

The Development and Validation: Scale of Subjective Well-Being for Mother (SSWB-M)

Endang Prastuti

Doctoral Program at the Faculty of Psychology, Universitas Airlangga
Faculty of Psychology Education, Universitas Negeri Malang.
endangprastuti12@gmail.com.

Mareyke Maritje Wagey Tairas

Faculty of Psychology, Universitas Airlangga
marreyke.tairas@psikologi.unair.ac.id

Nurul Hartini

Faculty of Psychology, Universitas Airlangga
nurulhartini@psikologi.unair.ac.id

Abstract

The objectives of this study were to develop the Scale of Subjective Well-Being for Mother (SSWB-M) and examine the psychometric properties of SSWB-M. Our developed SSWB-M consists of The Scale of Life Satisfaction in Family Domain (SLS-FD) and the Positive and Negative Affect Scale in Family Domain (PANAS-FD). The Scale of Life Satisfaction in Family Domain (SLS-FD) shows a match with chi-square = 147.190 ($p = 0.118$), GFI = 0.881, AGFI = 0.805, CFI = 0.984, TLI = 0.977, and RMSEA = 0.039 which describes a good goodness of fit. Overall, SLS-FD shows high composite reliability of 0.984 ($\alpha = 0.892$). Positive-Negative Affect Scale in Family Domain (PANAS-FD) shows a fit model with chi-square = 46,450 ($p = 0,332$), GFI = 0,925, AGFI = 0,886, CFI = 0,995, TLI = 0,994, and RMSEA = 0,028 that describes a good level of goodness of fit. Overall, PANAS-FD also has high composite reliability of 0.950 ($\alpha = 0.763$). The Scale of Subjective Well-Being for Mother (SSWB-M), the two sub-scales have high validity and reliability. Therefore, it can be used to measure subjective well-being in young mothers.

Keywords: Scale development, structural equation model (SEM), subjective wellbeing for mother (SSWB-M)

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Introduction

The purpose of human life is to pursue happiness and pleasure (Baumgardner & Crothers, 2010). In the study of psychology, it is reflected in studies on subjective well-being (Diener, 1984; Diener et al. 1999). However, subjective well-being is not defined as hedonism, which is as narrow as the pursuit of temporary physical pleasure (Baumgardner & Crothers, 2010). A subjective well-being, consisting of a cognitive component, is an assessment of a person's life satisfaction compared to a standard. It is also an affective component consisting of

positive and negative feelings, meaning that individuals with high subjective well-being experience life satisfaction, higher positive feelings, and fewer negative emotions (Diener, 1984; Diener et al., 2009). The affective subjective well-being aspect is the quality of emotion, both in terms of frequency and intensity experienced by individuals, both pleasant and unpleasant feelings (Kahneman & Deaton, 2010). Positive feelings refer to emotions such as satisfaction, while negative feelings are more like anger, sadness, and guilt (Baumgardner & Crothers, 2010; Diener et al., 1999; Kahneman & Deaton, 2010). Life satisfaction is what individuals think about their lives (Kahneman & Deaton, 2010), which does not lead to a particular domain. Nonetheless, the feelings and satisfaction of a particular domain are generally measured through an integrated assessment of one's life (Diener et al., 2009).

High subjective well-being plays an important role in health and longevity (Diener & Chan, 2011). In a family context, the subjective well-being of parents could impact the well-being of the child. In other words, parents with low subjective well-being, particularly those caused by stress, will also affect the well-being of their children (Lee et al., 2016). It also becomes a determinant of life satisfaction in children (Powdthavee & Vignolas, 2007).

Meanwhile, in the context of culture of indigenous psychology, the strongest contributor to the happiness of local people is having family relations (Anggoro & Widhiarso, 2010). Similarly, respondents who are mothers also found their happiness to come from the well-being of their family members (Prastuti, 2016). Thus, the findings of those studies imply that the measurement of subjective well-being differs depending on their culture and gender. Self-report is a methodologically valid to be used in measuring subjective well-being (Pavot, 2013). Because well-being is an internal and subjective phenomenon, it becomes necessary to sample experiences to provide a more meaningful measurement (Diener et al., 1999). Based on the subjective well-being component, the measurement focuses on the cognitive (life satisfaction) or affective component (Diener et al., 1985). In other words, the measurement of subjective well-being refers to different dimensions or levels of analysis (Diener, 2006; Sirgy, 2002, as cited in Galinha & Pais-Riberio, 2011). The subjective well-being measurement shows high reliability based on the time interval (Pavot, 2013). However, this might be caused by measurement bias when applied to the respondents based on culture and gender, because mother's happiness is related to her family or "subjective

well-being in the family domain" (Prastuti, 2016). Therefore, the suggested subjective well-being measurement of mothers is specific to context.

