

Effect Neuroticism to Subjective Well-being in Faculty of Psychology Student

Helianny Kiswantomo^a and Theofanny^b

Department of Psychology, Jl. Surya Sumantri 65, Maranatha Christian University, Bandung, Indonesia

Keywords: Neuroticism, Subjective Well-being, Students.

Abstract: Students of the Faculty of Psychologists are important to have subjective well-being because after they graduate, they must serve people. One of the factors that influence the subjective well-being is personality traits. One of the personality traits according to the Big Five Personality Trait is neuroticism. Respondents in this study was 467 students of the Faculty of Psychology, selected by Simple Random Sampling technique. This research used Big Five Inventory – 10 (BFI-10), to measure neuroticism, while subjective well-being was measured by Satisfaction with Life Scale and Scale of Positive and Negative Experience (SPANE). Data were analyzed by Linear Regression. The result indicated that neuroticism had a positive correlation and significant effect with positive affect and life satisfaction, but had no effect on negative affect. The summary was neuroticism only affected two subjective well-being components. Neuroticism possibly had an indirect effect on negative affect. Impact of this study is that very important of Faculty of Psychology to design intervention for student with high and moderate neuroticism.


1 INTRODUCTION


Psychology today is growing rapidly, in line with the increasing needs in the society for psychology services. In Indonesia, the number of universities that hold the Psychology Study Program currently has increased too. College student of the Faculty of Psychology will become a psychological scientist.

As a psychological scientist, some services that they can provide are a psychological testing, scoring, give a training, give non clinical counselling, and make a research for development psychology that can improve people's welfare. As student, they are prepared to be ready to give psychological services when they graduate. They have to learn through practicum or data collection. They need to ask people's consent to be their subject of the psychological testing, so they can practice through test, scoring, observation and interview. They also need to find people who give their consent to be the counselling subject, which they practice their counselling skills, and of course under the supervision. Other things, they need consent of the people that willing to be the subject, to be given the

training from modules that they make in the college. Even, they also need people's consent when they learn to construct research measurement and learn about psychometric properties. Thus, since college, psychology student had a lot of contact with people. Psychology student need to prioritize the well-being of the people they give services, as regulated in the Psychological Code of Ethics. They need to learn not to put their personal interest when dealing with people who will be their subject of assessment or respondent of their research. Learning to treat others according to the guidelines of the Code of Ethics is very important for a psychology student, who one day will graduate and enter the field of community service.

Prioritize the well-being of the individual they served, or so called as a client, is an important point in giving psychological services, in order to avoid bad effects as the result of abuse in its services given. To be able to prioritize well-being of the client, then the one who serves also need to live well, or refer to as subjective well-being. Brammer and MacDonald (2003) say, people who give this service must have fulfilling lives, and have a high self-awareness about

^a  <https://orcid.org/0000-0002-5364-4059>

^b  <https://orcid.org/0000-0002-2938-0997>

their needs, their life values, or they will tend to use the helping relationship too much for satisfaction of their unmet needs. If this condition occurs, then it is not the client's welfare that takes precedence, but more self-welfare takes precedence. Therefore, it is important for Psychology Faculty students to have well-being before they really plunge as a professional.

Subjective well-being is how individual evaluate or appraise their own lives (Diener et al., 2017). This evaluation can be a cognitive and an affective reflection. Cognitive means the individual reflective appraisals of his/ her life satisfaction in the area of his/her life, for example work, school, family. Affective reflection includes positive and negative affect. Positive affect is feelings like joy, excitement; while negative affect is feelings such as worry, sadness, anger. Individuals are said to have high subjective well-being if they feel satisfied with their life, feel more positive affect, and feel a little negative affect. Students at Psychology Faculty need to live themselves as prosperous, which means they have life satisfaction and more positive affect, so they do not have too much desire to find the satisfaction of their own needs, rather they can focus on the well-being of their clients. If they satisfy with their lives, so they won't seek fulfilment from people that they give services. If they have more positive affects, so they will treat people in a positive way too. Thus, its important for psychological students to have subjective well-being in high degrees.

