Subjective well-being: Mental health study among student in the Islamic boarding school

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ABSTRACT
The purpose of this study was to analyze the model of the influence of family social support, gratitude, and self-acceptance on subjective well-being in student in Islamic boarding schools. The population in this study was all student of class VII in boarding school X and boarding school Y in Yogyakarta, with a total of 430 students. The sample in this study was 150 students. The sampling technique used for this study was cluster random sampling. The data were collected by using several instruments in the form of scales. The scales consisted of family social support scale, gratitude scale, self-acceptance scale, and subjective well-being scale. Data analysis was performed by testing the outer model and the inner model. The data were analyzed using structural equation model (SEM) through the Smart Partial Least Square 3.2.8 program. The results of this study suggested that the formation of a model of the influence of family social support, gratitude, and self-acceptance on subjective well-being fits with empirical data obtained. In other words, there was a significant positive correlation between all variables being studied and subjective well-being. The theoretical model formed in this study was considered fit, so it can be used as a valid model reference in investigating adolescents' subjective well-being.

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1. INTRODUCTION
Happiness is a very important thing in life. Everyone wants happiness and tries to do whatever it takes to get it. The happiness that the individual feels in this case is called subjective well-being. Research on subjective well-being has shown varying but important results. Several studies suggest that subjective well-being can determine mental health [1], survival [2], developmental stages [3], and learning success [4, 5]. Given the importance of individual well-being, it is not surprising that it currently becomes the center of attention [6]. However, only a few studies have examined how subjective well-being develops in the adolescent stage [7-9]. Adolescence is the age of transition from childhood to adulthood, which is characterized by a need that must be met to cope with rapid physical changes, dramatic psychological changes, and transitions in social and cultural contexts [10]. Therefore, adolescents need to achieve subjective well-being [11, 12] for the learning process, adapting to the community, and improving quality of life [13].

Adolescent perceptions of the education system are more related to feelings of dissatisfaction, such as stress and pressure [14-18]. Subjective well-being that focuses on adolescents is increasingly preferred to be studied, especially in Indonesia [19-22]. Subjective well-being is a broad picture that refers to all forms of
evaluation of one's life or emotional experience, including life satisfaction, positive affect, and negative affect [23, 24]. Subjective well-being can be achieved when individuals see themselves as having a pleasant, satisfying, and quality life so that they feel positive feelings [25]. Subjective well-being is a measure of an individual's quality of life [26].

The benefits generated by subjective well-being will lead to physical and psychological health [27-30], including reducing the risk of stroke [27, 31] and arousing enthusiasm [32]. This is also in line with the study conducted by Wiest, et al. [30], which suggests that life satisfaction and positive feelings can prevent someone from being ill. Meanwhile, the impact of poor subjective well-being on a person, among others, is the emergence of anxiety, making an individual have low coping and low motivation. Other impacts that arise from poor well-being are vulnerability to depression and stress [7]. This is reinforced by Santrock [33], who illustrates that adolescents have very unstable affective conditions, which cause problems such as difficulty adapting to the social environment, the emergence of affective problems, and the emergence of health problems [34]. Someone who feels a lot of negative emotions is more at risk of cancer [35]. Not only that, but depressed teens are also more likely to be overweight and not healthy [36].

The problems faced by adolescents are very diverse, and subsequently, the problem solving required is different from one another, which ultimately affects the level of subjective well-being. Several factors can affect the level of subjective well-being, and one of which is family social support. The results showed a positive relationship between subjective well-being and family social support [37, 38]. This means that social support can predict subjective well-being, and social support can also be beneficial for one's subjective well-being. According to Sarafino, et al. [39], social support is a way to show care, affection, and appreciation for others. Social support is a kind of information and feedback from others, indicating love, caring, and respect. It will also enable someone to get involved in mutual communication [40].