The literature review suggests that most subjective well-being are measured based on their cognitive component, namely using The Satisfaction with Life Scale (SWLC) (Diener et al., 1985). SWLC measures the overall satisfaction of life based on four domains of the Quality of Life Index: health, social and economic, psychological, and spiritual (Ferrans & Powers, 1985, as cited in Froh et al., 2011). The life satisfaction instrument for children and adolescents is called The Brief Multidimensional Student Life Satisfaction Scale (BMSLSS; Seligson et al., 2003 as cited in Froh et al., 2011). BMSLSS is designed to measure the life satisfaction of children and adolescents in five diverse domains: family life, friendship, school experience, self, and environment.

The affective subjective well-being instrument is the Scale of Positive and Negative Experience (SPANE), developed by Diener et al. (2009) on 573 student subjects and Positive and Negative Affect Schedule instrument (PANAS) (Watson et al., 1988). However both SPANE (Diener et al., 2009) and PANAS (Watson et al., 1988), measure a general subjective well-being. Meanwhile, the affective subjective well-being measurement designed specifically for children and adolescents is The Positive and Negative Affect Scale for Children (PANAS-C), consisting of 15 items to measure positive and negative affect using a Likert scale. The PANAS-C instrument has strong internal consistency in the positive affect (PA) component, namely 0.90. Meanwhile, the negative affect (NA) component as much as 0.94 (Laurent et al., as cited in Froh et al., 2011).

The development of subjective well-being measurements in the Indonesian context was conducted in the Special Region of Yogyakarta (DIY), involving 277 small and medium-sized entrepreneurs as subjects. We aimed to examine the model of the subjective well-being instrument's measurement. Our findings show that subjective well-being indicators consist of positive and negative emotions as well as life satisfaction. Positive emotions include pride, love, satisfaction, relief, and pleasure. Negative emotions include feeling disappointed, worried, angry, sad, and jealous. Meanwhile, life satisfaction is measured by looking at a person's environment, health, and success in life. The results suggest that the model needs

to be tested empirically using other non-entrepreneur population to determine the suitability of the model (Sumanto, 2012).

An indigenous psychology research on the local community found that happiness is evident from having family ties (kinship), achievements, relationships with others and spiritual needs (Anggoro & Widhiarso, 2010). This was sampled from 556 Indonesians from various educational backgrounds (e.g., high school, graduate and postgraduate education). A sense of kinship is the greatest aspect for happiness, supporting the finding of a preliminary research that family-related matter (e.g., interaction with spouse and children) contributes to the happiness of young adult mothers between the age of 20-40 years (Prastuti, 2016). This result is true for mothers from various educational background and employment status.

Based on the literature study, it is concluded that subjective well-being instruments of existing cognitive components such as SWLC (Diener et al., 1985), PANAS (Watson et al., 1988), SPANE (Diener et al., 2009), PANAS-C (Laurent et al., as cited in Froh et al., 2011), BMSLSS (Seligson et al., 2003 as cited in Froh et al., 2011), as well as those already conducted in Indonesia (Sumanto (2012; Anggoro & Widhiarso 2010) measure life satisfaction, positive feelings as well as negative feelings with the level of global analysis on diverse domains across population (e.g. student, child, adolescent, employers and local communities). However, subjective well-being instrument in the family domain has yet to be constructed for young adult mother respondents (Prastuti, 2016). Meanwhile, profiling subjective well-being with reliable measuring tool is important to ensure appropriate development of an assessment model for mothers in the family context.

The aim of this study is to develop a subjective well-being instrument for Indonesian young adult mothers (age 20-40 years) named The Scale of Subjective Well-Being for Mother (SSWB-M), consisting of sub-scales: Life Satisfaction Scale in Family Domain (LSS-FD) and Positive and Negative Affect Scale in Family Domain (PANAS-FD).

Method

Objective of Study I

Our objective is to construct a new subjective well-being instrument for young adult mothers (25-40 years old), called SSWB-M. It consists of two sub-scales: (a) The Scale of

Life Satisfaction in Family Domain (SLS-FD), (b) The Scale of Positive Affect & Negative Affect in Family Domain (PANAS-FD).

Procedure of Research

Identifying the Objective of Measurement

This study aims to develop a new subjective well-being instrument, called SSWB-M. The purpose of developing this measurement tool is to assist the making of diagnostic decision regarding the level of young adult mothers' subjective well-being.

Identifying Construct Representation

The stage of identifying construct representation behavior in research is done through content analysis and literature reviews. Content analysis is done by distributing an open-ended questionnaire to the participants. The participants' responses will then be sorted out into the construct components, ensuring that we find the main components that are supported by literature reviews (Crocker & Algina, 2008).

The review stage of the tool was done using an eclectic approach. The SSWB-M was developed based on Diener's theory (Diener, 1984; Diener, 1999; Diener, 2009) that subjective well-being consists of cognitive components (e.g., life satisfaction) and affective components (e.g., positive affect, negative affect). Based on the indigenous psychology approach, local people's happiness is tied largely to kinship (Anggoro & Widhiarso, 2010). This is consistent with a preliminary study of young adult mother aged between 20-40 years, where both the cognitive and affective components of life satisfaction relates to family context, particularly regarding the interaction of mothers with children and spouses (Prastuti, 2016).

