

# Happiness of primary school teachers reviewed from the Big Five personality theory

Alifia Cahya Wicaksani<sup>1</sup>; Farida Agus Setiawati<sup>2</sup>

Faculty of Psychology, Universitas Selamat Sri, Jl. Soekarno-Hatta Km. 03, Kendal, Jawa Tengah, Indonesia<sup>1</sup> Department of Psychology, Universitas Negeri Yogyakarta, Jl. Colombo No. 1, Depok, Sleman, Yogyakarta, Indonesia<sup>2</sup>

alifiawicaksani1@gmail.com1; farida\_as@uny.ac.id2

#### Abstract

This study aims to assess: (1) teachers' happiness level, (2) dimensions of teachers' personality, and (3) effect of the big five personality dimensions on the happiness of primary school teachers in Belik. The research applied a quantitative descriptive method with the ex-post facto approach. It took place at primary schools in Belik. The subject consisted of 210 primary school teachers in the District of Belik. The sample was established using the cluster random sampling technique. The data were collected through questionnaires, the big five was measured by an instrument called BFI, and PANAS-X and SWLS for data on happiness. The data were analyzed using the multiple regression at the significance level of 5%. The result of descriptive statistic analysis showed that: teacher's happiness in Belik was high, for the big five dimensions of personality, the highest was extraversion followed by agreeableness, conscientiousness, openness, and neuroticism. The statistics quantitavely suggested that the types of personality significantly affected the teacher's happiness. The Extraversion personality dimension gave contribution of 2.85%, agreeableness of 2.25 %, openness of 3.80% and neuroticism of 2.13% of happiness.

Keywords: happiness, theory of personality, the Big Five

#### Introduction

Happiness is the source of strength in life, which is very important because everyone search for it. Many ways are done in order to live happily. This is not limited to making ourselves happy, but also to spread happiness to our surroundings.

The word happy has a different meaning from joy. Philosophically, the word happy can be interpreted as perfect spiritual comfort and pleasure as well as a sense of satisfaction, the absence of defects in the mind so to feel calm and peaceful (Bestari, 2015). Joy is a feeling of satisfaction, a relief that is part of the word happy.

Happiness is closely related to the psychological condition of the individual (Bestari, 2015). For example, the happiness that comes when someone buys a car may not reflect the feeling of other individuals under the same situation. Each individual has a different perspective on happiness because it is subjective. Happiness is abstract and intangible, it can only be felt. Happiness is related to the human emotional response that leads to positive emotions. It is gained from positive emotions as well as positive activities, where one respond to something positively. Positive emotions are also classified into three categories: those relating to the past, present, and future. The past involves interpreting what has happened, while the present reflects how one deals with what is currently happening. Additionally, positive emotions are also associated with the future through optimism, hope, faith, and trust (Seligman, 2002).

Emotion possesses at least two aspects: positive and negative affects (Carr, 2004, p.2). Positive affects such as feeling happy, confident, eager. Negative affects such as worry, fear, anxiety, shame, anger, sadness (Carr, 2004, p.3).

The Indonesian government also gives their people the right to be happy. The right of happiness refers to Law No. 39 of 1999 article 9, paragraph 2 on Human Rights, which states that 'Everyone has the right to live peacefully, safely, happily, physically and mentally prosperous'.

The level of happiness can be affected by personality traits (Soto, 2013). For example, living a life that consistently produces positive emotions will likely affect the level of happiness. These positive affects include a good mood, which usually leads to socializing, generosity, and exploratory behavior. The study was supported by Bruck and Allen (2003) and Kandler (2012) who found that emotionally stable individuals tend to be more secure, confident, and capable of stress management (Yazdi, 2015).

Trait is one of the most crucial factors with long-term effects on happiness. Previous studies have shown that happiness relates to life and circumstances, namely the personality reaction to life events that are more important than self-events and reactions on events influenced by personality traits (DeNeve & Cooper, 1998).

Many words can describe personality traits. McCrae and Costa (2006) stated that the big five personality traits are neuroticism, extraversion, openness, agreeableness, and conscientiousness. These are commonly referred to as 'The Big Five Personality'. With a variety of different properties, it encourages individuals to respond using different perspectives.