Individuals who receive social support will feel valued, loved, and respected. They will also become part of a group that can assist when other people need help. The existence of social support from the family and other people around such as peers in boarding schools context will make someone feel comfortable to study in boarding schools. Without social support, especially from the family, someone will feel ignored, and that will make it difficult for them to stay in the boarding school. Social support is needed to reduce the negative impacts arising from these conditions. Thus, perceived social support can explain an individual's life satisfaction and positive affect. Yu [41] explained that there was a significant relationship between social support and subjective well-being. This is also supported by the research of Tomás, et al. [42], which suggest that family social support has a strong influence on the subjective well-being of adolescents.

Besides social support, other factors influence subjective well-being, namely gratitude. Several studies have shown that there is a positive relationship between subjective well-being and gratitude [43, 44]. Gratitude is defined as part of a broader life orientation through appreciation for positive things in the world [45]. Gratitude is a feeling in human relationships when someone acknowledges valuable supports, benefits, and goodness that they receive from others [46]. This is in line with Bono, et al., [47], who said that gratitude is a feeling experienced by someone when getting a gift or benefit from others.

The results of the interview indicated a feeling of dissatisfaction from the student because they could not maximally exert their abilities and did the things they wanted. There was a need for gratitude to feel satisfied living in the Islamic boarding school, which could increase subjective well-being. This is reinforced by research conducted by Robustelli [44], which shows a positive relationship between gratitude and subjective well-being, namely the component of life satisfaction in the domain of social relations, employment, and health and global life satisfaction in the United States and Japan. Gratitude is an important factor to increase subjective well-being.

In addition to family social support and gratitude, self-acceptance also plays an important role in the formation of student' subjective well-being. The study results show a positive relationship between subjective well-being and self-acceptance [48, 49]. Someone with good self-acceptance will be able to control their emotions because they can accept themselves as who they are. Low self-acceptance can be overcome if a person can accept himself by acknowledging and accepting all the weaknesses and strengths that he/she has [50].

This research shows that self-acceptance is very important to help student to feel satisfied in life, more positive emotions, and to be able to control negative emotions so that they can achieve subjective well-being. Research conducted by Nayana [51] explains that a person with an unstable condition can still feel comfortable as long as he/she has good self-acceptance with his environment. Self-acceptance is an important factor that influences subjective well-being [52].

This study offers novelty because it tries to reveal the formation of the influence model between family social support, gratitude, self-acceptance, and subjective well-being. There were very little, if any, previous studies that simultaneously tested these variables. Second, the data analysis technique used in this research is structural equation model (SEM) through the Smart Partial Least Square 3.2.8 program, whereas...
previous studies that examined subjective well-being mainly use data analysis such as Lisrel, AMOS or SPSS. This study uses partial least square (PLS) because it aims to design a new model and then test the model. Model design and model testing can only be done using PLS. The three participants in this study were typical, namely adolescents student in Islamic boarding schools, which differed from subjects in previous studies.

2. RESEARCH METHOD

2.1. Population, sample, and sampling technique

The population in this study are all male and female student (students) in class VII who are currently attending boarding school X and boarding school Y in Bantul Regency Yogyakarta, totaling 430 student. The sample in this study consists of 150 student from both schools. The sampling technique used in this study is cluster random sampling.

2.2. Research instrument

The instrument used to measure subjective well-being was a scale that researchers arranged based on two subjective well-being components proposed by Diener [23], namely the cognitive component (life satisfaction) and the affective component (positive affect and negative affect). The scale consisted of 40 items in which each component had 20 items. The response from this scale was strongly agreed (SA), agree (A), disagree (DA), and strongly disagree (SDA). Examples of items from this scale are "Establishing good relationships with boarding school caretakers", "Enjoying life in the boarding school", and "The family supports me to study in the boarding school".

The researchers also designed a scale to measure family social support. This scale was arranged based on four aspects of family social support from Sarafino [39] consisting of aspects of emotional support, appreciation support, instrumental support, and information support. Each component of this scale had six items, so there were 24 items in total. The response of this scale is very appropriate (VA), appropriate (A), not appropriate (NA), and very inappropriate (VIN). Examples of items from this scale are "My parents advised me to complete my assignments well," "My parents bought school supplies such as books and the Qur'an to support my school while in boarding schools" and "My parents gave praise for the grades of Qur'an memorization that I got".