Our preliminary research on the evaluation of existing subjective well-being instruments have highlighted the need for one to be constructed specifically within the family domain (Prastuti, 2016). In the family context, satisfaction and happiness is achieved when couples have reciprocal or equal standing in all relationship dimensions (Cavanaugh & Blanchard-Field, 2010), namely personality issues, communication, conflict resolution, financial management, leisure activities, sexual relationship, children & parenting, family & friend

egalitarian roles, religious orientation. These aspects are measured by Enrichment Marital Satisfaction (Fowers & Olson, 1993).

Preparing a Test Specification Set

The specifications of SSWB-M developed in this study consist of:

(1) The Scale of Life Satisfaction in Family Domain (SLS-FD)

The satisfaction of life in the family domain, is the extent to which a person is satisfied with his or her life (Diener, 1984) in the family domain (Prastuti, 2016), related to aspects of relationship: communication, conflict resolution, financial management, leisure activities, sexual relationship, family and friends, egalitarian roles, religious orientation, children and parenting, as well as personality issues (Fowers & Olson, 1993; Olson & DeFrain, 2003). Several item examples from SLS-FD include: *(a) I feel satisfied that I can comfortably talk with my partner, (b) I feel satisfied that house chores can be divided equally with my partner, and (c) I feel satisfied for having enjoyable common activities together.*

(2) Positive and Negative Affect Scale in Family Domain (PANAS-FD)

PANAS-FD consists of 24 positive and negative feelings (Diener, 1984; Diener, 1999; Lazarus, 1991; Baumgardner & Crothers, 2010) associated with relationship aspects (Cavanaugh & Blanchard-Field, 2010; Fowers & Olson, 1993; Brooks, 2011). Indicators of positive feeling include feeling happy, glad, cheerful, joyful, enthusiastic, passionate, content, relieved, proud, calm, peaceful, safe, comfortable, affectionate, pity, sympathy, empathy, love, amazed, fascinated, and hopeful. Meanwhile, negative feelings are shown with the following feelings: anger, annoyance, resentment, frustration, hate, sadness, depression, despair, guilt, shame, regret, fear, anxiety, worry, contempt, confused, stressed, jealous, envy, horrified, shocked, and hurt. (Diener et al, 1999; Lazarus, 1991; Baumgardner & Crothers, 2010). The positive and negative feeling aspects associated with the interaction with others (Lazarus, 1991), especially spouse and children (Prastuti, 2016), consist of communication, conflict resolution, financial management, leisure activities, sexual relationship, family, equalitarian role, religious orientation, and personality issues (Fowers & Olson, 1993).

Examples of PANAS-FD items: (a) *I am happy to receive such emotional support from my partner when I face a problem*, (b) *I feel ashamed when my child's how a different attitude development compared to other children at his or her age*, (c) *I feel hopeless when I fail in guiding my children to conduct positive attitude*.

Item Construction

The next step is to arrange a set of items and choose a suitable format. The items were arranged according to the following rules: written in present tense, had no more than one interpretation, statement should be brief, used appropriate grammars, used phenomenon that are easily understood by respondents, and avoided using negative words (Crocker & Algina, Azwar, 1997). Meanwhile, the format of the items used a Likert scale (agree-disagree).

The SLS-FD consists of ten indicators of life satisfaction in the family aspects: communication, conflict resolution, financial management, leisure activities, sexual relationship, family, equalitarian role, religious orientation, and personality issues (Fower & Olson, 1993). Each indicator consists of five to six items, amounting to a total of 96 items written in a Likert scale format from very dissatisfied to very satisfied (scale 1-5).

The PANAS-FD scale consists of 24 positive interactions with children and spouses, with a total of 48 items. The negative feeling aspect, acting as unfavorable items, consists of 24 negative feelings that amounted to 48 items. Thus, PANAS-FD scale consists of 96 items written in a Likert scale format from very often to almost never (scale 1-5) of experience.

Professional Judgment

Once the items have been drafted, a professional judgment was conducted by qualified colleagues to score the accuracy and relevance of the items against test specifications, grammar, ambiguity, possibility of "bias", and level of readability (Crocker & Algina, 2008). The professional judgment was conducted by five experts, consisting of two psychometric experts, two doctorate researchers, and one professor in the field of positive psychology. Content input from the expert panel was in accordance to the test specification. It can be seen from the content validity analysis using Aiken V formula. Content validity analysis found

that all eligible items have an Aiken V value above 0.50. The literature review and blueprint of the tool was assessed and revised multiple times. The most notable change was, by the end of the process, there were 50 items within the life satisfaction scale and 64 items in the positive-negative feelings in the family scale.

Preliminary Item Try-Out

Prior to field testing, the items were administered to a small group of sample as preliminary tryout. The goal is to test the clarity of the instructions given in the questionnaire, estimate the time required to perform the test, and identify items that are written ambiguously. Revisions were made before field trials were conducted over a wider sample. This initial test was performed on ten respondents (i.e. mothers age 20-40 years) in the Laboratory Kindergarten of *Universitas Negeri Malang*.

