

The Effect of Subjective Well-Being with Biology Learning Results of Class X Students of the Nuraida Islamic Boarding School (NIBS), Bogor

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This study aims to determine and test the theory of the relationship between the intellectual intelligence, and subjective well-being of students on the biology learning outcomes of Grade X students of the Nuraida Islamic Boarding School in Bogor City. There are two problems in this study. Firstly, what is the condition of the subjective well-being of students in class X at the Nuraida Islamic Boarding School in Bogor City. Secondly, what is the relationship between the subjective well-being of students, and the biology learning outcomes of class X at the SMA Nuraida Islamic Boarding School in Bogor City. The method used in this research is a quantitative descriptive method with correlational analysis. This research was conducted at the Nuraida Islamic Boarding School in Bogor City, with a total sample of 46 people, taken by a purposive sampling method. The analysis of the data utilised a simple and multiple regression analysis. The research proves that: (1) the condition of the subjective well-being of students at the Nuraida Islamic Boarding School was in the high categories, with an average score of life satisfaction components of 3.98; (2) there is a significant relationship between the students' subjective well-being and the student biology learning outcomes, as shown with a correlation of 0.490, and a coefficient of determination of 24 per cent.

Keywords: *Subjective well-being, Learning outcomes, Biology.*

Introduction

Teenagers who enter the boarding school environment should be able to adjust to boarding life, but that is not an easy thing for teenagers. Transition from the neighbourhood to the dormitory environment will cause significant changes for adolescents. Changes that occur in themselves, and the environment require a teenager to make adjustments. This needs to be done so that harmony occurs between adolescents with the dormitory environment, and so that young people can comfortably live in the dormitory environment. Students at the Nuraida Islamic Boarding School are monitored for 24 hours or full-time by a Muslim escorting room. The students must face the same people, and the same environment with dynamics that always tend to be monotonous. Boarding schools have higher demands than non-boarding schools. Besides that, boarding schools also isolate students from the social environment, and limit relationships while in the dormitory. Many students who follow an education with the boarding school system because of the will of parents, not the will of the students themselves (Abidin Arief, 2017).

Both school activities, and the dormitory are quite dense and spacious. Boarding activities are limited by the rules set by (Ahmad, 2015) the hostel, are felt too much, and curbed by some students, making the students feel bored generally, and at living in the hostel. The boredom experienced by boarding school students also affects the subjective well-being of the students themselves.

The subjective well-being is a psychological condition of students in feeling their life satisfaction, which is felt in the family environment, relationships, school environment, and learning environment (Agung, 2012). Diener stated that an element of a good life is that individuals like their lives, where individuals who can enjoy their life possess a subjective well-being. Thus, it can be suggested, that in the students who have a subjective well-being, the psychological condition of these students accepts the satisfaction of the life they live (Azwar, 1996).

The students who feel well and are satisfied and perceive boarding school as a fun place, will be better able to perform social adjustments. On the contrary, the students who perceive boarding school as an unpleasant place, will experience obstacles in making social adjustments. The concept of school-based learning is created to improve the quality of education which is received by students through a system with binding, and hard characteristics, accompanied by uncommon sanctions that make students in boarding schools feel disassembled, and distracted. Students who are able to develop positive learning attitudes, such as liking (Compton, 2005), agreeing, and being happy in the learning activities and activities, will consequently experience a positive impact upon their student achievement. This is also evidenced from the results of research conducted by Fara Hamdana, who said that there was a significant relationship (Davidoff, 2000) between the subjective well-being of students, and student achievement (Dimiyati & Mudjiono, 2013).

Happiness can refer to many meanings, such as pleasure, life satisfaction, positive emotions, meaningful life or meaningfulness and contentment. Some researchers use the term, 'well-being', as a term of happiness itself. The concept of well-being refers optimally to psychological experiences, and functions. Some of the studies of happiness are written as synonyms of the subjective well-being (Djamarah, 2011).

According to Carr, the subjective well-being is a typical positive psychological condition with high levels of life satisfaction, high levels of positive affection, and low levels of negative affection. Whereas, Diener, Luca (Ed Diener, 1984), and Oishi define the subjective well-being as a result of one's cognitive, and affective evaluation (Ed Diener, 2000) or assessment of one's life experience.

