

Basic Psychological Needs on Primary School Student Well-being

Deasyanti*, Helmi Nurhasanah

Faculty of Psychology Education-Universitas Negeri Jakarta

Jl. Rawamangun Muka Raya, Jakarta Timur 13220, Indonesia. E-mail: deasyanti@unj.ac.id*

Abstract: This study aimed to test the effect of basic psychological needs toward the school well-being. This quantitative study uses a causal relationship research design. A total of 150 students were taken from six primary schools using a multi stage cluster random sampling technique. Data were collected by using two types of instruments, namely instruments to measure basic psychological needs; and instruments to measure school well-being. Data then analyzed by using regression. The findings showed there was an effect of the basic psychological needs on school well being. The need for relatedness is the most predictor to school well-being; whereas the need of autonomy is not associated significantly with school well-being.

Key Words: basic psychological needs, school well-being, self-determination theory

Abstrak: Penelitian ini bertujuan untuk menguji pengaruh kebutuhan dasar psikologis terhadap kesejahteraan sekolah. Penelitian kuantitatif ini menggunakan desain penelitian hubungan kausal. Sebanyak 150 siswa diambil dari enam Sekolah Dasar menggunakan Teknik *multi stage cluster random sampling*. Data dikumpulkan dengan menggunakan dua jenis instrumen, yakni instrumen untuk mengukur kebutuhan dasar psikologis; dan instrumen untuk mengukur kesejahteraan sekolah. Analisis data menggunakan regresi. Hasil penelitian membuktikan adanya pengaruh signifikan kebutuhan dasar psikologis terhadap kesejahteraan sekolah. Kebutuhan untuk keterkaitan merupakan prediktor yang paling besar terhadap kesejahteraan sekolah, sedangkan kebutuhan untuk mandiri tidak berpengaruh signifikan terhadap kesejahteraan sekolah.

Kata kunci: kebutuhan dasar psikologis, kesejahteraan sekolah, teori determinasi diri

INTRODUCTION

School plays an important role in achieving national education goals. In accordance with the National Education System Law No. 20 of 2003, the purpose of national education is the development of potential learners. As an important institution, schools are expected to be able to carry out these national education goals by providing the best school experience for students. Cognitive, social, and emotional experiences experienced by students influence their satisfaction and well-being in school. However, in reality today, most schools and parents are more oriented towards academic achievement or developing cognitive aspects of students rather than affective aspects of students (Kaluge, Setiasih, & Tjahjono, 2004). Though, the affective aspect is an equally important learning outcome because it will affect the cognitive

aspects (Elias et al., 2000; Immordino-Yang & Damasio, 2007).

Primary school (SD) is the first formal level of education that must be taken by children. In primary school, school satisfaction plays an important part for students. In line with the opinion of Ensminger and Slusarcick (1992), student's well-being at the elementary level is an important predictor of their school commitment at the next educational level. It is also an important basis for mental health in the later age period (World Health Organization, 2003). Summing up from various studies of school experiences, Stiglbauer, Gnamb, Gamsjäger, and Batinic (2013) found that positive school experiences are associated with student's well-being, and conversely, negative experiences are associated with various student behavior problems such as bullying, depression, and addiction behavior.

Various studies use different terms to describe school experiences, such as school satisfaction (school satisfaction; Samdal, Nutbeam, Wold, & Kannas, 1998), school climate (school climate; Loukas, Suzuki, & Horton, 2006), or school well-being (*school well-being*; Engels, Aelterman, Van Petegem, & Schepens, 2004; Tian, Liu, Huang, & Huebner, 2013; Vyverman & Vettenburg, 2009). This study employed the concept of school well-being in describing students' schooling experience.