Our findings conclude that: the manual is easily understood, the time required is 35-40 minutes, and that all items are clear. Furthermore, the developed final draft of the instrument is ready for field trial.

The result of Study I

The SSWB-M consists of SLS-FD and PANAS-FD. The SLS-FD consists of ten indicators of life satisfaction in the family, amounting to 96 items that are written using a Likert scale format (scale 1-5). Meanwhile, PANAS-FD consists of 24 positive and 24 negative feelings associated with interactions with children and spouses, each consisting to 48 items. Therefore, PANAS-FD consists of 96 items that are arranged on a Likert-scale format from very often experienced with a scale of 1-5.

After assessing the number of items repeatedly, the panel experts have agreed that the total number of items needs to be reduced based on the correlation and structure of certain items. Upon revision, the total item for SLS-FD became 50, while PANAS-FD had 64 items. Preliminary tryout obtained information that the respondents found the test manual and response format easy to understand. Once the professional judgment and initial tryout was conducted, the final draft of the instrument was ready for field trial to test the internal validity on a wider sample.

Method

Objective of Study 2

The purpose of study 2 was to conduct a confirmatory factor analysis (CFA) to test the factor structure of SSWB-M on a representative sample.

Participants

Data was collected from 102 mothers with children in Assalam Kindergarten and Laboratory Kindergarten of *Universitas Negeri Malang*. The sample characteristics include: (a) a mother with children, (b) age between 20-40 years old, (c) high school to college level of educational background. Each study participants expressed their willingness by filling out an informed consent to be a trial subject based on the principle of informed consent, namely that their identity will be kept as confidential information (Nevid et al., 2005).

Validation of The Scale of Subjective Well-Being for Mother (SSWB-M)

Validation refers to the process of ensuring that the test serves the test purpose (Crocker & Algina, 2008). We determined content validity through expert judgment as well as CFA. In accordance with the research objectives, CFA is used for item selection in each construct. The items in the test instrument acts as manifest variables (symbolized as box drawings), while aspects of each construct acts as latent variables (symbolized as circle images). Both were analyzed using AMOS-20.

Item Selection

Selection stage is divided into three parts. Firstly, the initial item selection was done by considering the factor loading of each item. Secondly, the selection of advanced items took into consideration the value of standardized residual covariance shown through poor *goodness of fit*. Thirdly, the final item selection was taken by considering the most appropriate selection to get a high goodness of fit CFA model. The result of the selected item will be calculated to find its convergent reliability based on Cronbach's alpha coefficient, composite reliability coefficient, and average variance extracted (AVE) value. The accuracy of each item selected in each will be confirmed through the calculation of discriminant validity and cross-loading values.

The Result of Study 2

The SSWB-M, consists of two subscales: SLS-FD, and PANAS-FD. Life Satisfaction scale consists of ten aspects: communication, conflict, leisure, financial management, sexual relationship, equality of roles, religious orientation, personality, extended family, and parenting. The total items of SLS-FD is 50.

The initial CFA model indicates that communication, leisure, financial management, sexual relationship, equality of roles, personality, and extended family aspects each had three items with a factor loading of more than 0.50. Meanwhile, conflict resolution and parenting had two items. In the first stage of item selection, as many as 21 items were eliminated, leaving 29 items. The next selection process directly considered the value of the standardized residual covariance because all the factor loading has a value greater than 0.50. In the final CFA model, the total factor loading is worth more than 0.50. The results of model fit evaluation with chi-square = 147,190 ($p = 0,118$), GFI = 0,881, AGFI = 0,805, CFI = 0,984, TLI = 0,977 and RMSEA = 0,039, explain the existence of a high *goodness of fit*.

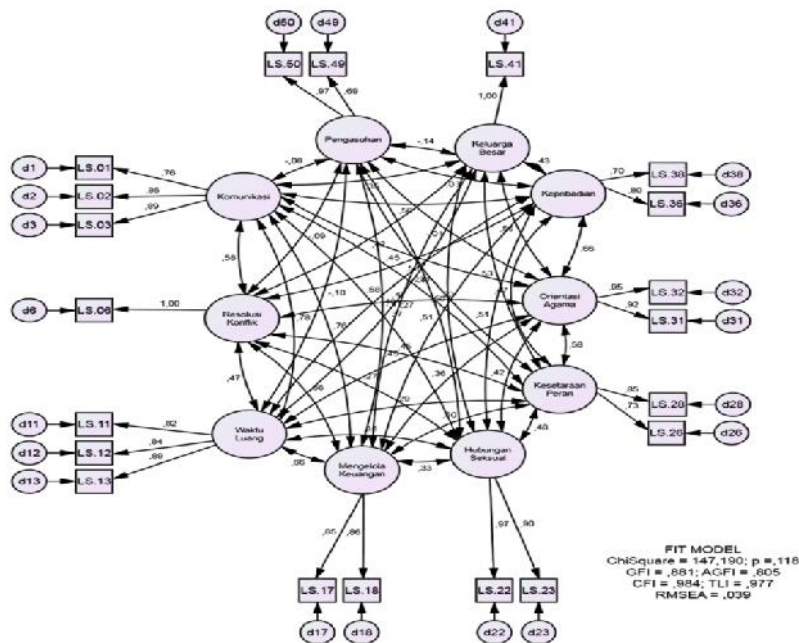


Figure 1. Final CFA Model in the Construct of Life Satisfaction in Family Domain

Based on the item selection process, 20 items with high factor loading remains as shown in the following table below.