Meanwhile, Diener argues that the definition of the subjective well-being and happiness can be made into three categories. Firstly, the subjective being, not a subjective statement, is a quality desire that everyone wants to have (Ed Diener, 2005). Secondly, the subjective well-being is an overall assessment of one's life, which refers to a variety of criteria. The third meaning of the subjective well-being, if used in everyday conversation, is where positive feelings are greater than negative feelings (Eid, 2000). Meanwhile, Campbell in Dienermits, stated that the subjective well-being lies in the experience of each individual, which is a positive measurement, and typically includes an assessment of all aspects of a person's life (Azwar, 1996).

Diener defines the subjective well-being as a global assessment of all the aspects of individual life. Diener translates the subjective well-being as a field in behavioural science regarding the individual evaluations of the lives they learn (Hasan, 1994). The subjective well-being has a variety of concepts, ranging from moods, as a global assessment of life satisfaction, and from depression to euphoria (Hanggoro, 2015).

Compton explained that the subjective well-being is an individual cognitive process regarding a global assessment of the acceptance of individual life. Compton believes that the subjective well-being is divided into two main variables: happiness, and life satisfaction. Happiness is related to the emotional state of individuals, and how individuals feel about themselves, and their world. Life satisfaction tends to be mentioned as a global assessment of an individual's ability to accept his or her life. Diener et al. interpret the subjective well-being as an individual's cognitive, and affective evaluation of himself or herself. This evaluation includes emotional reactions to events, as well as cognitive assessments of satisfaction, and the fulfillment of needs. Thus, the subjective well-being is a general concept that includes pleasant emotional experiences. The low level of negative experiences found in high levels of the subjective well-being is a core concept of positive psychology because people make their lives useful (Irwanto, 2002).

Pavot and Diener in Linley and Joseph argued (Iskandar, 2012) the subjective well-being represents a person's judgment of themselves, and that judgment can be based on cognitive or theoretical, and emotional responses. Such assessments are basic information in determining the overall quality of life, and well-being of a person, but are not enough to cause a good

quality of life, if the basic elements of human dignity, and freedom are absent (Islamudin, 2012).

The subjective well-being involves a multidimensional evaluation of life, including a cognitive assessment of life satisfaction and an affective evaluation of emotions, and moods. (Joko, 2004). The subjective well-being area consists of the scientific analysis of how individuals evaluate the lives of other individuals regarding an event (Linley & Joseph 2004), their moods, their assessment of the forms of life satisfaction, and the fulfillment of satisfaction needs in domains such as marriage, and work (Mardianto, 2012).

Subjective well-being is an individual's assessment of a positive life. Individuals are said to have high subjective well-being if the individual has life satisfaction, and more often feels happiness, and rarely experiences emotions that are not as pleasant as sadness or anger.

On the contrary (Mulyasa, 2006), the individual is said to have low subjective well-being if the individual is dissatisfied with his or her life, experiences a bit of happiness and affection, and more often feels negative emotions, such as anger or anxiety (Mustakim, 2004).

Biology Learning Outcomes

The learning process that has been passed by each individual or human being, always produces results because a process can be said to exist if there is something that can be produced from the results of the learning process (Nurkancana & Suwartana, 2002). For more details about the results of learning scientifically, with this, the author will explain some understanding of learning outcomes, according to experts.

To provide an understanding of the learning outcomes, it will be described in advance, and in terms of language. This understanding consists of two words, 'results', and 'learning'. In KBBI, results have several meanings. Firstly, something held by the business, and secondly, income, acquisition or fruit. Whereas, learning is a change in behaviour or response caused by an experience. As for what is meant by learning, according (Prawirohartono, 2007) to the Osman, it is "Changes in behavior in the individual individual, he said, the interaction between one individual with another individual and between individuals with the environment".

Learning outcomes are abilities that are obtained by individuals after the learning process takes place, which can provide changes in the behaviour of students after learning, understanding, attitudes, and student skills, so that they become better than before. Learning outcomes are one indicator of the learning process. Learning outcomes are changes in behaviour, which are obtained by students after experiencing learning activities (Rahayu, 2015). One indicator of whether or not a learning process is achieved, is to look at the learning outcomes achieved by students. According to Sudjana, defining student learning outcomes is essentially a change in behaviour, as a result of learning in a broader sense covering the cognitive, affective, and psychomotor fields (Sabri, 2010).

Learning outcomes are the level of mastery achieved (Sardiman, 2014) by students in attending teaching, and learning programs, and in accordance with the objectives set. According to Dimiyati and Mudjiono, it can be understood that learning outcomes is a process to determine the extent to which students can master learning after participating in teaching and learning activities or the success achieved by (Sobur, 2009) a student after participating in learning activities, which is marked by the form of numbers, letters or certain symbols agreed upon by the education provider (Slameto, 2003).

