Translation, validity and reliability of Multidimensional Self-Concept Scale (MSCS) questionnaire among Malaysian teenagers

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Abstract

This study aims to translate the English edition of Multidimensional Self-Concept Scale (MSCS) questionnaire into Malay language, to validate it and to make it reliable. The MSCS constructed by Bracken (1992) to evaluate self-concept in accordance to Multidimensional Self-Concept Model (MSCM). MSCS consists of 150 items (74 positive items, 76 negative items) which assess the 6 subscales of self-concept; social self-concept, ability self-concept, affective self-concept, family self-concept, physical self-concept and academic self-concept. The process of translation into Malay language using the back translation method was suggested by Brislin, Lonner and Thondike (1973). The items in MSCS are translated according to local values and culture by 3 Malay language panels and 3 English language panels. For the face validity evaluation, 8 secondary school students and 3 Malay language experts involve in the betterment of language, sentence structures and comprehension of terms in MSCS. Subsequently, MSCS is evaluated by 7 expert panels for the validity of its contents. Next, reliability analysis is conducted to 214 students in 2 secondary schools in Selangor, Malaysia. The result shows that the value of contents validity by expert panels has high coefficient value which is = 0.822 with minimum and maximum values of over 0.60. Family self-concept sub-scale has the lowest coefficient value which is 0.668 while social self-concept sub-scale has the highest coefficient value (0.964). For the overall analysis of reliability is alpha = 0.964 with the values of each sub-scale are; social = 0.971, ability = 0.963, affective = 0.964, family = 0.974, physical = 0.974 and academic = 0.965. Hence, this study has succeeded to convert the MSCS that has high validity and reliability values and applicable for Malaysian teenagers.

Keyword: translation, validity and reliability, multi dimensional, self-concept, teenagers

1. Introduction

Self-concept is the root of one’s personality establishment and development. Understanding one’s self-concept can lead us to further comprehend many other traits of the person, such as personality, thought, behavior and prediction of his/her future (Mohammad Aziz Shah, 2010). The definition of self-concept has various perspectives according to contributing figures. According to Rosenberg (1969), he defined self-concept as an overall individual’s thought and affection, assuming himself as an object. Rosenberg also believes that self-concept can be viewed as either a specific perspective or a broad perspective. For Ma’rof (2003), self-concept is the feeling of a person’s
identity who views himself from the aspect of his true identity, his possessions in terms of thought, physical condition, place of living and anything related to himself. Kuper and Kuper (1976) on the other hand, defined the self-concept as how we view ourselves from others’ perspectives. Hence, it is related to the reactions and responses obtained from the surrounding people. It is almost the same to the definition given by Butler and Gasson (2005), which states that self-concept is the trait that refers to a person’s level of acceptance and fondness towards himself. According to Marcus and Warf (1987), self-concept is not a single, static entity, but rather a dynamic structure, consists of many dimensions and can be changed. The many dimensions and changeable properties of self-concept are very important and have been acknowledged by lots of psychological figures such as Rogers (1951, 1961), Combs (1981), Bracken (1992, 1996), and Habibah and Noran Fauziah (2002). Therefore, the building, translating and testing of self-concept evaluation questionnaire is of utmost importance in order to evaluate the level of one’s self-concept and to run the interventions to escalate the self-concept.

2. Statement of Problems

Based on the importance of self-concept as a vital psychological construct in human psychological development, various self-concept evaluation questionnaires have been created by psychologists (Mohammad Aziz Shah, 2010). According to Combs (1981), self-concept is important for modern humanity psychology, if it is not owned; it should be created in human life. However, most of the questionnaires are enacted in foreign countries and not many systematic studies have been done to back-translate these questionnaires into Malay language and fulfill the values and culture of local community. These factors made the questionnaires became irrelevant and tough to be applied in Malaysian society. In this matter, the Multidimensional Self-Concept Scale (MSCS) questionnaire built by Bracken (1992) to evaluate the self-concept based on the Multidimensional Self-Concept Model (MSCM).