Table I
Item Selection Results

| No Item | Statements | Factor Loading |
|---------|--|----------------|
| 1 | I feel satisfied that I can openly express my feelings to my partner. | 0.75 |
| 2 | I feel satisfied that I can comfortably talk to my partner. | 0.86 |
| 3 | I discuss problems, I feel satisfied by my partner's willingness to listen attentively. | 0.89 |
| 4 | Conflicts can be solved in a relieving solution. | 1.00 |
| 5 | I feel satisfied for having spare time that I can enjoy with my partner. | 0.83 |
| 6 | I feel satisfied for having enjoyable common activities together. | 0.84 |
| 7 | I feel satisfied that I have a spare time to enjoy with my partner in the midst of our routine activities. | 0.89 |
| 8 | I feel satisfied that family expenses are planned openly | 0.89 |
| 9 | I feel satisfied to the trust given by my partner to me in managing the finance. | 0.86 |
| 10 | I feel satisfied that the sexual relationship with my partner happen as I dreamt. | 0.97 |
| 11 | I feel satisfied when my partner is sensitive to my sexual needs. | 0.50 |
| 12 | I feel satisfied that house chores are divided based on each other's role. | 0.73 |
| 13 | I feel satisfied that the house chores can be divided equally with my partner. | 0.85 |
| 14 | I feel satisfied for having the same religious perspective as my partner. | 0.92 |
| 15 | I feel satisfied for having the same religious orientation with my partner. | 0.95 |
| 16 | I feel satisfied for having a lot of similarities with my partner in daily lifestyle. | 0.80 |
| 17 | I feel satisfied that my partner has the personalities that I want. | 0.70 |
| 18 | I feel satisfied that the relationship with the big family is as I expected. | 1.00 |
| 19 | I view my duty as a parent to optimize my children's intelligence, has not met my ideal yet. | 0.69 |
| 20 | I view that my duty as parent in teaching discipline to children is not perfect. | 0.97 |

TheScale of Life Satisfaction in Family Domain (SLS-FD)

Source of Validity is based on Internal Structure

The construct validity is based on some calculation of convergent validity, such as factor loading, Composite Reliability (CR), and Average Variance Extracted (AVE). Factor loading that has a value between 0.690 - 0.967 (>0.50) meets the good requirement.

Table 2
 Validity– Reliability: The Construct of Life Satisfaction in Family Domain

| Aspects | Selected Item | Factor Loading | Alpha Cronbach | Composite Reliability | Average Variance Extracted (AVE) |
|-----------------------|---------------|----------------|----------------|-----------------------|----------------------------------|
| Communication | LS.01 | 0.760 | 0.872 | 0.876 | 0.837 |
| | LS.02 | 0.863 | | | |
| | LS.03 | 0.888 | | | |
| Conflict resolution | LS.06 | 1.000 | 1.000 | 1.000 | 1.000 |
| Spare Time | LS.11 | 0.822 | 0.887 | 0.887 | 0.850 |
| | LS.12 | 0.838 | | | |
| | LS.13 | 0.889 | | | |
| Financial management | LS.17 | 0.848 | 0.845 | 0.846 | 0.856 |
| | LS.18 | 0.864 | | | |
| Sexual Relationship | LS.22 | 0.974 | 0.934 | 0.935 | 0.936 |
| | LS.23 | 0.898 | | | |
| Equality of Role | LS.26 | 0.726 | 0.763 | 0.769 | 0.789 |
| | LS.28 | 0.852 | | | |
| Religious Orientation | LS.31 | 0.915 | 0.931 | 0.931 | 0.934 |
| | LS.32 | 0.952 | | | |
| Personality | LS.36 | 0.797 | 0.719 | 0.722 | 0.751 |
| | LS.38 | 0.704 | | | |
| Extended Family | LS.41 | 1.000 | 1.000 | 1.000 | 1.000 |
| Parenting | LS.49 | 0.690 | 0.8000 | 0.823 | 0.829 |
| | LS.50 | 0.967 | | | |
| Overall | | | 0.892 | 0.984 | 0.862 |

Composite reliability between 0.722 - 0.935 with a value of more than 0.70 and AVE between 0.751 - 0.936 with a value of more than 0.50 also represent good convergence validity. The calculation for all selected items in this construct shows good convergence validity.