A consistent pattern of such behavior can be integrated into individual concepts and other psychological systems, thereby leading to an increase in extraversion, agreeableness, and openness to experience. Conversely, a life situation that consistently produces negative emotions can cause individuals to behave unpleasantly, be quiet, self-centered, cautious and accompanied by negative mood (Rubin & Burgess, 2001). In terms of personality traits, this will manifest as an increase in neuroticism, and a decline for extraversion, agreeableness, and openness to experience.

Placement of the right person on a job, needs to consider personality traits of the person first, whether it is in accordance with the job to be positioned. Incompatibility of a person's personality towards assigned work will result in harm to both the company as well as to the person themselves. These losses can include low labor productivity, frequent employee absenteeism, increased cost loss and time for retraining of employees.

Smith (2007) found that there are many teachers who feel unhappy with their life. A survey on twelve professions considered to be happiest, showed that teacher did not make it into the list (Aziz, 2011). This created speculation whether from the profession or from the trends of personality traits possessed.

The Third National Working Conference Teachers Association of the Republic of Indonesia in January 2016, found that the largest complaint is on delayed disbursement of benefits. Additionally, they felt disappointed about the extremely high requirements for receiving allowances, complicated promotion process, functional positions, small income of honorary teachers, as well as uneven special allowance. This is all despite the large responsibility placed on teachers. Further, the ratio of teachers and students is often imbalanced. Moreover, there are strong moral and ethical demands closely attached to the teachers, ranging from speech to behavior. For all that, a teacher must continuously quality and build personality harness (Amiranti, 2016).

There are approximately a total of 50 elementary school teachers in the district of Belik, Pemalang, Central Java. Elementary teachers not only teach school materials but also acts as role models. Every teacher in Belik District Elementary school have various traits, resulting to schools having to deal with different types of traits. The personality trait that support happiness are often ignored. From the above background and the fact that no research has been done in Indonesia, we aim to study the happiness of elementary school teachers as seen through the Big Five personality theory.

The purpose of this research are: (1) to discover the level of happiness in primary school teachers in Belik District, (2) to discover the big five personality dimension of primary school teacher in Belik district, and (3) to explore whether there is the influence between the personality dimensions of the big five to the happiness at Primary School in Belik District.

#### Method

The Ex-Post facto approach was used in this research. In other words, this research was conducted to examine the events that have occurred and explore the factors that precede or causes the events (Sugiyono, 1992, p.3). This approach was used to determine the trait of the teachers which must be seen from previous events, allowing us to see the effect attitude on elementary school teachers' personality trait.

The research was conducted at elementary schools across Belik district, Pemalang Regency, between September 2016 until June 2017. Elementary school teachers from Belik District were recruited as the population of this study. The samples were taken from Belik district because they represent both public and private schools, amounting up to 455 teachers. Thus, the sample should be at least 205 subjects with a 5% significance level based on the Morgan table calculation. The sampling was done by cluster random sampling.

Data collection was done using a questionnaire method by providing a list of questions to be answered. More specifically, we used a Likert scale.

#### Instrument of Data Collecting

Happiness was measured using PANAS -X scale (Positive Affect and Negative Affect Schedule) created by Watson and Clark in 1994. PANAS-X is used to describe two significant dimensions of mood (Watson & Tellegen, 1988 in Watson & Clark, 1994), namely positive and negative affect. Items to measure positive and negative affect were on a scale of one (never feels happy) to five (often feels happy).

The Big Five Inventory (BFI) module is based on a Five-Factor Theory from McCrae and Costa (2006) consisting of 45 items with 39 positive items and six negative items.

Validity in this research was achieved through content validity. It is the estimated validity based on the feasibility or relevance of the test contents through expert judgment (Azwar, 2012, p.42). After the instrument was constructed based on a theory, we consulted it with a panel of experts (expert judgment). The experts were asked to give their opinion on the instruments prepared. Firstly, language expert (Indonesian and English) was consulted to assess the quality of the translation. At this stage, any inaccurate translations were corrected. Repaired items such as blue which mean sad, downhearted means melancholy, disgusted with myself means feeling disgusted on himself, hostile means not friendly, joyful means cheerful, daring means brave, alert means alert, attentive means attention. In the first expert was done within a week.