According to MSCM, the model is deemed multidimensional and Bracken has rejected the self-concept construction approach as a one-dimensional concept, saying that every individual develops with different self-concept environments as different as their own environments that are very diverse and unique. Henceforth, Bracken has classified the six domains of self-concept based on specific main environments, i.e.; social, ability, affective, academic, family and physical. Every individual said to be having different role as a passive or negative agent in this domain and influencing the self-concept on different level for each domain. To support the MSCM, Bracken (1992) has enacted the MSCS questionnaire that aims to evaluate these six dimensions of self-concept theoretically and practically. Furthermore, Bracken (1996) has also said that MSCM and MSCS that he pioneered have been influencing the new writing styles about self-concept, preparing model for the effective treatment for the enhancement of self-concept and supporting most of the already existing scales of self-concept evaluation. Nonetheless, according to Bracken, although these domains are evaluated separately, they are not regarded as ultimately separate because they are overlapping between one another. This means that any impact on a domain will affect another domain and these entire domains of self-concept create the whole or global self-concept.

The importance to use the MSCS questionnaire is supported by Keith and Bracken (1996), by saying that the enactors of MSCM have dedicated the MSCS questionnaire to become the manual in interventional program, and it was even designed based on the intervention strategies. Therefore, in this study, the MSCS questionnaire is translated directly by researchers by following the fixed procedures. The MSCS questionnaire which was originally written in English language was being translated into Malay language by using back translation method as suggested by Brislin, Lonner and Thondike (1973) in accordance to local values and culture. Subsequently, the validity and reliability values analysis were conducted to ensure that this questionnaire has the stability to be utilized by Malaysian society.

3. Theoretical Foundation of The Multidimensional Self-Concept Scale (MSCS)

The MSCS was built based on the Multidimensional Self-Concept Model (MSCM) which was pioneered by Bracken (1992). Bracken (1992, 1996) stated that the Self-Concept needs to be evaluated in domains (multidimensional). It consists of six main individual domains in the environment which are, social, efficiency,
emotions, academic, family and physical. Even so, all of the six domains are not entirely separated from one another because in some situations these domains may overlap each other. As figure 1 demonstrates, the Multidimensional Self-Concept Modal Bracken (1992) which consist of;

**Social Self-Concept (SSC)**
Based on social context, every individual communicates in a wide scope in various social perspectives. Every individual that is involved in the process of interaction, such as parents, family members, neighbors, friends and teachers in schools have a certain influence on an individual’s social self-concept.

**Ability Self-Concept (ASC)**
Ability self-concept is one’s perception towards their abilities. Throughout the process of growing every individual will experience successes and failures in life. Based on these failures and successes one will evaluate oneself and make generalizations on their capabilities in various environments.

**Affective Self-Concept (AFSC)**
Affective self-concept is the reaction given or emotion displayed by an individual based on the evaluation of the society on reactions in particular situations (Bracken 1996). Similar to the Self-Concept of Social, the Self-Concept of emotion is formed through various situations in life. When a child is praised for his or her success, a positive reaction or emotion is displayed.

**Academic Self-Concept (ASSC)**
According to Bracken (1996), in an academic environment one will evaluate oneself based on how another evaluates them on their academic performance. At the same time, they are also evaluated and judged by friends and teachers based on their academic performance.

**Family Self-Concept (FSC)**
Family environment in the context of self-concept of family refers to the view or belief one holds about oneself as a member of a family. The formation of this belief very much depends on whether or not one receives enough attention, protection, guidance and care.

**Physical Self-Concept (PSC)**
Bracken (1996) explains the Self-Concept of Physical is a reaction of an individual towards their bodies as a whole, it is also the comparison one does of their physical states to another. The result of the comparison will determine if their views upon their physical states are positive or negative and this will contribute to the formation of one’s Self-Concept of Physical.

Diagram 1: Multidimensional Self-concept Model (MSCM) by Bracken (1992)
4. Objectives of Study

This study aims to:

a. Translate the English edition of Multidimensional Self-Concept Scale (MSCS) questionnaire into Malay language
b. Investigate the face validity and contents validity of MSCS
c. Investigate the value of reliability of MSCS

5. Research Method

This descriptive study aims to obtain the contents validity and reliability value of MSCS which has been translated into Malay language. Therefore, this part explains the study process that involved three main phases which are; Phase I : MSCS translation, Phase II : Face validity and contents validity analysis by experts, and Phase III : Reliability analysis.