Discriminant Validity

Discriminant validity is tested by comparing the AVE root value with all correlation coefficients between aspects. If the AVE root value is greater than the correlation coefficient, then that aspect has good discriminant validity. Table 3 shows that all aspects of life satisfaction have good discriminant validity.

Overall, LSC-FD has a composite reliability of 0,984 ($\alpha= 0.892$) and AVE of 0.862. This indicates that LSC-FD has high reliability. Each aspect shows high composite reliability

between 0.722-0.935 with a value of more than 0.70. Overall, LSC-FD has high composite reliability of 0.984 ($\alpha = 0.892$).

Table 3
Discriminant Validity: The Construct of Life Satisfaction in Family Domain

| Aspects | AVE root | correlation | | | | |
|-----------------------|----------|---------------|---------------------|------------|----------------------|-----------------|
| | | Communication | Conflict resolution | Spare time | Financial management | Sexual activity |
| Communication | 0.915 | 1.000 | - | - | - | - |
| Conflict resolution | 1.000 | 0.607 | 1.000 | - | - | - |
| Spare time | 0.922 | 0.838 | 0.493 | 1.000 | - | - |
| Financial management | 0.925 | 0.830 | 0.699 | 0.719 | 1.000 | - |
| Sexual relationship | 0.967 | 0.399 | 0.273 | 0.376 | 0.356 | 1.000 |
| Equality of role | 0.888 | 0.528 | 0.498 | 0.344 | 0.568 | 0.541 |
| Religious orientation | 0.966 | 0.486 | 0.482 | 0.479 | 0.405 | 0.437 |
| Personality | 0.866 | 0.651 | 0.557 | 0.665 | 0.600 | 0.576 |
| Extended family | 1.000 | 0.366 | 0.420 | 0.283 | 0.514 | 0.506 |
| Parenting | 0.910 | -0.086 | -0.093 | -0.112 | -0.132 | -0.235* |

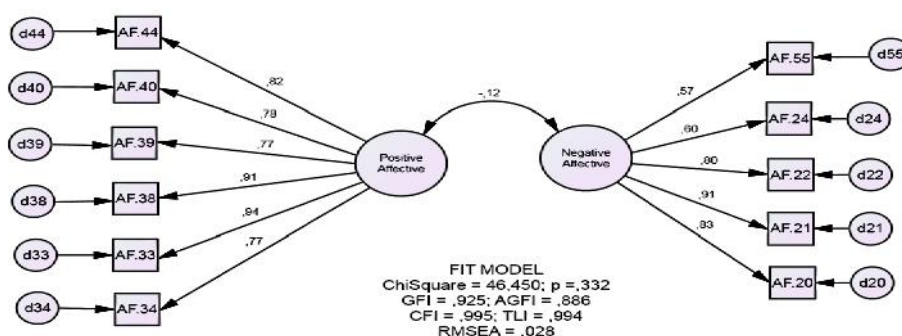
Table 3 (Continued)

| Aspects | Equality of role | Religious orientation | Personality | Extended family | Parenting |
|-----------------------|------------------|-----------------------|-------------|-----------------|-----------|
| Equality of role | 1.000 | - | - | - | - |
| Religious orientation | 0.645 | 1.000 | - | - | - |
| Personality | 0.577 | 0.744 | 1.000 | - | - |
| Extended Family | 0.584 | 0.574 | 0.479 | 1.000 | - |
| Parenting | -0.253* | -0.007 | -0.036 | -0,141 | 1.000 |

Positive - Negative Affect Scale in Family Domain (PANAS-FD)

The construct of positive negative affect is divided into two aspects: positive and negative affect. The total number of items is 64. The initial CFA model results in positive affect aspect leaving 14 items because it has a factor loading of more than 0.50. Meanwhile, the negative affect aspect leaves 17 items. We eliminated 33 items in the first part of the item

selection stage, leaving 31 items. On the second stage, factor loading is no longer a consideration because all has items have a value greater than 0.50. Instead, it has shifted to a decision based on the value of standardized residual covariance. In the final CFA model, the entire factor loading is more than 0.50. The results of model fit evaluation with chi-square = 46,450 ($p = 0,332$), GFI = 0,925, AGFI = 0,886, CFI = 0,995, TLI = 0,994 and RMSEA = 0,028 explain the *goodness of fit*.



Item Se

The measurement model of PANAS-FD consists of two aspects: 32 positive affect (favorable items) and 32 negative affect (unfavorable items), bringing the total number of items to 64 items. After the item selection process, there are 11 items with high factor loading as shown in table 4 below.