After completion of the first expert judgment (the validation of the language from English to Indonesia), the second language validation was conducted, namely the compatibility of Bahasa Indonesia with the language of Psychology. There are some that have not been appropriate, then researchers consult with experts until the item is appropriate, for example: scared which means less bold, blameworthy meaning to be blamed. It took nine days to complete the second expert judgment.

#### Reliability

Reliability test (internal consistency) was conducted to avoid problems usually caused by re-examination and parallel-shaped approaches. The data was collected through a single-trial administration procedure. This method has high practicality and efficiency value compared to re-test and parallel procedure (Azwar, 2012, p.59).

The subjects were tested once before being analyzed using the Cronbach Alpha technique with the help of the SPSS program. The instrument reliability level can be seen from the Alpha coefficient; it is stated that the instrument is considered reliable if the reliability coefficient is between 0.5-0.6.

Table 1. Result of reliability test of the happiness

Dimension	Cronbach's Alpha	N of Items
Negative affect	.895	31
Positive affect	.950	22

Table 1 shows that the happiness variable is reliable. No items were eliminated from the negative affect dimension, whereas two items were taken out of the positive affect dimension namely number 22 (dumbfounded) and 24 (wonder). Thus, the alpha coefficient showed 0.895 for negative affect and 0.950 for the happiness dimension. In other words, they are all reliable because their reliability score is above 0.5. Similarly, in terms of personality, all the dimensions are proven to be reliable (see Table 2).

Table 2. Result of reliability test dimension of the Big Five

Dimension	Cronbach's Alpha	N of Items
Extraversion	.822	5
Agreeableness	.762	3
Conscientiousness	.719	3
Neuroticism	.677	3
Openness	.916	10

#### Technique of Data Analysis

The data were analyzed using descriptive and inference analysis. Data description within this study used high and low category to categorize each dimension. Meanwhile, inference analysis using multiple regression was done to answer the research hypothesis, namely that personality traits affect the happiness level of teachers in Belik district.

#### **Findings and Discussion**

Description based on Categorization on *The Big Five* Dimension

The description of each dimension is created based on the categorization from the

criteria of each dimension of The Big Five. The categorization calculations result based on each dimension of The Big Five is shown in Table 3.

Table 3 shows that there are 135 subjects with high extraversion, while the remaining 75 subjects are considered to have low extraversion. Thus, teachers in Belik district can be said to have high extraversion.

In terms of agreeableness, 123 subjects were categorized into having high agreeableness. Meanwhile, 87 subjects were categorized into having low traits of agreeableness. This indicates that there are a fairly significant number of subjects with agreeableness traits.

Next, there are 120 subjects with high conscientiousness and 90 subjects with low conscientiousness. This shows that the majority of the subject had high conscientiousness.

In the neuroticism dimension, most subjects were in the high category (N = 146), while in the dimension of Neuroticism, most subjects are in the low category of 64 subjects and 64 subjects were found in the low category. This shows that most subjects have high Neuroticism.

Lastly, there are 104 subjects with high openness and 116 subjects with low openness. This condition suggests that most subjects have a high openness trait.

#### Description of Happiness

The descriptive data on the happiness of elementary school teachers in Belik District can be seen in Table 4. Table 4 shows that the highest positive affect score is 118 and the negative affect is 140. Meanwhile, the lowest

Dimension	Median	Categoriz	zation	Subject Quantity
Extraversion	27	X > 27	High	135
		$X \le 26.9$	Low	75
Agreeableness	28	X > 28	High	123
		X < 27.9	Low	87
Conscientiousness	27	X > 27	High	120
		X < 26.9	Low	90
Neuroticism	25	X > 25	High	106
		X < 24.9	Low	104
Openness	33	X > 33	High	116
		X< 32.9	Low	104

Table 3. Categorization dimension of the Big Five

score of positive affects is 30 and the lowest score of negative affects is 41.

The category for happiness is divided into two, namely high and low for every aspect. The description can be seen in Table 5.

Table 5 shows that there are 106 subjects with positive affect and 104 subjects with negative affect. This indicates that someone is said to be happy when he or she shows a high positive affect score. Thus, it can be concluded that teachers in Belik District are quite happy. According to the gender, women also tend to be happier.