5.1 Study Phase I

MSCS questionnaire has never been utilised by researchers in Malaysia. Hence, it was translated directly by the researchers according to the fixed procedures. MSCS questionnaire was originally written in English language and translated into Malay language by using the back translation method as suggested by Brislin, Lonner and Thondike (1973). Therefore, six panels of translating experts were chosen, consist of three experts in Malay language (as well as psychological counseling concentration field) and three experts in English language. The translating process started when three panels in psychological counseling field who are also experts in English and Malay language translated the MSCS questionnaire original English version into Malay language. After that, three panels who are experts in English language translated back the translated version (in Malay language) of the questionnaire into English language to ensure it is identical to the original English version. To make sure the strengthening of the translating process, both groups of translators have discussed among themselves to make amendment and ascertain the language accuracy and the terms used are in line with the original construction items and accurate based on psychological perspective. When this process was done, then only have the face validation and contents validation been conducted.

5.2 Study Phase II

There were two validation methods conducted, i.e. a) face validation and b) contents validation by external criticism. After the MSCS was translated into Malay language, face validation was conducted by doing review from the aspects of language, sentence structures and terms accuracy which was done to the details by three Malay language experts from Sultan Idris Education University (UPSI), Perak, Malaysia. These language experts have reviewed and suggested to improve the language, sentence structures and comprehension of terms utilised in MSCS. Next, the improvement of language and terms in MSCS was done to make sure it is more accurate and appropriate with the target groups. Further, MSCS which has been structurally improved in terms of Malay language was applied on eight secondary school students in Selangor, Malaysia. This was to verify the language accuracy and the comprehension in every statement by students subjects. Based on responses received, MSCS was amended once again by the researchers and sent back to three Malay language experts from the Malay Language Department, UPSI, Tanjong Malim, Perak, Malaysia to review and give suggestion to improve the language, sentence structures and comprehension of terms in MSCS.
Next, to test the contents validity value of the MSCS questionnaire, validation method by expert panels and external criticisms was used. According to Othman (2004), six to nine experts are enough in order to evaluate the study construct and items. Six expert panels have cooperated to evaluate MSCS based on theoretical MSCM and Malaysian culture. Expert panels were chosen based on their expertise in psychology and counseling field, inventory construction and in-depth experience as academicians. For this process, researchers have prepared the complete copy of panel validation questionnaire which contains MSCS translated into Malay, the original English version of MSCS and attachments that contains study introduction and MSCS user manual to obtain the critics and experts’ suggestions. The scale for this evaluation is 10 options, i.e. 1 (strongly disagree) to 10 (strongly agree).

5.3 Study Phase III

Study Phase III was conducting the MSCS reliability analysis. To ensure the MSCS questionnaire can really be utilised and hold high consistency in evaluating the duly aspects, the reliability analysis was done. The basis for reliability value of questionnaire was taken from Kerlinger (1979), which is any questionnaire which possesses $\alpha$ (alpha) value more than 0.6 at 0.05 significance level is the best evaluation. To obtain this reliability, MSCS was distributed to 214 students who were chosen by simple random sampling in two secondary schools in Selangor, Malaysia.

5.4 Study Area and Subjects

Study area and subjects for the first phase was six language experts (three Malay language experts and three English language experts) from Department of Languages, Sultan Idris Education University (UPSI), Tanjong Malim, Perak, Malaysia. For the second phase of the study which involved seven expert panels who evaluated the contents validity MSCS consisted of academicians and psychology and counselling practitioners in Sultan Idris Education University, National University of Malaysia and Putra University of Malaysia. While for the third phase, it involved 214 students from two secondary schools that were almost identical in terms of location and student demography in Hulu Selangor, Selangor, Malaysia.

5.5 Study Tools

Study tools used were two types of questionnaires, i.e.;

a) Multidimensional Self-Concept Scale (MSCS) questionnaire that has been translated into Malay by researchers
b) Experts validation questionnaire with altered evaluation scale to evaluate every item with 10 points scale started with scale 1 (strongly disagree) to scale 10 (strongly agree).