Table 4
Result of Item Selection in PANAS-FD Scale

| No Item | Statements | Factor Loading |
|---------|--|----------------|
| 1 | I am worried that my child's development might not be as I expected. | 0.83 |
| 2 | I feel depressed when I fail to build my children's behavior as I dreamt | 0.91 |
| 3 | I feel hopeless when I fail in guiding my children to conduct positive attitude. | 0.80 |
| 4 | I feel ashamed when my child shows a different attitude development compared to other children at his or her age | 0.80 |
| 5 | I am happy to live a life with my partner. | 0.94 |
| 6 | I am happy to get such emotional support from my partner, when I face a problem. | 0.77 |
| 7 | I feel satisfied with my harmonic love relationship with my partner. | 0.91 |
| 8 | I feel relieved because my partner has the same religious point of view about life. | 0.77 |
| 9 | I am proud of my partner's current success at work. | 0.78 |
| 10 | I love my partner just the way he or she is | 0.82 |
| 11 | I feel guilty for putting more attention on my job than my partner's needs. | 0.57 |

Source of Validity based on Internal Structure

The construct validity is determined based on some calculation of convergent validity such as factor loading, composite reliability (CR), and average variance extracted (AVE).

Table 5
Validity of Positive Negative Affect Construction's Reliability

| Aspects | Selected Item | Factor Loading | Alpha Cronbach | Composite Reliability | Average Variance Extracted (AVE) |
|-----------------|---------------|----------------|----------------|-----------------------|----------------------------------|
| Negative Affect | AF.22 | 0.803 | 0.860 | 0.865 | 0.743 |
| | AF.24 | 0.604 | | | |
| | AF.55 | 0.568 | | | |
| | AF.21 | 0.909 | | | |
| | AF.20 | 0.832 | | | |
| Positive Affect | AF.39 | 0.765 | 0.928 | 0.931 | 0.831 |
| | AF.38 | 0.913 | | | |
| | AF.33 | 0.942 | | | |
| | AF.34 | 0.769 | | | |
| | AF.40 | 0.779 | | | |
| | AF.44 | 0.817 | | | |
| Overall | | | 0.763 | 0.950 | 0.791 |

Table 5 above shows good factor loading between 0.568 - 0.942, good composite reliability between 0.865 - 0.931 with a value greater than 0.70, and good AVE in the range of 0.743 - 0.831 with a value greater than 0.50. Overall, it indicates good convergence validity. The calculation results for all selected items in this construct also have good convergence validity.

Discriminant Validity

Discriminant validity is determined by comparing the AVE root value with all correlation coefficients between these aspects. If the AVE root value is greater than the correlation coefficient, then that aspect has good discriminant validity.

Table 6
Discriminant Validity: Positive Negative Affect in Family Domain

| Aspects | AVE Root | Negative Affect | Positive Affect |
|----------------------|----------|-----------------|-----------------|
| Negative Affect (NA) | 0.862 | 1.000 | - |
| Positive Affect (PA) | 0.912 | -0.124 | 1.000 |

Table 6 shows that all aspects have good discriminant validity. In detail, the positive composite reliability is 0.931 ($\alpha= 0.928$), while the negative affect has a composite reliability of 0.856 ($\alpha= 0.860$). Overall, both positive and negative affect have good composite reliability of 0.950 ($\alpha= 0.763$).

The Result of Study 2

The validation result of SLS-FD is done using CFA approach. The results of the initial CFA model indicated that the aspects of communication, leisure, financial management, sexual activities, equality of roles, personality, and extended family left three items with a factor loading above 0.50. While the aspects of conflict resolution and parenting left two items. We eliminated 21 items in the first stage of item selection, leaving 29 items. Next, standardized residual covariance was taken into consideration for item selection. The final CFA model factor loading is more than 0.50. The results of model fit evaluation with chi-square = 147,190 ($p = 0.118$), GFI = 0,881, AGFI = 0,805, CFI = 0,984, TLI = 0,977 and RMSEA = 0,039 explain the existence of a good *goodness of fit*.

Construct validity is determined based on three aspects, namely factor loading, composite reliability (CR), and average variance extracted (AVE). We had good factor loading that ranges between 0.690-0.967 and good composite reliability between 0.722-0.935. Overall, we had a high composite reliability of 0.984 ($\alpha= 0.892$). The AVE that is ranges between 0.751-0.936 with a value greater than 0.50 also indicates good convergence validity. Our finding shows that all selected items in this construct have good convergence validity. Discriminant validity is determined by comparing the AVE root value with all correlation coefficients between aspects. If the AVE root value is greater than the correlation coefficient, then that aspect has good discriminant validity.

The validation of PANAS-FD was done using CFA approach. The construct of PANAS-FD is divided into two aspects: positive and negative affect. The total number of item is 64. The initial CFA model results in positive affect leaving 14 items and negative affect leaving 17 items. This initial stage eliminated 33 items, leaving 31 items behind. In the next process of selection, decisions were made based on the standardized residual covariance. The final CFA model, the total factor loading is worth more than 0.50. The results of model fit evaluation with chi square = 46,450 ($p = 0,332$), GFI = 0,925, AGFI = 0,886, CFI = 0,995, TLI = 0,994 and RMSEA = 0,028 explain there is a good *goodness of fit*.