From some of the theories above about learning outcomes, it can be concluded by the authors that learning outcomes are the result of behavioural changes, which include cognitive, affective, and psychomotor skills, after completing the learning process. This is evidenced by the evaluation results expressed in symbols, letters, and sentences. Learning outcomes can be an indicator of students' success in participating in the learning process, and whether it works well.

According to Riana Yani et al., "biology is a branch of science that studies the ins and outs of living things. Biology comes from Greek which consists of two words namely Bios which means life and logical which means science". Still, according to Riana Yani, studying biology is an attempt to recognise oneself as a creature because basically humans are always interested in themselves, other organisms, and the environment (Sudjana, 2010).

Associated with the previous exposure that has been reviewed by the author, learning outcomes are changes in behaviour that exist in students from the cognitive, affective, and psychomotor aspects in learning something (Suhardi, 2011). To achieve the results of learning biology, in essence, students are expected to be able to understand, explore, try, and infer phenomena that occur in everyday life associated with biology, such as knowledge of the nature of biology, cell development, viruses, microbes, and others.

Based on the explanation of the above opinion, it can be concluded that the nature of biology learning outcomes at the high school level is a follow-up process of learning from the junior high level, which learns about natural (Sujanto, 1993) phenomena, and the environment in daily life. Moreover, it is where the learning process is emphasised on the creation of the interaction between the students, and the objects learned, so that students can explore, understand, feel, find concepts, and provide conclusions about what happens from the results learned. Therefore, students are required to include their intellectual intelligence to draw conclusions on the biology learning process which is carried out in the classroom.

Methods

This study uses quantitative descriptive methods with a correlational analysis. The purpose of using this method is to (Surya, 1995) describe based upon the facts, and actual events from the research site that are associated with the theories, and assumptions that exist (Suryabrata, 1998).

In this study, the total population of the Nuraida Islamic Boarding School was 69 students. The Nuraida Islamic Boarding (Su'udah, 2010) School SMA only began operating in the

2018/2019 academic year, with a total of 69 students accepted. As the subject of this study, the authors took samples by means of a purposive sample. That is, samples taken specifically, and aimed. The sample used as an object in this study is specifically science students, amounting to 46 students, consisting of 23 students in class XA, and 23 students in class Xb. This sample was taken based on the opinion expressed (Shah, 2011) by Zainal Abidin Arief: "One thing to note is that random sampling can be used if elementary units in the population have homogeneous characteristics and can be considered homogeneous".

This study uses primary data, obtained through direct research on the object under study by conducting direct observations, and giving questionnaires to students, and by digging up information to parties involved with the problem being discussed. To support the accuracy of this data collection, the authors conducted a literature study, and field research (Toha, 2007).

The instrument in this study consisted of the variable of subjective well-being by giving each question the weight of the assessment with a Likert scale model. A Likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena. The questionnaire in this study uses five answer choices. The way (Language Development Team, 2007) the respondents answer the questions is by giving a check mark (✓) to one of the alternative answers provided. The alternative answers, and answer score weights, can be seen in the table below:

Table 1: Scale Measurement Questionnaire data

Pilihan Jawaban	Kode	Skor	Makna
Sangat Setuju	SS	5	Sangat Tinggi
Setuju	S	4	Tinggi
Kurang Setuju	KS	3	Sedang
Tidak Setuju	TS	2	Rendah
Sangat Tidak Setuju	STS	1	Sangat Rendah

The biology learning outcomes of students in this study were obtained from the results of the average value of the first daily tests, second daily tests, and UAS scores in the odd semester of the 2018/2019 academic year (Triyanto, 2010). The average value was then processed to be used as a research tool for student learning outcomes in biology subjects.

Results and Discussion

Testing the Validity of Reliability and Data Normality

Before an analysis is carried out to answer the problem formulation and research hypothesis, the measuring instrument used (Uno, 2006) in this study will be tested on the level of reliability, and validity of the items.

Based on the results of the data reliability test using the SPSS version 22 assistance program, a Cronbach alpha value of 0.855 was obtained (Uzer, 2000; Source: Results of validity data processing with SPSS). The reliability test results show that for the biology learning variable,

it is reliable because the alpha cronbachs value is >0.60 . The reliability test results show that the subjective well-being can be variable.