6. Study Findings

6.1 Study Finding Phase I

Study Phase I has succeeded in translating the MSCS into Malay language from the original English version. The Malay edition of MSCS has the local value and culture characteristics and certified by three Malay language panels and three English language panels from Department of Languages, Sultan Idris Education University (UPSI), Tanjong Malim, Perak, Malaysia. Just like the English edition of MSCS, the Malay edition maintains the original concept built by Bracken (1992), which consists of 150 items (74 positive items and 76 negative items) that measure six subscales i.e.; social self-concept (SSC – 25 items), ability (ASC – 25 items), affective (AFSC – 25 items), family (FSC – 25 items), physical (PSC – 25 items) and academic (ASSC – 25 items). The measurement of each item was conducted by using 4 options likert scale (strongly agree to strongly disagree). The whole or global self-concept scale is the average for all of those six subscales.
6.2 Study Finding Phase II

MSCS Face Validity Findings

Based on the face validity study for MSCS, the findings show that it obtained a good validity. The MSCS was reviewed to details by three language experts from Department of Languages, Sultan Idris Education University (UPSI), Tanjong Malim, Perak, Malaysia. These language experts have reviewed, gave suggestions on how to improve the language, sentence structures and comprehension of terms in MSCS. Subsequently, the MSCS has been administered to eight students of secondary schools in Selangor, Malaysia and the responses about terms accuracy and language comprehension have been obtained. According to these opinions, corrections were redone by the language experts to improve the language and terms in MSCS so that they are more accurate and appropriate to student subjects. As a whole, for face validity of MSCS, it is appropriate from the aspect of language accuracy and comprehension and it is approved by student subjects and three Malay language experts from Malay Language Department, Sultan Idris Education University, Perak, Malaysia.

For contents validity of MSCS findings with external criticism method, seven experts’ validations have been obtained. This fulfil the recommendation of Othman Mohamed (2004) which said that only six to nine experts are needed in evaluating the construct and items of the study.

MSCS Contents Validation By Expert Panels Findings

Seven expert panels evaluated the specially formatted MSCS to obtain contents validity value as shown in Table 1.

| Self-concept Subscales | Minimum Value | Maximum Value |
|------------------------|---------------|---------------|
| Social                 | .855          | .964          |
| Ability                | .740          | .848          |
| Family                 | .854          | .959          |
| Affective              | .668          | .971          |
| Physical               | .763          | .872          |
| Academic               | .845          | .957          |

The expert panels’ evaluation for MSCS showed that minimum and maximum values at each self-concept subscales have high values, which are more than 0.60. This means that MSCS questionnaire meets the criteria to measure the self-concept subscales. The lowest value is for family self-concept sub scale (0.668) and the highest value is for social self-concept sub scale (0.964). Based on the average score, researchers found that the value of validity coefficient for MSCS instrument is 0.822.

6.3 Study Finding Phase III

Phase III was the MSCS reliability test analysis. This was to ensure the built questionnaire has high consistency in measuring the appropriate aspects (Sidek and Jamalidin, 2005). Reliability analysis found that the MSCS has high reliability value to prove that the questionnaire has succeeded to measure the needed aspects. The basis for good questionnaire reliability value was taken from Kerlinger (1979), which said that a questionnaire which has the \( \alpha \) (alpha) value of more than 0.6 at 0.5 significance level is a good evaluation.
Table 2: Multidimensional Self-concept Scale (MSCS) Questionnaire Reliability Value

| Subscales      | (α) Value |
|----------------|-----------|
| MSCS Overall   | .757      |
| Social         | .793      |
| Ability        | .770      |
| Affective      | .744      |
| Family         | .680      |
| Physical       | .791      |
| Academic       | .762      |

Significance level = 0.05

Table 2 shows the value of MSCS overall reliability is 0.963, which is considered high. Meanwhile, the reliability values of the subscales are also showing strong reliability level; α = 0.965 to α = 0.974. These show that the level of reliability of MSCS questionnaire is at a satisfying level to measure the mentioned self-concept subscales. The description for Table 4.17 is; the α values for each sub scale is social = 0.971, ability = 0.963, affective = 0.964, family = 0.974, physical = 0.974 and academic = 0.965.

7. Discussion

The translation of MSCS from English language edition into Malay language is a major contribution to the development of psychology and counseling in Malaysia. This is because although MSCS has been enacted by Bracken (1992), but it has never been translated and utilized in any research in Malaysia. Furthermore, MSCS is based on the Multidimensional Self-concept Model (MSCM), which is a unique approach because it explains that self-concept has to be evaluated as multiple domains (multidimensional), where there are six main individual domains in the environment, i.e.; social, ability, affective, family, physical and academic. However, these six domains are not considered ultimately separate because in certain conditions the domains can overlap between each other. Hence, this study has succeeded to prove that the theoretical MSCM is appropriate with the Malaysian society value and culture.

