English to Bahasa Indonesia was carried out by two translators. The result of the two translations were similar on domains of perseverance, optimism, connectedness, and happiness. However, in the domain of engagement, for item number 5 (When I do activity, I enjoy it so much that I lose track of time) and item number 11 (I get so involved in activities that I forget about everything else) there are differences in translation between translators 1 and translator 2 so that the results of the translation need to be synthesized. Item number 5 (When I do an activity, I enjoy it so much that I lose the track of time) was translated into "Saat melakukan suatu aktivitas, aku sangat menikmatinya sampai-sampai aku lupa waktu". Whereas item number 11 (I get so involved in activities that I forget about everything else) was translated into "Aku sungguh-sungguh berkonsentrasi dalam kegiatan yang sedang kulakukan sampai-sampai aku melupakan hal lainnya". There is a discussion for item number 11 to decide the use of the word "sangat terlibat (highly involved)" or "asyik mengerjakan (engrossed in work)" or "terfokus (focused)". After getting input from the experts review, the word used in the instrument is "sungguh-sungguh berkonsentrasi (highly concentrated)".

2. Back translation

The back translation was done by 2 translators who were not involved in the initial translation into the Indonesian version. The result of back translation compared with the original version of the instrument and was considered as equivalent.

3. Expert review

The translation version of the instrument was then reviewed by two experts. There was comments on words selection and translation to improve the readability of the instrument. The translation version of the instrument was then revised according to the experts’ comments.
4. Pretesting

The revised instrument was then tested for readability for 40 junior high school students. At this stage there is a note that the use of the word "optimist" (item number 3) and "hard worker" (item number 19) is less well understood by the subject. Therefore, revisions are made to both of these items. The word "optimist" is replaced with the word "have good expectations". For the word "hard worker" is replaced with "do everything possible".

5. Test Trial of the Instrument

The results of the test trial showed that the reliability of the measuring instrument was obtained by the alpha coefficient (Cronbach's alpha coefficient) of 0.842. Calculation of item correlation with total (item total correlation) indicates that out of 20 items there are 18 items that can be declared eligible because they have item correlation values above 0.3. The items have item correlation values ranging from 0.360 - 0.505. There are 2 items that need to be revised as they have item correlation values below 0.3 (low). Items that have an item correlation value at least 0.3 can be declared eligible as part of the test [9].

B. Discussion

The purpose of this study was to adapt the EPOCH Measure Adolescent of Well-being [1] instrument into Indonesian. This instrument has 20 items consisting of 5 domains, namely Engagement, Perseverance, Optimism, Connectedness and Happiness. A high total score indicates a high level of psychological well-being in adolescents. The result of the adaptation of the instrument showed that out of the 20 items, there are 18 items that have a high correlation item value, so that they can be used in the instrument and there are 2 items (item number 5 and number 11) that need to be revised because these items showed low item-total correlation values (below 0.3).

Beaton [2] states that the adaptation of items in instrument must pay attention to the equivalence between the original version and the adaptation version. This equivalence includes semantic aspects, use of idioms, subject experiences and equivalent concepts used. The domains of perseverance, optimism, connectedness, and happiness expressed in this instrument can be adapted into Indonesian properly because they have corresponding equivalents in Bahasa Indonesia. This also affects to the fulfillment of item-total correlation values which is a criterion for being part of a test [9]. However, it is not easy to obtain equivalence in terms of subject concepts and experiences for domain engagement. In this case, the subject's experience in experiencing flow (very high involvement in the activity s/he is doing) is likely to be rarely experienced by these teens. Especially in this study the age of the subject is in the age range of 11-13 years where external factors still have a lot of influence on the activities carried out by individuals. In this instrument, out of 4 items which revealed the domain of engagement, there were 2 items that showed low item-total values correlation (below 0.3). These 2 items need to be revised. These items are item number 5 i.e. “Saat melakukan suatu aktivitas, aku sangat menikmatinya sampai-sampai aku lupa waktu (While doing an activity, I enjoy it so much that I forget the time) (rtt = 0.173) and item no.11 i.e. "Aku sungguh-sungguh berkonserntasi dalam kegiatan yang sedang kulakukan sampai-sampai aku melupakan hal lainnya" (I really concentrate on the activities I'm doing - until I forget the other thing ) (rtt = 0.289). In the adaptation of this instrument, these two items need to be revised.

V. Conclusion

In this study the Indonesian version of the EPOCH Measure of Adolescent Well-being has a Cronbach alpha reliability value of 0.842. Of the 20 items used to reveal the 5 domains in this instrument, 18 items showed high item-total correlation values so that the items could be used in adaptation version of the instrument. There are 2 items in the adaptation version of the instrument that need to be revised (rtt < than 0.3) so that it can more accurately reveal the engagement domain in adolescents.

The limitation of this study is that the subjects involved in this study were adolescents aged 12-13 years so that they did not fully represent the age range in the category of adolescents. For that reason, the next research needs to increase the variation in the age range of subjects that fall into the category of adolescents. In addition, a more in-depth statistical analysis can also be carried out. Other studies can also look more deeply at the concept of engagement and flow in carrying out activities in adolescents.

REFERENCES