Figure 2: Histogram Data of Subjective Normality Well-being Variable

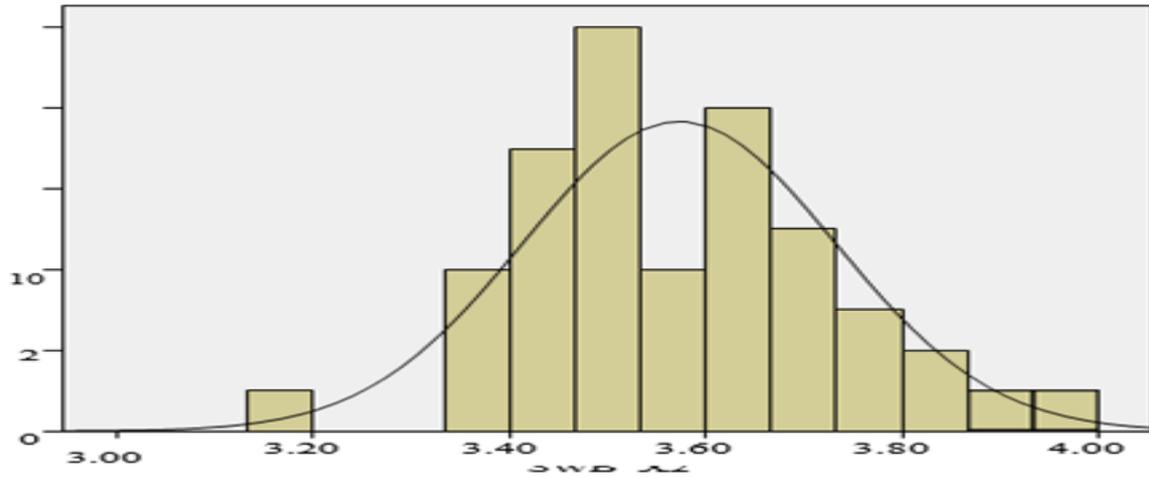
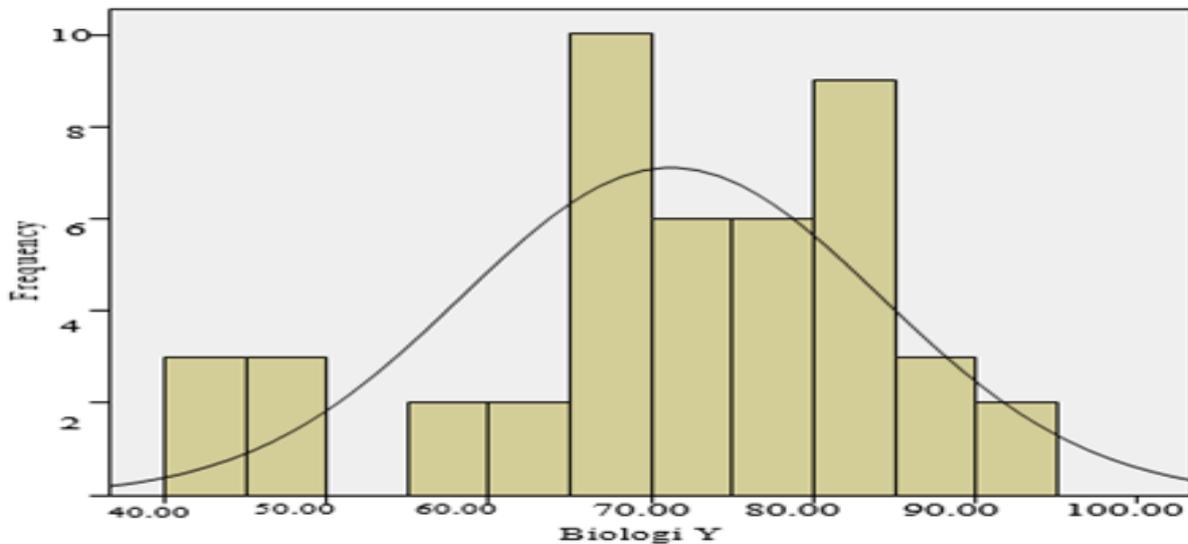


Figure 3: Histogram Data of Normality in Biological Learning Outcomes



Based on the results of the normality test data from the curve figures above, it shows that the shape of the curve is in the middle. This indicates that all variables in this study are normally distributed.