The importance of subjective well-being has been researched a lot. High subjective well-being is positively correlated with the individual health (Diener et al., 2017), namely with the system of cardiovascular, immune system, and glands. Life satisfaction, as a cognitive component of subjective well-being, is said to contribute related perceptions of quality of life health (Munoz et al., 2016). Steptoe, Deaton & Stone (2015) also found that subjective well-being is related to the ability to survive (survival). In addition, positive affect, which is a component of affective subjective well-being, also develop the quality of social relationship (Moore, Diener & Tan, 2018). Research results show that it reinforces the importance of the students at The Faculty of Psychology has a high subjective well-being.

Besides the needs to have subjective well-being, Brammer and Mac Donald (2003) as well reveal, that personality trait is an essential element for the person to provide psychological services (referred to as helper), because the helper's personality is the main means in the helping process. Personality traits will

influence perspective and how to respond to people, so it will also affect when someone gives psychological services. One theory that is suggesting the personality trait is the big five personality (Costa & Mc Crae, 2012). Personality trait is a dimension of individual differences which tends to show a consistent pattern of thoughts, feelings and actions (Costa & Mc Crae, 2003).

Big five personality looks at human personality as traits arranged in five personality domains, namely Neuroticism, Extraversion, Openness to experience, Agreeableness, and Conscientiousness. Neuroticism represents the individual's propensity to experience unpleasant emotions and annoying emotions and have a disturbance in thought and action (Vestre, in Costa & Mc Crae, 2003). Extraversion refers to the differences in preferences in interacting in social and daily life. Openness refers to acceptance of an idea, new approaches, and experiences. Agreeableness appears in concern for others, trust, and generosity. Conscientiousness refers to caution, obedience, self-discipline, ambition and hard work (Costa & Mc Crae, 2003).

Several studies have linked personality traits and subjective well-being. From research conducted by Albuquerque et al (2012), openness to experience, agreeableness and conscientiousness have no positive direct effect to life satisfaction and reduce negative affects. Extraversion directly increase positive affect. Only Neuroticism that reduces life satisfaction, positive affect, and increase negative affect, either directly, or through a mediator. It means that neuroticism decrease subjective well-being.

Other research conducted by Soto (2015), who found the same results, said that high subjective well-being is related to Extraversion, Agreeableness, and high conscientiousness, however high subjective well-being is related with low Neuroticism. Melendez et al (2019) found that neuroticism is related with low life satisfaction scores and positively correlated with negative affect. Allan et al (2018) even concluded that neuroticism has been found to be a predictor of several negative life outcomes. From those studies, Neuroticism trait has to get special attention, because it has a negative effect to subjective well-being.

The results of several studies that have been conducted by the researchers at the Faculty of Psychology at several universities in Indonesia, indirectly provide an overview as follows: Utami (2016) found that on 100 student respondents from one of the faculties Psychology in Indonesia, trait tendencies of neuroticism which is at a high level are 17%, moderate 62%, low 21%. That means that most of the student respondents have trait neuroticism at a

moderate level. In the Faculty of Psychology of another university in Indonesia, Prabowo (2016) obtains a description of the personality types of 100 students as follows: 35 students have neuroticism-type, 15 students have the extraversion-type, 7 students have the Openness to new experience-type, 18 students have the agreeableness-type and 25 students have the conscientiousness type, which means a large portion of students have neuroticism-type.

Furthermore, through this pre-liminary study about trait of neuroticism in 200 students at the Faculty of Psychology in University "X", obtain the result that 51.5% of students have a trait of the high neuroticism, and 48.5% have a trait of the low neuroticism. From some of the research results mentioned above, obtained that many students have traits of the neuroticism in a moderate or high degree. In fact, which has been explained in several research before, the high degree of the neuroticism trait is associated with the lower subjective well-being.