The instrument used to measure gratitude was also a scale that researchers arranged based on three aspects of gratitude from Watkins [53], namely a sense of abundance, appreciation of the contribution of others, and simple pleasures appreciation. The scale consisted of 18 items in total, and each aspect had six items. The response of this scale is very appropriate, appropriate, not appropriate, and very inappropriate. Examples of items on this scale are "I thank God because I go to this boarding school", "I am nothing without my parents' prayer," and "I believe the health that I have now is gifts from God".

Similarly, the instrument used to measure self-acceptance was a scale that researchers arranged based on three aspects of self-acceptance from Carson and Langer [54], namely one's ability and willingness to let others see their true self, proper self-evaluation, and decision making. The total items of this scale were 18 items, with each aspect consisted of six items. The response of this instrument is very appropriate (VA), appropriate (A), not appropriate (NA), and very inappropriate (VIN). Examples of the statements from this scale are "I try to be myself", "I take full responsibility for my life choices", and "I accept any criticism from others".

2.3. Construct validity and reliability

The stage of testing the construct validity and reliability is called the evaluation of the measurement model or outer model. Hair, et al., [55] explain the construct validity as the extent to which a measuring instrument is able to measure the construct that is to be measured. The construct validity test consists of convergent validity and discriminant validity. Convergent validity is based on the loading factor value used to express the validity of a construct, and a construct is said to be valid if it has the loading factor value of >0.4 [56] and average variance extracted (AVE) value of >0.5 [57]. Discriminant validity test can be done by comparing the value of the root of average variance extracted (AVE) in each construct with the correlation between constructs in the model. Whereas the construct reliability test was conducted to show the internal consistency of the measuring instrument. Construct reliability testing includes composite reliability and Cronbach's alpha. The expected criteria for composite reliability and Cronbach's alpha value are >0.7 [58].

2.4. Data analysis

The data collected in the present study were analyzed using the SmartPLS 3.2.8 program, which included testing the outer model and inner model. Data analysis using smartPLS can be used to design or test models, and further explain the presence or absence of influence between exogenous variables and
endogenous variables [59]. The stages of forming and testing the model used in this study include the R-squares test, the predictive relevance test (Q2), the goodness of fit (GoF), and the index test [60].

3. RESULTS AND DISCUSSION

The SmartPLS 3.2.8 program was employed to test the outer model and the inner model, and the result as shown in Figure 1.

3.1. Outer model test

The outer model analysis includes convergent validity, discriminant validity, composite reliability, and Cronbach alpha. The outer model test results as shwon in Figure 1.

![Figure 1. Outer model test results](image)

3.1.1. Convergent validity test

Convergent validity is generated based on the loading factor values used to express the validity of a construct, and it should be >0.4. In addition, a valid construct should also meet the average variance extracted (AVE) values of >0.5. Based on the results of data analysis, it shows the loading factor for each item meets the criteria of >0.4, so each item is valid. The subjective well-being scale consists of 40 items, and there were only 28 valid items. In the family social support scale, there were 21 valid items. Meanwhile, there were 17 valid items obtained from the gratitude scale. Finally, the self-acceptance had 15 valid items.

In terms of the root value of average variance extracted (AVE), each variable also meets the discriminant validity criteria (AVE>0.5). The average variance extracted value (AVE) for each variable can be seen in Table 1. Based on Table 1 above, all of the variables have an average variance extracted value (AVE)>0.5, so that it can be concluded that all research variables have met the requirements of convergent validity. Based on Table 2 above, all of the variables have an average variance extracted value (AVE) >0.5, so that it can be concluded that all research variables have met the requirements of convergent validity.