Hypothesis Testing

To test the relationship between the subjective well-being (X) variable, and the biology learning outcomes (Y), it can be seen from the results of the calculations that have been made with the SPSS version 22 assistance program, as follows:

Table 2: Coefficient

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant) SWB_X2	-70.480	38.067		-1.851	0.071
	39.655	10.644	0.490	3.726	0.001

From the data table above, the result of the t-test value is 3.726, with a level of sig 0.001. The T-table value at 0.05, with $df = n-2 = 46-2 = 44$, obtained a t-table value of 2.0154. The result of the t-test was $3.726 > t\text{-table } 2.0154$, with $\text{sig } 0.05 > 0.001$, which means that the proposed hypothesis is accepted. This means that there is a significant relationship between the subjective well-being, and the student biology learning outcomes (Yani, 2007).

The magnitude of the correlation value or the relationship between the subjective well-being (X) variable, and the biology learning outcome variable (Y) can be seen in the following table:

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.490 a	0.240	0.223	11.37715

a. Predictors: (Constant), SWB_X2

b. Dependent Variable: Biologi_Y

The magnitude of the correlation coefficient (r_{xy2}) relationship between the subjective well-being for biology learning outcomes is 0.490, and the magnitude of the coefficient of determination or influence given to the subjective well-being variable towards the biology learning outcomes was 24 per cent (Yani, 2009). The regression equation model between the subjective well-being (X) variable and the student biology learning outcomes (Y) obtained a regression equation with the formula $\hat{Y} = \alpha + \beta_1 X_1$, namely $\hat{Y} = -70.480 + 39.655X$. This regression equation contains the following meanings:

- the constant value of -70.480 states that if the value of the subjective well-being variable does not exist (0), then the value of the biology learning outcome variable is -70.480.
- the regression coefficient of the subjective well-being variable is 39.655, which means that every addition of one point of the subjective well-being variable will increase the biology learning outcomes by 39.655 times.
- the interpretation of the equation above, is the regression coefficient of the subjective well-being variable has a positive sign (39.655). This implies that the subjective well-being of students is in line with the biology learning variable (Whitherington, 1991).

From the results of the descriptive statistics, the minimum average value of the respondents' answers is 3.16, the maximum average value of the respondents' answers is 4.00, and the

average value of all the respondents' answers is 3.57. The mean range value of 3.57, can be said to be good because the average value is in the range of 3–4.

The t-test results obtained a t-test of $3.726 > t\text{-table } 2.0154$. This indicates that there is a significant relationship between the subjective well-being of the students with the biology learning outcomes. There was a large value of the r_{xy2} correlation of 0.490. The value of this correlation is in the range of correlations or relationships that are moderate or sufficient (Here and Pius, 2014).

The instrument variable of subjective well-being in this study is in the form of a questionnaire, which was divided into three indicators: life satisfaction, positive affection, and negative affection. From these three indicators, the average respondent's answer was 3.98 for the life satisfaction component, 3.91 for the positive affection component, and 2.74 for the student negative affections.

The average score of the components of life satisfaction was 3.98. This indicates that the average score of the respondents' answers is of a high value or meaning. The score indicates that the life satisfaction component of (Nickyta, 2010) the Nuraida Islamic Boarding School high school students has a high sense of life satisfaction. The students feel comfortable living with the current conditions, including family conditions, school environment, and social friends.

The average score of the positive affection component of students was 3.91. This also indicates that the positive affection factor or emotional sense possessed by the Nuraida Islamic Boarding School students has a high positive affection. This means that the emotions of the students are stable and can control towards positivity.

The average score of the affective negative student component was 2.74. This score is at a low value, which indicates that the negative affection or negative feelings of students at the SMA Nuraida Islamic Boarding School are at a low level. This means that students can still control things or attitudes pertaining to the negativity that arises or that is owned by students.

From the results of the respondents' answers above, it can be concluded that the subjective well-being of students at the Nuraida Islamic Boarding School are in the good or high category. This means that, in general, the students at the Nuraida Islamic Boarding School have a sense of satisfaction in a comfortable, and happy life, and rarely experience excessive emotions. The individuals who have a high sense of subjective well-being will have enthusiasm in living their lives, but conversely, if individuals or students have a low subjective well-being, then the individual or students do not have the zest for life, and their life is full of low emotions, and cannot be controlled.



Conclusion

From the results of this research, several conclusions can be drawn in accordance with the research objectives, as follows:

1. The condition of the subjective well-being of students at the Nuraida Islamic Boarding School is either in the good or high category. This means that, in general, the students at the Nuraida Islamic Boarding School have a sense of satisfaction in a comfortable, and happy life, and rarely experience excessive emotions.
2. There is a significant relationship between the subjective well-being of students, and the biology student learning outcomes of students at the Nuraida Islamic Boarding School in Bogor.



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