Based on the analysis, PANAS-FD has good factor loading (ranging between 0.568-0.942), composite reliability (ranging between 0.865-0.931) with a value of more than 0.70, and AVE (ranging between 0.743-0.831) with a value of more than 0.50. This indicates that PANAS-FD has good convergence validity. All selected items in this construct also show good convergence validity. In detail, positive affect has a composite reliability of 0.931 ($\alpha = 0.928$) while negative affect has a composite reliability of 0.856 ($\alpha = 0.860$). Overall, both positive and negative affect have good composite reliability of 0.950 ($\alpha = 0.763$).

Discussion

The SSWB-M developed in this study consists of SLS-FD (consisting of 20 items) and PANAS-FD (consisting of 11 items). Psychometrically, both sub-scales have high validity and reliability, therefore the instrument can be used to measure subjective well-being for young mothers aged between 20-40 from an Indonesian cultural context.

This tool contributes to existing instruments such as SWLC (Diener et al., 1985), PANAS (Watson et al., 1988), SPANE (Diener et al., 2009) PANAS-C (Laurent et al., as cited in Froh et al., 2011), BMSLSS (Seligson et al., 2003, as cited in Froh et al., 2011), as well as those constructed in Indonesia (Sumanto, 2012; Anggoro & Widhiarso, 2010).

Based on the literature review, existing instruments have only measured the general subjective well-being, allowing possible bias to exist. Although an instrument has been developed specifically for children and adolescents, none has been made for mothers. The

developed SSWB-M contributes to the development of psychology, particularly in subjective well-being tools for women in east culture.

Another type of specific subjective well-being tool has been constructed for entrepreneurs (Sumanto, 2012), with entrepreneurs in DIY Central Java as the sample. Based on a previous indigenous psychology study (Anggoro & Widhiarso, 2010), it was found that the main source of happiness comes from family. This support our preliminary study of mothers in Malang, which found that their definition of happiness (subjective well-being) in within the family domain. This previous finding implies that the development of subjective well-being tool is needed, not only for Javanese culture but also configured specifically for mothers. The subjective well-being instrument developed in the Indonesian cultural contexts (Sumanto, 2012; Anggoro & Widhiarso, 2010), is not appropriate for measuring the subjective well-being of mothers.

The advantage of SLS-FD is that it was developed specifically for respondents who are mothers. Meanwhile, instruments such as Enrich Marital Satisfaction Scale (EMS; Fower & Olson, 1993) that consist of ten items, also measures the same aspect but was developed specifically for husband and wife (N = 7,261).

SSWB-M consists of 2 sub scales, namely SLS-FD (20 items) and PANAS-FD (11 items). It is different from EMS (Fower & Olson, 1993), which measures marital satisfaction in married couples. This means that SSWB-M measures 2 dimensions more comprehensively which is satisfaction in family aspect and positive and negative feeling in family contexts more precisely.

SSWB-M has its weaknesses because it involves a not-so-large sample (N = 102), with sample characteristics of mothers aged 20-40 years, with the lowest educational background being graduate of high school, some work and some do not work, mostly are Javanese and Moslem. Therefore, the measure tool still needs to be tested in a wider sample with different socio-demographic variables. It should also include respondents from middle to late adulthood development stage. Other than that, psychometrically, SSWB-M has good validity based on expert judgement (content validity), as well as internal structure (construct

validity, discriminant and convergent validity). However, SSWB-M developed in this research still needs to be supported by external validity evidences because we have yet tested the convergent and external validity of this test. This is the weakness or limitation of the SSWB-M from validity aspects that needs to be perfected for further research.

Future studies are advised to strengthen the measuring tool by correlating it with similar instruments such as EMS (Fowers & Olson, 1993). This is because validity that comes from external evidence will strengthen the quality of the developed measuring instrument. Additionally, the results suggest that the model should be empirically tested to determine the suitability of the model by using a wider sample, namely mothers from middle to later adulthood. It should also be accompanied by a larger number of respondents with more diverse characteristics.

Conclusion

The SSWB-M consists of SLS-FD that used a Likert scale format. After being reviewed by experts, revised, and analyzed using CFA, 20 items remained with high factor loading. Meanwhile, PANAS-FD consists of 11 items with high factor loading. Our finding reveals that both SLS-FD and PANAS-FD have high *goodness of fit* with regard to their CFA model. They were also found to have good validity based on their Aiken V formula. This validity points to their internal structure that indicates high convergent and discriminant validity. Additionally, the composite reliability of both tools were classified as high based on their Alpha Cronbach coefficient.

Based on the evidence above, we can conclude that both sub-scales can be used to measure the subjective well-being of young mothers, because they have fulfilled the reliability and validity aspect. SSWB-M has the advantage of being specifically designed for young adult mothers. Contrary to existing subjective well-being instruments, SSWB-M measures both cognitive and affective aspects in a specific domain (e.g., family). However, studies need to be conducted to test the suitability of SSWB-M in a wider sample of mothers from middle to late adulthood stage.

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