<table>
<thead>
<tr>
<th>Table 1. The root value of average variance extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective well-being</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Subjective well-being</td>
</tr>
<tr>
<td>Family social support</td>
</tr>
<tr>
<td>Gratitude</td>
</tr>
<tr>
<td>Self-acceptance</td>
</tr>
</tbody>
</table>

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3.1.2. Discriminant validity test

Discriminant validity can be seen by comparing the root values of average variance extracted (AVE) between variables. A scale is valid if the AVE root correlation value of each variable is higher than (AVE) root correlation value with other variables [56]. The root value of average variance extracted (AVE) can be seen in Table 1. The table above suggests that all variables have met the criteria in which the comparison of the same variable correlation is greater than the correlation between each construct of the variable. Thus, it can be concluded that all variables in this study have met the discriminant validity requirements.

3.1.3. Reliability

Construct reliability can be seen from the composite reliability and Cronbach alpha values. A construct is said to be reliable if the composite reliability and Cronbach alpha value are >0.7, and 0.6 values are still acceptable [56]. In addition, according to Cooper, the root value of average variance extracted (AVE), which is >0.5, has further supported reliability because by fulfilling the construct validity, the valid construct is a reliable construct [58]. The composite reliability and Cronbach values in this study are shown in Table 3. The table shows that all variables have meet the criteria of composite reliability of >0.7 and Cronbach’s alpha value of >0.6. Thus, it can be said that all constructs or variables in this study have met the construct reliability requirements.

3.2. Inner model test

The inner model test aims to ensure that structural models that have been previously built are robust and accurate. The results of the inner model test can be seen in Table 4 and Figure 2. Inner model test aims to ensure that structural models that have been previously built are robust and accurate. The results of the inner model test are shown in Table 5 and Figure 2.

3.2.1. Hypothesis test

After the model is formed and declared fit, it can be continued by looking at the influence between variables. Hypothesis testing is done by looking at the probability value (p-value) in which the value of p has to be <0.05. Looking at the value of t-statistics of >1.96 is also required because it indicates that the hypothesis is accepted. The following analysis result of the p-values and t-statistics values are shown in Table 5.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Average variance extracted (AVE)</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective well-being</td>
<td>0.586</td>
<td>Valid</td>
</tr>
<tr>
<td>Family social support</td>
<td>0.518</td>
<td>Valid</td>
</tr>
<tr>
<td>Gratitude</td>
<td>0.518</td>
<td>Valid</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>0.614</td>
<td>Valid</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Composite reliability</th>
<th>Cronbach alpha</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective well-being</td>
<td>0.920</td>
<td>0.933</td>
<td>Reliable</td>
</tr>
<tr>
<td>Family social support</td>
<td>0.808</td>
<td>0.862</td>
<td>Reliable</td>
</tr>
<tr>
<td>Gratitude</td>
<td>0.933</td>
<td>0.943</td>
<td>Reliable</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>0.687</td>
<td>0.827</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rule of thumb</th>
<th>Value</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient determinant (R²)</td>
<td>0.67 (strong), 0.33 (moderate), dan 0.19 (weak)</td>
<td>0.755</td>
<td>Strong effect of exogenous variables on endogenous variables.</td>
</tr>
<tr>
<td>Predictive relevance (Q²)</td>
<td>Q² &gt; 0 (good predictive model), Q² &lt; 0 (poor predictive relevance)</td>
<td>0.411</td>
<td>Good predictive relevance</td>
</tr>
<tr>
<td>Goodness of Fit (GoF)</td>
<td>GoF value criteria of 0.1 (weak GoF), 0.25 (moderate GoF), and 0.36 (strong GoF)</td>
<td>0.647</td>
<td>Goodness of Fit (GoF) strong</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable influence</th>
<th>P-values</th>
<th>T-Statistics</th>
<th>Original sample</th>
<th>Criterion</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family social support-subjective well-being</td>
<td>0.029</td>
<td>2.015</td>
<td>0.099</td>
<td>P&lt;0.05</td>
<td>There is a positive and very significant influence</td>
</tr>
<tr>
<td>Gratitude-subjective well-being</td>
<td>0.000</td>
<td>32.13</td>
<td>0.836</td>
<td>P&lt;0.05</td>
<td>There is a positive and very significant influence</td>
</tr>
<tr>
<td>Self-acceptance-subjective well-being</td>
<td>0.872</td>
<td>0.154</td>
<td>0.008</td>
<td>P&gt;0.05</td>
<td>There is no significant influence</td>
</tr>
</tbody>
</table>
4. DISCUSSION