#### Result of Hypothesis Test

The hypothesis test used a multiple linear regression with the aid of the SPSS for windows version 16.00. Several pre-tests were conducted prior to performing the regression test, namely (1) normality test, (2) auto-correlation test, (3) multicollinearity, (4) heteroscedasticity, and (5) linearity test. Result from the normality test showed that the residual data were not distributed normally.

Auto-correlation test was used to explore whether autocorrelation exist based on the Durbin Watson test that could be seen from the multiple regression result. Based on the Durbin Watson, the test obtained a dL score of 1.707 and dU of 1.831, so (4 - 1.874) = 2.216. If 1.874 > 1.831 then it is assumed that there is no positive autocorrelation. If 2.216 > 1.831 then there is no negative autocorrelation. Thus, the regression model showed no autocorrelation (Suharjo, 2008, pp.94-96). Because Durbin Watson > 1.831, then there is no autocorrelation within this model.

Multi-collinearity was conducted to ensure that the independent variables of the regression model are not inter-correlated. Multicollinearity is seen through the Variance Inflace Factor (VIF) of each predictor. A variable is considered to be free of multicollinearity when the VIF score does not exceed 10. From the above table, it can be seen that the vulnerable value is narrow, that is in extraversion 0.880 to 1, 1137. The agreeableness is from 0.874 to 1.144. Conscientiousness range from 0.946 to 1.057. While neuroticism 0.980 to 1.020 and openness 0.951 to 1.051. Because the range is narrow, VIF score close to one, it can be concluded that there is no multi-collinearity in the regression model (Sumanto, 2014, p.166).

The heteroscedasticity test is performed to determine the similarity of the residual data's variance from one observation to the next. Heteroscedasticity happens when the variance error (ɛi) for some values change. Constant detection is done by looking at the graph between the X and Y axes.

Figure 1 and 2 reveals that there are dots spread below and above the Y axis, showing no regular pattern. Thus, it can be concluded that the variable above shows no Heteroscedasticity (Sumanto, 2014, p.170).

The research hypothesis states that there is an effect between the Big Five personality trait towards happiness. The personality dimension consists of Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. The hypothesis testing used multiple linear regressions with the help of SPSS for Windows 16.00 version. The alternative hypothesis will be accepted if the significance value if below 0.05. Meanwhile, if the significance exceed 0.05 then the null hypothesis will be accepted.

Table 4. Descriptive data of teachers happiness

Dimension	Min Value	Max Value	Mean	Median	Std. Dev	Var
Positive Affect	30	118.00	90.566	92.000	1.372	188.275
Negative Affect	41	140	71.857	71.000	1.223	149.61

Table 5.	Description	Based on	Happiness	Category
				() /

Dimension	Median	Category	Ν
Positive Affect	92	Male	48
Negative Affect	71	Female	68

#### Scatterplot



Figure 1. Heteroscedasticity test of positive affect and the Big Five

#### Scatterplot



Figure 2. Heteroscedasticity test of negative affect and the Big Five

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4494.634	5	898.927	5.261	.000ª
	Residual	34854.933	204	170.858		
	Total	39349.567	209			

Table 6. F-test of positive affect with the Big Five

F test was used to determine whether the big five personality dimensions simultaneously have a significant effect on happiness. The used significance value is 0.05. If F value > F statistic, then Ha is accepted, namely that personality dimensions have an effect on happiness.

Table 6 shows that the value of F is 5.261 with a significance level of 0.000, so it can be concluded that big five personality dimensions have a significant influence on positive affect (happiness).

From Table 7, it can be seen that the score of F value is 4.484 with a significance level of 0.001, so it can be concluded that big five personality dimensions have a significant influence on negative affect of happiness.

The determinant coefficient  $(\mathbb{R}^2)$  is used to explore the relationship between several variables in a clearer definition. The coefficient of determination will explain how much change or variation are present in other variables. That is the variable dimension of the big five personalities to contribute to the happiness in the unit percentage. From determination test showed that the value of R Square 0.114, it shows that openness, conscientiousness, neuroticism, extraversion, and agreeableness has 11.4% influence to happiness, particularly positive affects. Meanwhile, they contributed 0.99% to the negative affect within the happiness scale.