Based on several previous research and pre-liminary study on students at the Faculty of Psychology in "X" University, so research on neuroticism and subjective well-being of the students at Psychology Faculty become very important.

Roberts et al (2017) and Allan et al (2018) give hope that from their research, neuroticism traits can change through intervention and it will show a large effect of changes after intervention. That is, if in this research, neuroticism trait is also proven to have a negative effect on subjective well-being, then an early intervention can be carried out on students who have moderate or high degrees of neuroticism trait. Based on this, the researcher is interested in examining effect of neuroticism trait on the components of the subjective well-being of the students at the Faculty of Psychology in "X" University.

2 METHODS

2.1 Instrument

This study uses a quantitative approach and correlational methods (Graziano & Raulin, 2014). The variables in this study are subjective well-being and neuroticism trait. To measure neuroticism trait, the measuring instrument used in this study is the Big Five Inventory - 10 questionnaires (BFI-10), consisting of 10 items, which is adapted from Rammstedt, B. & John, O. P. (2007). The initial statement of the BFI item is "I see myself as someone who ...". Then the respondent is given a number of

items describing the personality trait, for example "... is outgoing, sociable"; or "... is relaxes, handles stress well". Respondents are asked to rate themselves on a 5-grade scale from "disagree strongly, disagree a little, neither agree nor disagree, agree a little and agree strongly". Meanwhile, to measure subjective well-being, on the cognitive component, the researcher used the Satisfaction with Life Scale, which consists of 5 items, with 7 scales, namely "strongly agree, agree, slightly agree, neither agree nor disagree, slightly disagree, disagree, and strongly disagree". Respondents are asked to rate themselves in statements such as: "In most ways, my life is close to my ideal."

While the Scale of Positive and Negative Experience (SPANE) is used to measure the affective component (Diener, 2009), consisting of 6 items that measure positive affect, and 6 items measure negative affect. In SPANE, respondents are asked to think about how often positive or negative feelings occurred (for example: "happy", "sad). The choice consists of 5 scales, namely "very rarely or never, rarely, sometimes, often, very often or always". The reliability of the questionnaire is tested using Cronbach's Alpha, while the validity of the questionnaire is measured using the construct validity, which is calculated using Pearson's product-moment.

The results of the BFI-10 validity test for neuroticism amounted to 0.834-0.848, with a degree of correlation coefficient of < 0.001 , at a significance level of 0.01. The results of the neuroticism reliability-test are 0.586; this means that the measuring instrument is valid and reliable. For the Satisfaction with Life-Scale measurement tool, the validity coefficient ranges from 0.714-0.851 and the reliability coefficient is 0.862, meaning that the SWLS measuring instrument is valid and reliable. Whereas for the positive affection, the validity coefficient ranges from 0.644-0.859, and the reliability is 0.859. For negative affection, the validity coefficient ranges from 0.700-0.779, and the reliability is 0.826. All of these results have a significance degree of < 0.001 at the 0.01 significance level. The test results indicate that the positive and negative affection measurement tools are valid and reliable.

2.2 Sample and Sampling Technique

The population of this study is 668 students at the Faculty of Psychology in "X" University in Bandung (odd semester 2019/2020 data). Samples are collected using the Simple Random Sampling technique and

obtained 467 students. The research procedure is carried out by distributing questionnaires directly to students, by first asking the students' willingness to fill out the informed consent. Only students who had filled in the informed consent and were willing to be participants filled out the distributed questionnaires.

2.3 Data Analysis

The data obtained is processed using the Linear Regression technique (Field, 2017), to measure the contribution of neuroticism trait to each component of subjective well-being. To do a test for Linear Regression statistics, the classical assumption test procedure is first carried out, which includes data normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. From the results of the classical assumption test, the data has met the requirements, so it is continued with the Linear Regression test.

3 RESULTS AND DISCUSSION

From the results of demographic data processing, the following descriptions of respondents are obtained.