School Well-being

School well-being is a comprehensive assessment of students' sense of well-being in their daily lives at school (Mertens & Van Damme, 2000, in Vyverman & Vettenburg, 2009). A number of studies use different school well-being models. Konu and Rimpelä, (2002) used the school well-being model which refers to the level of student satisfaction with school which includes the condition of the school, social relations, self-fulfillment, and health status. Hascher (2003, in Hascher, 2008) defines school well-being as a quality of school experience that includes positive thoughts and feelings towards the school and people in the school environment. This definition contains cognitive and affective dimensions towards school. Similar to Hascher, the school well-being model of Tian et al (2013) and Long, Huebner, Wedell and Hills (2012) state that school well-being is a specific domain of subjective well-being (Diener, 1994), which consists of components cognitive such as school satisfaction, the affective component such as positive affect, and negative affect in school. School satisfaction is an assessment or cognitive evaluation of students on overall school life (Baker, Dilly, Aupperlee & Patil, 2003; Elmore & Huebner, 2010; Tian et al, 2013) Positive affect is the frequency of positive emotions experienced during school, such as feeling comfortable, relaxed, happy (Tian et al, 2013; Tian, Chen & Huebner, 2014). Negative affect is the frequency of negative emotions experienced during school, such as sadness, disappointment, and boredom (Tian et al, 2013; Tian et al, 2014).

Basic Psychological Needs

Related to the affective component of school well-being, to achieve school well-being, students need school experience that meet their basic psychological needs. Based on the definition of needs in the per-

spective of Self-Determination Theory (SDT) from Deci and Ryan (2000), the basic psychological needs are innate and universal nutriment at the level of psychological basis that is essential for the continuity of growth, integrity, and personal well-being. There are three basic psychological needs: (1) need for autonomy, the need for freedom in the individual to behave according to his/her choice. In other words, individuals have a need to behave that originates from oneself and it is not influenced and controlled by external impulses (Deci & Ryan, 2000); (2) need for competence, that is the need to feel successful and effective in interacting with the social environment and get the opportunity to perform or show one's capacity (Ryan & Deci, 2000). Ryan and Powelson (1991) state that this dimension of need is reflected in one's tendency to face challenges that go beyond one's level of functioning through activities that can develop self-confidence and self-esteem; and (3) need for relatedness, the need to feel connected or close to parents, teachers, and classmates at school or peers (Ryan & Deci, 2000). This need also refers to feeling of being cared for and being able to pay attention to other people, as well as having a sense of being together with other individuals and communities.

Fulfillment of basic psychological needs can support optimal learning conditions and encourages the involvement of students in the learning process at school. In addition, students with basic psychological needs will have a positive school experience and influence their happiness. Reeve (in Stiglbauer et al., 2013) states that when schools are able to provide experience that meet their basic psychological needs, student's mental health and well-being will be good.

Several studies have found that there is a positive relationship between the fulfillment of basic psychological needs and school well-being, for example, research on junior high school students in China (Tian et al, 2014) and research by Stiglbauer et al. (2013) in Austria among high school students. In a sample of primary school students, through a qualitative approach to understanding the factors that affect student welfare, Deasyanti (2015) found that student dissatisfaction with school experience was related to various school situations that did not accommodate the fulfillment of students' basic psychological needs. Considering the limited research on the relationship of psychological basic needs and student's school well-being, research with a quantitative approach on the influence of students' psychological needs on primary school student welfare is important, especially to find

out what dimensions of basic psychological needs contribute the most to students' school well-being. In addition, research on the basic psychological needs and schools well-being is also carried out more in Western cultural contexts, while in Asian cultural contexts it is still limited, (for example, Tian et al., 2014; Deasyanti, 2015; Hidayah, Pali, Ramli, & Hanurawan, 2016).

This study aims to determine whether the basic psychological needs affect the well-being of primary school students. This research hypothesized that there is an influence of fulfilling the basic psychological needs (the need to be independent, the need to be competent, and the need for relatedness) to school well-being in elementary students. Furthermore, the effects of each dimension of basic psychological needs on school well-being will also be examined in detail and to determine how much contribution each dimension has. Thus, the hypothesis test was carried out: 1) there is an influence of the need to be independent on school well-being. 2) there is an influence of the need for competence on school well-being, 3) there is an influence of the need for relatedness on school well-being. The separation of the hypothesis refers to the statement that these three needs are different and independent needs in giving effect to the psychological growth of individuals (Ryan & Deci, 2000).

METHOD

The population of this research was State Primary school students in Jakarta. The subjects of this study consisted of six state primary schools in Central Jakarta and South Jakarta namely, SDN G-01 Pagi, SDN M-02 Pagi, SDN M-03 Pagi, SDN P-01 Pagi, SDN P-07 Pagi, dan SDN R-08 Pagi. The sampling technique used in this study was multi stage cluster random sampling which is included in the probability sampling. The number of primary school students involved in this study was 150 people.