The notion of subjective well-being was first proposed by Diener [25] and is now widely accepted by various researchers [61-63]. Along with the development of positive psychology, subjective well-being has become one of the important constructs in the world of education [64-66]. Some literature that is in line with the present study which has examined subjective well-being in the school environment include Long, et al., [67], Tian, et al. [68], Tian, et al. [69], Tian, et al. [70], Tian, et al. [71], Tomyn, et al. [63]. Schools have the potential to give students the opportunity to develop cognitive and social capacities, and subjective well-being investigated in this study is an important index to measure mental health and quality of life of students [72]. Factors that influence subjective well-being are classified into subjective and objective categories [73]. Subjective factors include personality characteristics, such as self-concept [74], self-acceptance [75], gratitude [53]. Meanwhile, objective factors include social relations [24], family support [76], and a positive social environment [77].

The analysis results suggest that first hypothesis is accepted because it fulfills several set of requirements, including the coefficient of determination (R2), predictive relevance (Q2), and goodness of fit index (GoF). It can be said that the model which describes the influence of family social support, gratitude, and self-acceptance to subjective well-being in boarding school student fit with empirical data obtained from the data. Thus, this research offers the novelty in the form of the formation of models of the influence of family social support, gratitude, self-acceptance to subjective well-being. There were very little, if any, previous studies that simultaneously tested these particular variable models. Models of previous research results such as those produced by Zhang, et al. [78] are models of the influence of attribute style and optimism on subjective well-being. Meanwhile, Bajaj, et al. [79] produce resilience models in mediating the influence of attention on subjective well-being. Sánchez-Álvarez, et al. on the other hand, [80] produce a model of the influence of meta-mood traits on subjective well-being in students. Finally, Agarwal, et al. [81] have created a model of a reciprocal relationship between the quality of work-life and subjective well-being.

Secondly, this research also has novelty mainly because it uses structural equation model (SEM) through the Smart Partial Least Square 3.2.8 program as the data analysis technique whereas previous studies have extensively used structural equation modeling (SEM) with the help of the AMOS program in compiling subjective well-being literature [82, 83]. Meanwhile, Ph, Lin, et al. [84] and Siedlecki, et al. [38] examine subjective well-being with the help of LISREL. Finally, the study participants also become a potential source of novelty because Islamic boarding school arguably hasn't become the focus of investigation in previous research.
The second hypothesis in this study was also accepted, showing a positive and significant influence between family social support on subjective well-being. So far, the literature on the influence of family social support on subjective well-being has been carried out in a variety of different settings, both in the social sphere [85], development context [38], organizations [86], education context [87], to cross-cultural research context [88]. The present study focuses on the scope of education in Islamic boarding schools, where the family is an important factor in social activities involving parents and teachers; thus, social support activities between parents, teachers, and students are the main social relations [89]. Support and assistance offered by families can increase the subjective well-being of students [90]. Support as a first step to developing positive interactions and communication between family members [91]. The creation of positive communication will produce a range of benefits that lead to the mental health of students and families [92].

Children in Islamic boarding schools do not live with relatives, but they live with friends, supervisors, teachers, principals, and caregivers so that all of these parties become the main actor who will build and maintain interpersonal relationships with the student. They also become the main source of social support [93, 94]. The social support referred here is the students’ perceptions about general support and supporting behavior from their social networks [95, 96]. The family’s social support is very important for students because it can improve students’ capacity to play a social role, and it can further protect students from harmful things [97]. During adolescence, the need for social support from peers, boarding supervisors, and teachers will increase [98]. Individuals tend to receive more support from peers and teachers than parents in this case [99, 100]. Students’ cognitive development depends heavily on family support within the boarding school context, which has started from elementary to high school [101]. During this transition, a positive relationship with the family has a profound impact on the overall satisfaction of boarding students’ life [102, 103].