Table 1: The Gender of The Respondents.

Gender	Frequencies	Percentage
Men	71	15.2%
Women	396	84.8%
Total	467	100.0%

In table 1, it can be seen that most of the respondents are female (84.8%), the rest are male (15.2%). Then, the contribution of neuroticism to life satisfaction components will be tested. Before testing regression of neuroticism on life satisfaction, the correlation between variables was tested and presented in table 2.

Table 3: The Contribution of Neuroticism to Life Satisfaction.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.213 ^a	.046	.043	5.01409	.046	22.181	1	465	.000

Table 2: Correlation Between Neuroticism and Life Satisfaction.

		Life Satisfaction	Neuroticism
<i>Pearson' correlation</i>	Life satisfaction	1.000	-0.213
	Neuroticism	-0.213	
<i>Sign (1 tailed)</i>	Life satisfaction		0.000
	Neuroticism	0.000	
	N	467	467

In table 2, it can be seen that neuroticism has a negative correlation with life satisfaction, which means that the higher the degree of neuroticism, the lower the degree of life satisfaction is.

In table 3, it revealed that neuroticism contributed significantly (sign 0.000 < 0.001) to life satisfaction by 4.3%, and the rest is determined by other factors.

Furthermore, before testing the regression of neuroticism on positive affect components, the correlation between variables was tested and represented in table 4

Table 4: The Correlation Between Neuroticism and Positive Affect.

		Positive Affect	Neuroticism
<i>Pearson' correlation</i>	Positive Affect	1.000	-0.297
	Neuroticism	-0.297	
<i>Sign (1 tailed)</i>	Positive Affect		0.000
	Neuroticism	0.000	
	N	467	467

Based on the results in table 4, it can be seen that neuroticism has a negative correlation with positive affect, which means that the higher the degree of neuroticism, the lower the degree of positive affect is.

Table 5: The Contribution of Neuroticism to Positive Affect.

Model	R	R Square	Adjusted R Square	Std. Error of the estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.297 ^a	.088	.086	3.62603	.088	44.932	1	465	.000

In table 5, it appears that neuroticism contributed significantly to positive affect by 8.6%, the rest is determined by other factors. Before testing the neuroticism regression on negative affect components, the correlation between variables was tested and represented in table 6.

Based on the results in table 6, it can be seen that neuroticism is not significantly correlated with negative affect, which means that the higher the degree of neuroticism, not always the higher the negative affect is.

Table 6: The Correlation Between Neuroticism and Negative Affect.

		Negative Affect	Neuroticism
<i>Pearson' correlation</i>	Negative Affect	1.000	-0.050
	Neuroticism	-0.050	
<i>Sign (1 tailed) *</i>	Negative Affect		0.141
	Neuroticism	0.141	
N		467	467

In table 7, it appears that Neuroticism does not significantly contribute to negative affect.

Based on the results of data processing, it appears that neuroticism contributes to two components of subjective well-being, namely life satisfaction and positive affect. Neuroticism contributed the most to positive affect, amounting to 8.6%, and if it is seen from the direction of the correlation, it is negative. That is, neuroticism has the opposite effect on positive affect. A high degree of neuroticism can cause a decrease in positive affect (happiness, joy, optimism). Conversely, a low degree of neuroticism can lead to an increase in positive affect. These results are consistent with the results of research obtained by Albuquerque et al (2012), revealed that neuroticism directly or through mediators can reduce positive affect. Individuals with high neuroticism, tend to worry easily, feel guilty, fearful, angry, shy (Costa & Mc Crae, 2003).

With these characteristics, when facing obstacles, students who have high neuroticism traits feel worried that they cannot overcome obstacles, are hesitant to act, are pessimistic about the results, so that they do not appreciate the emergence of positive affect.