Data collection techniques was using a questionnaire instrument. There were two types of questionnaires used in this study, the questionnaire to measure the basic psychological needs and to measure school well-being. The instrument of basic psychological needs was an adaptation of the Adolescent Students' Fulfillment of Basic Psychological Needs at School Scale (ASBPNSS; Tian, Han, & Huebner, 2014). There are 15 items in the psychological basic needs questionnaire, which consists of six items that need to be independent, five items that need to be competent, and five items that need to be connected. The sample

items are "I can decide for myself how to do things at school"; "I was able to learn new knowledge in school". The school well-being questionnaire in this study consisted of two types, school satisfaction instruments and positive and negative affect instruments. The school satisfaction instrument used in Deasyanti's (2015) research consisted of 15 items. The sample item is "I love being in school". The positive and negative affect instruments were the adaptation results of The Positive Affect and Negative Affect Schedule (HEAT; Watson, Clark, & Tellegen, 1988) consisting of ten positive affect, such as: happy, strong, excited, and ten negative affect, such as: depressed, scared, worried.

The instrument validity testing process began with translating the original instrument into Indonesian and translating it back into its original language (English) through a sworn translator. In checking the results of the translation and the process of modifying the instrument to make it easier for respondents to understand, a consultation with a colleague with a psychology education background was carried out. The instrument testing process was then given to 116 primary school students. Furthermore, the instrument reliability test calculation of basic psychological needs and school welfare used Rasch modeling. This approach was chosen because it has advantages over the classical test model approach. In Rasch modeling, the subject scores used in advanced statistical calculations were no longer raw scores, but pure scores that have been free from measurement errors. In addition, through Rasch modeling three things can be done at once, namely detecting inappropriate subjects (misfit) in giving outlier responses, thus the subject is aborted as a respondent; identifying items that have good differentiation and instrument reliability values (Sumintono & Widhiarso, 2013).

Based on statistical calculations using Rasch modeling with Winstep software version 3.73, the following results were obtained: on the instrument of psychological basic needs, there was one item that fell out of each dimension thus the final instrument number consisted of 14 items. There was one item that fell on the school satisfaction instrument, thus the final instrument was 14 items. One item that is dropped on the positive affect instrument makes the number of items on the positive affect instrument consist of nine items and the negative effect remains at ten items. The reliability of the instrument of basic psychological needs was calculated for each dimension, namely the need for independence of 0.96, the need for com-

petence of 0.91 and the need for relatedness of 0.89. The reliability of the school welfare instrument consists of the school satisfaction instrument of 0.93, while the positive and negative affect instruments were 0.89 and 0.80, respectively. All instruments have reliability values above 0.80 or were classified as very good (Sumintono & Widhiarso, 2013).

Before conducting the hypothesis test with regression analysis, various assumptions were tested on the data, namely the normality test, the linearity test, and the correlation test (Pedhazur, 1997). Normality test was carried out in order to find out whether the data is normally distributed or not. Linearity test was performed to see the relationship between two variables classified as linear or not. This linearity test is a requirement that must be met if using linear regression analysis techniques for testing hypotheses. Regression analysis was performed to find out how much the contribution of the independent variable to the dependent variable. Regression analysis can only be done if there is a significant correlation between the two research variables. The regression analysis technique used in this study was three linear predictor regression analysis

RESULTS

From the research subjects totaling 150 students, it was known that the sex of the students consisted of 66 male students (44.00%) and 84 female students (56.00%), while the age range of the study subjects ranged from 10–12 years. Hypothesis testing using the results of a regression analysis of the overall dimensions of the basic psychological needs of school welfare, obtained an F count of 50.33 with a F table value (3.06), which means that $F_{\text{count}} > F_{\text{table}}$ was 50.33 > 3.06. The p value was 0,000 with $\alpha = 0.05$, then $p < \alpha$. This shows that H_0 was rejected and H_a was accepted, meaning that there was a significant influence on the basic psychological needs of school well-being in elementary students. Thus, there is an influence of the dimensions of psychological basic needs simultaneously on school well-being.

To find out how much the contribution of the influence of each dimension of psychological basic needs on school well-being, it obtained the following results (Table 1).