Constant is the constant of regression equation or commonly called by intercept. The table above shows the constant score of 40.535, a regression coefficient X1 of 0.360, a coefficient of regression X2 of 0.947, a regression coefficient X3 of 0.633, a regression coefficient X4 of -0.586, and a regression coefficient X5 of 0.357. Based on these data, a multiple linear regression equation can be written as follows:

 $\mathbf{Y} = 40.535 + 0.360 \text{ X1} + 0.947 \text{ X2} + 0.633 \text{ X3} + -0.586 \text{ X4} + 0.357 \text{ X5}$ 

Results of the coefficient regression analysis between the Big Five to the negative affect can be seen in Table 9. It shows that there is a constant score of 101.04 and some regression coefficients of -.798, -.374, 0.136, 0.500, and -.413. Thus, the multiple linear regression equation is specified as follows:

Y = 101.04 + -.798 X1 + -.374 X2 + 0.136 X3 + 0.500 X3 + -.413 X5

Based on the results of hypothesis test above, it can be concluded that there is a positive contribution and significant personality dimensions of the Big Five to happiness, especially negative affect teachers in Elementary School in Belik District, Pemalang regency, Central Java. The T-test was used in order to determine whether the personality dimension of the Big Five is partially significant to happiness. The used signification is 0.05. If the significance value is below 0.05

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3096.573	5	619.315	4.484	.001ª
	Residual	28173.141	204	138.104		
	Total	31269.714	209			

Table 7. F-Test of negative affect with the Big Five

Model		Unstan Coef	dardized ficients	Standardized Coefficients	Т	Sig.	Correlations			
	В	Std. Error	Beta		Zero-order		Partial	Part		
1	(Constant)	40.535	16.868		2.403	.017		·		
	Е	.360	.327	.077	1.100	.272	.161	.077	.073	
	А	.947	.345	.194	2.746	.007	.252	.189	.181	
	С	.633	.319	.134	1.984	.049	.175	.138	.131	
	Ν	586	.316	123	-1.855	.065	137	129	122	
	0	.357	.265	.091	1.349	.179	.139	.094	.089	

Table 8. Result of coefficient and T test influence Big Five on positive affect

Table 9. Result of coefficient and T test influence the Big Five on the negative affect

Model		Unstandardized Coefficients		Standardized Coefficients T	Sig.	Correlations			
		В	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	101.004	15.165		6.660	.000			
	Е	798	.294	192	-2.713	.007	250	187	180
	А	374	.310	086	-1.206	.229	142	084	080
	С	.136	.287	.032	.475	.635	.013	.033	.032
	Ν	.500	.284	.118	1.762	.080	.151	.122	.117
	0	413	.238	118	-1.733	.085	173	120	115

then Ha is accepted, namely that the Big Five personality dimensions partially affects happiness. Table 8 shows:

#### Influence of Extraversion (X1) on Positive Affects

Extraversion has a sig value of 0.272 (> 0.05). It indicates that extraversion has no effect on positive affects.

#### Effect of Agreeableness (X2) on Positive Affects

Agreeableness has a sig value of 0.007 (<0.05), showing that it (X2) has no effect on positive affects. Partial correlation test obtained r = 0.189. Thus, Agreeableness contributes to positive affects in 0.0357 or 3.57%.

# The Influence of Conscientiousness (X3) on Positive Affects

Conscientiousness (X3) has a sig value of 0.049 (<0.05), meaning that it has an effect on positive affects. Partial correlation obtained r = 0.138, which shows that it contributes to positive affects as large as 0.0190 or 1.90%.

#### The Influence of Neuroticism (X4) on Happiness

Neuroticism has a Sig value of 0.65 (> 0.05). It indicates that it has no effect on happiness.

#### The Influence of Openness (X5) on Happiness

Openness has a Sig value of 0.179 (> 0.05). Hence, there is no influence of Openness to positive affects.

From the t-test or partial test in Table 9, the influence of each dimension of the Big Five with negative effects are as follows:

#### Influence of Extraversion (X1) on Negative Affects

Extraversion has a Sig value of 0.007 (<0.05), so that it has influence on negative affect. Partial correlation test obtained r = 0.187, meaning that the effect that extraversion (X1) has on negative affects is 0.3496 or 34.96.

#### The effect of Agreeableness (X2) on Negative Affects

Agreeableness has a sig value of 0.229 (> 0.05). It indicates that Agreeableness (X2) has no effect on positive affects.