Neuroticism contributed 4.3% negatively to life satisfaction, which means that neuroticism has the opposite effect on life satisfaction. High degrees of neuroticism can lead to decrease the life satisfaction. Conversely, a lower degree of neuroticism can lead to an increase in life satisfaction. This is in line with previous research from Albuquerque et al (2012), which states that neuroticism can reduce life satisfaction, both directly and through mediators. The results of other studies that are in line with the results of this study are from Melendez et al (2019), that neuroticism is associated with a low life satisfaction score, meaning that the higher the neuroticism, the lower one's life satisfaction. Jansi & Anbazhagan (2017) suggest similar research results, namely neuroticism is a predictor of life satisfaction. Individuals who have a high degree of neuroticism, when faced with problems, tend to be worried, pessimistic, and too focused on their own problems, so they hesitate to take steps, for the fear of making mistakes. The opportunity to be able to cope with the problems they face is also small, and the opportunities to achieve their goals are also small. If they fail to achieve their goals, they tend to feel guilty and become increasingly pessimistic. When evaluating their life, this condition causes students to feel dissatisfied with their life.

The contribution of neuroticism in negative affect is not significant. This means that for students at the Faculty of Psychology, an increase in the degree of neuroticism does not necessarily lead to an increase in negative affect. This result is not in line with the results of previous studies. Albuquerque et al (2012) stated that neuroticism has an effect on increasing negative affect. Balgiu (2018) and Melendez et al (2019) also found that neuroticism is positively correlated with negative affect.

Different conditions can be seen in several studies in Indonesia, obtained by Nanrimansyah (2019), which states that there is no relationship between

Table 7: The Contribution of Neuroticism to Negative Affect.

Model	R	R Square	Adjusted R Square	Std. Error of the estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.050 ^a	.002	.000	3.94811	.002	1.157	1	465	.283

neuroticism and subjective well-being. Julian (2019) also found the same research results as Nanrimansyah (2019). The research of Nanrimansyah (2019) and Julian (2019) is in line with the results of this study, that there is no significant contribution to neuroticism and negative affect.

For the student respondents at the Faculty of Psychology in this study, not significantly contribution of neuroticism with negative affect can be explained by the research held by Wang & Shi (2009). Research by Wang & Shi (2009) states that the relationship between personality and affect is not a simple direct relationship, but can be mediated by a mediator. This means that neuroticism has an indirect effect on negative affect. According to Wang & Shi (2009), neuroticism contributes to negative affect through emotional regulation (reappraisal), an important psychological process. The results of research held by MacIntyre et al (2018) prove that difficulties in regulating emotions are related to the intensity and lability of negative affect. Individuals who are difficult to regulate their emotions, tend to have a high intensity of negative affect. Conversely, individuals who are able to regulate their emotions have a low intensity of negative affect.

For students at the Faculty of Psychology, there is no significant contribution of neuroticism with negative affect, possibly related to the role of the mediator. Students at the Faculty of Psychology who have high or low neuroticism, if they are able to regulate emotions (for example: reappraisal) to stimuli that generate negative emotions (for example, anxiety, fear, pessimism), the reappraisal process makes them reassess these stimuli objectively and process them, so that it does not necessarily lead to negative affect. Likewise, students with high or low neuroticism traits if they are less able to regulate their emotions (less able to reappraise or reassess the situation objectively), then it is possible for negative affect to emerge.

Based on the results, if a Psychology student has a high degree of neuroticism, so it will have an impact on their subjective well-being, especially on life satisfaction and a decrease in positive effects. This condition can have an impact on when they serve others. Lack of life satisfaction and at least positive

affect can impact in the way Psychological students treat the people they serve. Likewise, if they have a low degree of neuroticism and life satisfaction will be high, so they will have a positive affect, and that will influence the way they serve others.