Based on Table 1, the school well-being variable constant was 1.202 while the regression coefficient for autonomous dimensions was 0.206, the need for competence was 0.530, and the need for relatedness

Table 1. Regression Coefficient Equation

Model	Unstandardized Coefficients		Sig
	B	Std. Error	
(Constant)	1,202	0,189	0,000
<i>Autonomy</i>	0,206	0,115	0,075
<i>Competence</i>	0,530	0,124	0,000
<i>Relatedness</i>	0,382	0,069	0,000

was 0.382. Thus the regression equation is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots(1)$$

$$Y = 1,202 + 0,206X_1 + 0,530X_2 + 0,382X_3 \dots(2)$$

Based on the level of significance of each dimension of psychological basic needs, the results are obtained that the dimensions of psychological basic needs that significantly influence school well-being are the need for competence and the need for relatedness. While the need for independence does not significantly influence school well-being. Furthermore, to find out how much the contribution of each dimension to school welfare is calculated as follows (Table 2).

Table 2. Correlation of Dimensions of Basic Psychological Needs and School Well-being

Model	R	R Square
<i>Autonomy</i>	0,374	0,140
<i>Competence</i>	0,616	0,379
<i>Relatedness</i>	0,650	0,423

Based on Table 2, the results of the calculation of multiple correlations (R) obtained from the results of the calculation of each dimension. The double correlation (R) on the dimension of the need for autonomy was 0.374 and R square was 0.140. The double correlation (R) on the dimensions of the need for competence was 0.616 and R square was 0.370. The multiple correlation (R) on the dimensions of the need for relatedness was 0.650 and R square was 0.423. Thus, the need to be independent contributes to the school well-being by 14.00%, but the magnitude of this contribution does not significantly influence. The need for competence contributes to school well-being by 37.90%, and the need for relatedness with people contributes to school well-being by 42.30%.

DISCUSSION

This research proves that basic psychological needs affect the well-being of primary school students. Although this research was conducted in the context

of Indonesian culture, psychological basic needs are universal in all cultures (Deci & Ryan, 2000), across gender and time (Deci & Vansteenkiste, 2004) although the way of expressing those needs is different between cultures.

The need for relatedness is the biggest predictor in influencing school well-being. This is caused by the social and cultural context in the school environment. Students feel they have a good relationship with peers or with the teacher. According to Ryan, Connell and Grolnick (in Ryan & Powelson, 1991), the need for relatedness plays an important role in the process of culture and internalization of values, including in the educational context. Deasyanti (2015) found that the need for relatedness to elementary students was more influenced by the need to establish relationships with peers. While the needs of students to connect with teachers are still not fulfilled, which is reflected in the negative emotions of students at school because of various teacher behaviors.

The results of this study that found the greatest predictor of school well-being is the need for relatedness. This result differs from the study of Tian et al. (2014), who found that the most significant contributor to student school welfare was the need for competence. The difference in these results can be understood in relation to research subjects of Tian et al.; junior high school students who are in their adolescents with a high need for competence in order to get social recognition. In this study, the need to be independent also did not significantly influence school well-being. This result can be explained by the influence of collectivist cultural factors which have a low index on individualism (Hofstede, 2011) and highly value the closeness of interpersonal relationships (Hall, 1966, in Maulana, Opdenakker, den Brok, & Bosker, 2011).

The implications of the results of this study are related to the importance of school efforts in creating a positive school climate to meet the students basic psychological needs for achieving optimal school well-being. Furthermore, improving student well-being also affects the fulfillment of basic psychological needs. This relationship has been proven by Tian et al. (2014) about the two-way relationship between the basic psychological needs and school well-being. Thus, the relationship between the basic psychological needs and well-being of student schools is reciprocating and mutually reinforcing. Schools that provide opportunities for students to satisfy their psychological needs for development can be said to have functioned as psychologically healthy environments (Baker et al, 2003; Roeser & Eccles, 1998).

CONCLUSION

This research proves that there is a significant influence in fulfilling the basic psychological needs of students on the well-being of primary school students. Among the three types of basic psychological needs, the biggest predictor of school well-being is the need for relatedness. Furthermore, the second predictor is the need to be competent, while the need to be independent does not contribute significantly. Although this research was carried out in a different cultural context from previous studies, it proves that basic psychological needs are universal needs. The biggest contributor to the dimensions of psychological basic needs for student well-being is that the research differs from one another to reflect the influence of the cultural context in which the study is based and the characteristics of the educational level of the research subjects.

Future studies can be carried out with a wider number of samples or with a religious context to increase the generalization of research results and in discussing the comparison of results with similar research in other country contexts.

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