The Influence of Conscientiousness (X3) on Negative Affects

Conscientiousness (X3) has a Sig value of 0.635 (> 0.05). Therefore, it indicates that Conscientiousness has no effect on negative affects.

The Influence of Neuroticism (X4) on Negative Affects

Neuroticism has a Sig value of 0.80 (> 0.05). It shows that Neuroticism (X4) has no effect on happiness.

## The Influence of Openness (X5) on Negative Affects

Openness has a Sig value of 0.85 (> 0.05). It means that Openness (X5) has no effect on positive affect.

## **Conclusion and Recommendation**

#### Conclusion

Based on the results of the hypothesis test, the following conclusions are obtained: (1) The Big Five personality dimensions which are found in primary school teacher, from highest to lowest, are openness, agreeableness, extraversion, conscientiousness, and neuroticism; (2) Primary school teachers in Belik district have a high level of happiness. This is indicated by a high positive affective category; (3) There is influence between the Big Five personality dimensions with happiness, namely, Extraversion has an effect on negative affect, while agreeableness and conscientiousness have an effect on positive affects.

#### Recommendation

Based on the conclusions and implications of the research, recommendations are proposed as follows: (1) Elementary school teachers in Belik district should develop their personality traits further in order to create and perform better, incorporating interesting learning and teaching activities; (2) It would be interesting for future researchers to expand more on studies regarding other personalities in the Big Five theory that may influence happiness.

#### References

- Albuquerque, I., Matos, M., et al. (2012). The interplay among levels of personality: The mediator effect of personal projects between the Big Five and subjective well-being. *Journal Happiness Study, 14, 235–250.*
- Amiranti, C.C. (26 September 2016). Jaga gairah guru kalau mau pendidikan maju!. *Kompas.com*
- Aziz, R. (2011). Pengalaman spiritual dan kebahagiaan pada guru agama sekolah dasar. *Proyeksi*, 6(2) 1-11.
- Azwar, S. (2012). Reliabilitas dan validitas. Yogyakarta: Pustaka Pelajar.
- Bestari, A.W. (2015). Perbedaan tingkat kebahagiaan pada mahasiswa strata 1 dan strata 2. Seminar Psikologi & Kemanusiaan, Universitas Muhammadiyah Malang.
- Bruck, C.S. & Allen, T.D. (2003). The relationship between Big Five Personality Traits, negative affectivity, type A behaviour, and work-family confict. *Journal of Vocational Behavior*, 457-472. DOI:10.1016/S0001-8791(02)00040-4
- Carr, A. (2004). *Positive psychology*. Hove and New York: Brunner-Routledge Taylor and Francis Grop.
- DeNeve, K.M. & Cooper, H. (1998). The happy personality: Meta anlysis of 137 personality traits and subjective wellbeing. *Pshychogical Bulletin*, 124(2), 197-229.
- Kandler, C. (2012). Nature and nuture in personality development: The case of neuroticism and extraversion. *Current Directions in Psychological Science, 290-296.*

- McCrae, R.R. & Costa, P. (2006). Personality in adulthood: A five-factor theory perspective. New York, NY: The Guildford Press.
- Rubin, K. H. & Burgess, K.B. (2001). Social withdrawal and anxiety. In M. W. Vasey & M. R. Dadds (Eds.), *The developmental* psychopathology of anxiety (pp. 407-434). New York, NY: Oxford University Press.
- Seligman, M.E.P. (2002). *Authentic happiness*. New York, NY: Free Press.
- Smith, T.W. (2007). Job satisfaction in the united states. Chicago, IL: University of Chicago.
- Sugiyono. (2015). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif, dan RnD. Bandung: Alfabeta.
- Undang-Undang Republik Indonesia Nomor 14 Tahun 2005 tentang guru dan dosen dan peraturan Mendiknas Nomor 11 Tahun 2005 beserta penjelasannya. 2006. Bandung: Penerbit Citra Umbara.
- Watson, D., Clark, L., & Tellegen, A. (1988). Development of breif measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Watson, D., Clark, L., & Tellegen, A. (1994). The PANAS-X: Manual for the positive and negative affect schedule-expaned form (Unpublished manuscript). Iowa City, IA: University Of Iowa.
- Yazdi, A.M.T. (2015). Empowerment potential: Big Five personality traits and psychological empowerment. *International Business and Management*. 11(3), 62-69.