One limitation of this study is that it does not measure the mediator between neuroticism trait and affect. Neuroticism trait, as described in Albuquerque et al (2012), can have an indirect effect on the components of subjective well-being. The implication of the results of this study for the development of science is to provide broader insight into the contribution of neuroticism to the components of subjective well-being, especially for students at the Faculty of Psychology, who are expected to have high subjective well-being. Another implication is that not significantly neuroticism's contribution to negative affect is expected to be an inspiration for further researchers to measure the effect of neuroticism on negative affect through emotional regulation mediators.

4 CONCLUSIONS

Based on the results of this study, it can be concluded that in students at the Faculty of Psychology, neuroticism influences the two components of subjective well-being, life satisfaction and positive affect. Neuroticism has correlation with life satisfaction and positive affect, but has no correlation with negative affect. The stronger influence is on positive affect. Neuroticism has no effect on negative affect. The implication of this research is to provide broader insight into the development of knowledge regarding neuroticism trait and subjective well-being, especially for students at the Faculty of Psychology.

The limitation of this study is that it does not pay attention to the possibility of a mediator between neuroticism and negative affect. Therefore, for further research it is recommended to measure the role of emotional regulation as a mediator between neuroticism and negative affect. If emotional regulation is proven to be a mediator, then the provision of emotional regulation skills interventions

can be an alternative way to reduce the emergence of negative affect.

Suggestions that can be given are for students who have high neuroticism traits, can get intervention through counselling, therapy, or coaching from guardian lecturers or counsellors, considering that this trait in a high degree can reduce the degree of life satisfaction and positive affect of students. The faculty can equip lecturers with adequate intervention skills to handle students who have high neuroticism, so as not to interfere with the effectiveness of learning and their relationships.