Yet, the most important thing is the translation of MSCS has successfully given the theoretical perspective and clinical practice for the researchers in Malaysia in order to identify the level of self-concept and conduct the intervention for the improvement of self-concept. The fact is supported by Keith and Bracken (1997), saying that the enactors of MSCM have dedicated the MSCS questionnaire as a manual in intervention programs, and it was built based on the intervention strategies. Therefore, in this study the MSCS questionnaire is directly translated by the researchers by following the fixed procedures. The MSCS questionnaire which was originally written in English language is being translated into Malay language by using back translation method as suggested by Brislin, Lonner and Thondike (1973) in accordance to local values and culture. After that, the findings of validity and reliability analysis with high values has successfully proven that the method of back translation as suggested by Brislin can be applied in translating psychological questionnaires in Malaysia.

The findings of validity and reliability analysis for the MSCS questionnaire have also obtained high values. These proved that MSCS has the stability to be utilized by Malaysian society. This is evidenced by the findings of MSCS contents validity using external critics (external critics) obtaining value which is more than the set value of 0.06. With this, it shows that the construct and sub construct of MSCS represent the content aspects to be measured. Next, the validity of MSCS has sufficient consistency for all the MSCS subscales, which are more than 0.60 and acceptable for a good measurement.

The study was in accord with the recommendations Fitts (1965), Marsh (1990a), Hattie (1992), Hattie, Biggs and Purdie (2000), Bracken (1992, 1996) and O’mara, Marsh and Craven (2004) for the Bracken (1997) that the self-concept summary is psychological design which needed to be measured separately or multidimensional and all self-concept development process should be conducted specifically based on the main components of self-concept. Overall, the MSCM theoretical concept and MSCS questionnaire have high consistency in measuring the aspects that should be measured in students and Malaysian culture.
8. Study Implication

The study focuses on theoretical and practical aspects of education in Malaysia, scholarship counselling, psychometric and implementation of counselling programs in schools. The result showed that MSCM and MSCS can assess the self-concept of the students and Malaysian community. For the implications of education in Malaysia, problems of students who often associated with the low self-concept role can be evaluated with MSCS and observations can be made based on six different environment or multidimensional, namely social, ability, affective, academic, family and physical. Hence, this will be an alternative to the psychological, counselling and psychometric fields in using the MSCS questionnaire in the evaluation of self-concept. Further, the MSCS can be a tool to measure students' self concept and as an evaluation basis to undertake self-concept enhancement intervention program based on six main domains of self-concept specifically. Therefore, this approach should be addressed and developed further in psychology and counselling.

Thus, the implication of the study is to prepare the MSCS theoretically and practically for the MOE, the field of counselling knowledge, psychometric and counselling practices in schools. In fact, it is believed that the success in translating the MSCS into Malay language will make a significant contribution in the process of students’ development and self-concept enhancement. As a matter of fact, it will be a compliment to the various existing self-concept evaluation questionnaires in psychological testing.

9. Recommendations

Based on the findings of this study, several recommendations have been made, namely:

1. Based on the translation of the English edition of MSCS into Malay language which received experts evaluation, good validity and reliability, the MSCS should be accepted and utilised in evaluating the self-concept of students in Malaysian schools.

2. Based on the good validity and reliability of MSCS for application to students, other studies should be done to prove the effectiveness of the MSCS, such as the study of correlation with other questionnaires, test and test again, factor analysis and so on.

3. Based on the effectiveness of MSCS in identifying the level of students’ self-concept and as a manual for self-concept enhancement intervention, an experimental study on self-concept enhancement by using MSCM and MSCS questionnaire should be done among the school students in Malaysia.

10. Conclusion

Overall, this study has successfully translated the English edition of MSCS into Malay language, obtained good validity and reliability values, a significant contribution to the psychology and counseling development in Malaysia. With that been said, this study also supported the Bracken’s (1992) theoretical multidimensional self-concept model, that self-concept should be evaluated as multidimensional, that there are six main domains of self-concept based on the individual interaction with the environment, namely; social, ability, affective, academic, family and physical. Thus, this study has proved that the theoretical MSCM and the MSCS questionnaire are appropriate with the Malaysian values and culture.

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