The third hypothesis in this study was also accepted. It shows a positive and very significant influence between gratitude and subjective well-being. So far, gratitude has been one of the variables which receive the lowest attention [104, 105], but historically, gratitude is considered important for the functioning of life [106-108]. Much evidence emerges stating that gratitude is closely related to all aspects of well-being [109-113]. Gratitude is an emotion that occurs after students receive the assistance that is considered valuable or important for their lives [114, 115]. Gratitude is emotion is always directed to appreciate the beneficial actions committed by others including a very simple action, and this attitude can increase life satisfaction [114, 116].

Gratitude is part of a broader life orientation that pays attention and values positive things in the world [114, 117]. Gratitude serves as an indicator of aspects of life that must be respected [105, 118]. It neutralizes negative emotions, so students tend not to get angry easily when facing conflicts or social problems [119, 120]. The contribution of gratitude in improving individual well-being is to foster emotional warmth, to seek social activities, and to always think positively [121, 122]. Students who are grateful have a higher openness to feelings, ideas, and positive values, and this is related to the concept of humanistic well-being [123, 124]. It further enhances the image of life. Gratitude is strongly associated with mood and life satisfaction [122, 125]. Students with grateful personalities tend to avoid excessive stress that leads to depression and disorders [115, 126, 127].

The fourth hypothesis in this study, on the other hand, was rejected. It shows that self-acceptance has no significant influence on subjective well-being. Some previous research results contradict the results of this study, which show that there is a positive relationship between self-acceptance and subjective well-being [75, 128-130]. Self-acceptance is an important indicator of mental health [54]. This concept involves the acceptance of unpleasant experiences in the past, present, and future [131, 132]. Self-acceptance to others reflects the attitude of individuals towards themselves and others [133]. Students with self-acceptance will be able to accept their condition. They will not blame or criticize his thoughts, feelings, and emotions [134]. Self-acceptance helps individuals to pay attention to what is happening in the present. In this way, students do not easily judge the opinions of others [135]. The result of the present study shows that self-acceptance is not related to the levels of self-welfare, and this result subsequently refuted what researchers have documented previously. This study, therefore, has its novelty as it shows that self-acceptance does not contribute to life satisfaction.

Previous studies suggest that students who cannot accept their condition might still have better subjective well-being as long as they receive sufficient support or attention [136, 137]. Students in their adolescence tend to need self-recognition [33, 138]. A series of social activities and roles are played by students to attract the attention of the surrounding environment [139]. This concept underlies that recognition and attention factors are priorities that must be met so that self-acceptance factors are ignored [140]. Low self-acceptance does not always have an impact on individual life satisfaction [141, 142]. Some student admitted that even though living in boarding schools had many limitations, they still felt comfortable because, in this environment, positive family ties were formed. They remind each other in terms of kindness and when behaving wrongly, motivating each other to increase morale and mutual support when there are
subject who are uncomfortable being away from home. This form of attention is a source of satisfaction and welfare for student, so student can have subjective well-being even though their self-acceptance is low.

5. Conclusion

Based on the results of the research analysis, it is known that the subjective well-being model fits with empirical data. The results of the model illustrate the influence of family social support, gratitude, self-acceptance to subjective well-being of student in Islamic boarding school. In addition, there is a positive and significant influence between family social support on subjective well-being with a contribution of 9.9%. Similarly, gratitude is also shown to have a significant contribution to wellbeing with a contribution of 83.6%. However, results also show that there is no correlation between self-acceptance and subjective well-being. Thus, the model in this study can be used to develop and handle subjective well-being, both theoretically and practically, especially in adolescent student.

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References

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