REFERENCES

- Albuquerque, I., de Lima, M.P., Matos, M., & Figueiredo, C. (2012). The Interplay Among Levels of Personality: The Mediator Effect of Personal Projects Between the Big Five and Subjective Well-Being. *J Happiness Stud.* January 2012. DOI: 10.1007/s10902-012-9326-6.
- Allan, J., Leeson, P., De Fruyt, F. and Martin, S. (2018) 'Application of a 10 week coaching program designed to facilitate volitional personality change: Overall effects on personality and the impact of targeting', *International Journal of Evidence Based Coaching and Mentoring*, 16 (1), pp.80-94. DOI: 10.24384/000470 (Accessed: 8 May 2020).
- Balgiu, B. A. (2018). The psychometric properties of the Big Five inventory-10 (BFI-10) including correlations with subjective and psychological well-being. *Global Journal of Psychology Research: New Trends and Issues.* 8(2), 61–69.
- Brammer, L. & Mc Donalds, G. (2003). *The Helping Relationship: Process and Skill.* 8th ed. Boston: University of Washington
- Costa, P. T., & McCrae, R. R. (2012). The Five-Factor Model, Five-Factor Theory, and Interpersonal Psychology. In *Handbook of Interpersonal Psychology: Theory, Research, Assessment, and Therapeutic Interventions* (91-104). John Wiley and Sons. <https://doi.org/10.1002/9781118001868.ch6>
- Diener, Ed. (2009). Social Indicators Research Series 37: *The science of Well-Being.* Springer: Netherlands.
- Diener, E., et al., (2017). *If, Why, and When Subjective Well – Being Influences Health, and Future Needed Research.* Applied Psychology: Health and Well – Being / Volume 9, Issue 2. Diunduh dari <https://onlinelibrary.wiley.com/doi/full/10.1111/aphw.12090>
- Field, A. (2017). *Discovering Statistics using SPSS.* 5th edition. New Delhi: Sage Publications India Pvt Ltd.
- Graziano, A.M & Raulin, M.L. (2014). *Research Methods: A Process of Inquiry.* 8th edition. Harlow: Pearson Education Limited.
- Jansi, Mary A. & Anbahazhagan, Dr.S. (2017). *The Relationship between Big 5 Personality Traits and Life Satisfaction of Among NCC Women Students.* International Journal of Management (IJM), 8(2) : 106-111.
- Julian, A. (2019). Uji Pengaruh Trait Kepribadian Big Five, Penyesuaian diri dan Gratitude terhadap Subjective Well being Mahasiswa Perantau UIN Syarif Hidayatullah Jakarta. *Skripsi.* Fakultas Psikologi, Universitas Islam Negeri Syarif Hidayatullah Jakarta.
- MacIntyre, J.M., Ruscio, A.C., Brede, E. & Waters, A.J. (2018). Emotion dysregulation and negative affect: Laboratory and EMA investigations in smokers. *Addictive Behavior Reports*, 7: 65-70. <https://doi.org/10.1016/j.abrep.2018.01.001>
- McCrae, R.R & Costa, P.T, Jr. (2003). *Personality in Adulthood : A five-Factor Theory Perspective.* 2nd Ed. London : The Guilford Press.
- Melendez, J.C., Satorres, E., Cujino, M.A. & Reyes, M.F. (2019). Big Five and Psychological and subjective well being in Columbian older adults. *Archives of Gerontology and Geriatrics*, 82: 88-93. DOI: 10.1016/j.archger.2019.01.016
- Moore, S. M., Diener, E., & Tan, K. (2018). Using multiple methods to more fully understand causal relations: Positive affect enhances social relationships. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being.* Salt Lake City, UT: DEF Publishers. DOI: nobascholar.com
- Munoz, R.T., Hellman, C.M., Buster, B. et al. (2016). Life Satisfaction, Hope, and Positive Emotions as Antecedents of Health Related Quality of Life Among Homeless Individuals. *International Journal Applied Positive Psychology*, 1:69-89. <https://doi.org/10.1007/s41042-017-0005-z>
- Nanrimansyah, N.R. (2019) Hubungan Trait Kepribadian dengan Subjective Well-Being pada Remaja yang Orangnya Bercerai di kota Bandung. *Skripsi.* Fakultas Psikologi, Universitas Kristen Maranatha.
- Prabowo, A.A. (2016). Hubungan Antara Tipe Kepribadian Big Five Dengan Intensi Berwirausaha Pada Mahasiswa Psikologi Universitas Muhammadiyah Surakarta. *Skripsi.* Fakultas Psikologi, Universitas Muhammadiyah Surakarta.
- Rammstedt, B. & John, O. P. (2007). Measuring personality in one minute or less: A 10 item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41, 203-212. Doi: 10.1016/j.jrp.2006.02.001. Diunduh dari <https://socialwork.buffalo.edu/content/dam/socialwork/home/self-care-kit/brief-big-five-personality-inventory.pdf>.
- Roberts, B. W., Luo, J., Briley, D. A., Chow, P. I., Su, R., & Hill, P. L. (2017). A Systematic Review of Personality Trait Change Through Intervention. *Psychological Bulletin.* Advance online publication. <http://dx.doi.org/10.1037/bul0000088>
- Soto, Christopher. (2015). Is Happiness Good for Your Personality? Concurrent and Prospective Relations of the Big Five With Subjective Well-Being. *Journal of personality.* 83: 45-55. DOI: 10.1111/jopy.12081.
- Steptoe, A., Deaton, A & Stone, A.A. (2015). Subjective wellbeing, health and ageing. *The Lancet*, 385(9968):

640-648. Doi: [https://doi.org/10.1016/S0140-6736\(13\)61489-0](https://doi.org/10.1016/S0140-6736(13)61489-0)

- Utami, W. (2016). Pengaruh Kecenderungan Neurotik Dan Self - Efficacy Terhadap Psychological Well Being Pada Mahasiswa Psikologi Universitas Muhammadiyah Malang. *Journal An-nafs*, 1(2): 202-226.
- Wang, L.,&Shi.,Z. (2009). Neuroticism, extraversion, emotion regulation, negative affect and positive affect: the mediating roles of reappraisal and suppression. *Social behavior and personality*, 37(2) : 193-194. DOI: 10.2224/sbp.2009.37.2.19.

