

## ***Analysis of The Big-Five Personality and Knowledge to Healthy life Motivation with SEM PLS***

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<p><i>Received</i> 8 August 2022</p> <p><i>Revised</i> 24 January 2023</p> <p><i>Accepted</i> 24 January 2023</p> <p><i>*Correspondence</i> Rasminto Email: rasminto45@unismabekasi.ac.id</p>	<p><b>Abstract</b></p> <p><i>This research proved the effectiveness of the big-five personality factors and knowledge of reproductive health to motivation to live healthy on students of public high school. The method used was a survey with a partial least square (PLS) with 279 samples participated through purposive sampling. Some instruments have been measured, namely the healthy life motivation (reliability 0.971), the big-five personality (reliability 0.937), and knowledge about reproductive health (reliability 0.874). The research data was carried out by PLS. The results showed that; 1) there is a positive and significant relationship between big-five personality and motivation healthy living, although controlled by the second order correlation; 2) there is a negative and significant relationship between knowledge about reproduction health and motivation to live healthy, although controlled by the second order correlation; and 3) there is a positive relationship and significant between big-five personality and knowledge about reproduction health together with motivation to live healthy. Moreover, from the five big-five personality factors, it shows that the strongest contribution to healthy living motivation is extraversion and agreeableness. Therefore, it can be concluded that if the motivation to live a healthy life is to be increased, then the big-five personality and knowledge of reproduction health must be considered.</i></p> <p><b>Keywords:</b> <i>big-five personality, healthy life motivation, knowledge of reproduction health, partial least squares (pls), public high school student</i></p>
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### **INTRODUCTION**

*Kholifah, Yumni, Minarti, & Susanto (2017) which states that based on national survey data in Indonesia that 1% of women and 8% of the male population have had sexual relations outside of marriage. Then, 5% of adolescents aged 10-24 years have been involved in various sexual activities, such as masturbation. The survey also confirmed symptoms of premarital sexual activity, including sexual intercourse. Currently, adolescents have a liberal attitude towards sexuality*

*due to liberalism and Westernization. Susanto (2016) in Kholifah et al., (2017) confirms that Reproductive Health programs to improve adolescent life skills during puberty must be based on their personal characteristics. Meanwhile, health education generally promotes health behavior for adolescents in the school environment. This research is an interesting study in exploring the problem of the interaction of personality and motivation for healthy living on the understanding of reproductive health*

*among adolescents. Motivation for healthy living is an effort that aims to achieve physical and spiritual health. If this can be realized then it becomes an advantage for each individual. Healthy living motivation can be seen as fulfillment and needs, namely; the need to achieve a high level of health and the need to avoid failure to achieve a healthy level of life (Crowl, Kamisrky, & Podell, 1997).*

*Based on the description of the relevant research above, it can be concluded that many previous researchers have conducted studies on motivation to live healthy, but very few have reported the results of research on motivation for healthy living, which is influenced by personality, let alone influenced by Knowledge of reproductive health. In the youth group especially in the school context. In Indonesia, this research is new, because it focuses on the development of healthy living motivation, which is influenced by personality factors with knowledge of reproductive health in schools and important aspects in supporting the achievement of sustainable goals in the strategy development goals (SDGs), namely the third point about good health of health and well-being.*

*Pakdel (2013), who explains that motivation is an intrinsic phenomenon that*

*is influenced by four factors, namely; first, the situation in the form of the environment and external stimuli; second, temperament in the form of the internal state of the organism; third, targets in the form of behavioral and attitude goals; and fourth, a tool in the form of an instrument to achieve the target. According to Colquitt et al. (2014) in the theory of the big five personality says that personality is a collection of certain traits, where according to him there are five factors that underlie human personality, namely; conscientiousness, agreeableness, neuroticism, openness and extraversion. Factors in the big five are the main factors that influence a person's motivation to act in accordance with the object to be achieved. This is in line with Higgins, (2012) where he states that there are three characteristics of motivation or the main driving force of individuals to act in accordance with the attractiveness or objectives to be achieved, namely; intensity, namely linking weak and strong impulses to cause certain individuals to behave; giving directions, namely the appointment of individuals in avoiding or carrying out a certain behavior; and persistence or the tendency to repeat the behavior over and over again.*

*The experience and background of a person's family environment affect the individual's ability, this strengthens Colquitt's opinion about the cognitive relationship to a person's motivation or impetus to act. This is reinforced by the opinion of Niu et al.'s (2013) in Kwan & Wong (2015) which suggests that individual cognitive factors such as encouragement of beliefs, cognitive and metacognitive strategies are very important in critical thinking or knowledge. However, it is different from Yee & Braver (2018) which explains that the opposite motivation can affect various cognitive processes, namely, attention, learning, memory, and perception. This opinion is reinforced by Jung, rdfelder, Bröder, & Dorner (2019) which explains more about a person's motivational performance, such as preference for consistency, doubt, orientation towards action, and also cognitive factors, such as an individual's evidence threshold that reflects the need for prior information. decision making as well as individual differences in the ability to understand bias conditions.*

### **Methodology**

*Based on the conception and theoretical framework, the hypotheses of this research are structured as follows:*

- 1. There is a positive relationship between the big-five personality and the healthy life motivation.*
- 2. There is a positive relationship between knowledge about Kespro and healthy life motivation.*
- 3. There is a positive relationship between the big-five personality and knowledge about Kespro together with the healthy life motivation.*

*Based on the problems above and the expected research objectives, the method used is a survey method with multiple regression techniques (multiple regression). Sampling in this study was carried out by means of multistage random sampling (staged sampling technique), namely with the following steps; First, the sample area is determined from all areas of the DKI Jakarta Province by purposive sampling, in this case the selected public high school schools located in the South Jakarta Administrative City, the second step, selected three public high schools in the South Jakarta Administrative City area through purposive sampling, namely SMAN 70, SMAN 6 and SMAN 82, The third step, namely by selecting the class that will be used as a sample by cluster random sampling from all classes in the three public high schools. Furthermore, 279 respondents were selected as research objects; the fourth step by selecting nine*

class XI IPA, representing 3 classes each. Then, selected by simple random sampling

of students as many as 279 people as samples.

The data analysis technique used in this study is to use regression and correlation tests. Data analysis was used with descriptive statistics and inferential statistics.

There instruments that have been measured the healthy life motivation (reliability 0.971), the big-five personality (reliability 0.937), and knowledge of reproductive health (reliability 0.874). Instead of being able to be used as theoretical confirmation, PLS can also be used to recommend existing relationships and also propose further testing propositions. Based on the research objectives and methodology chapter, the initial PLS model, in this case, is as follows (Figure 1).

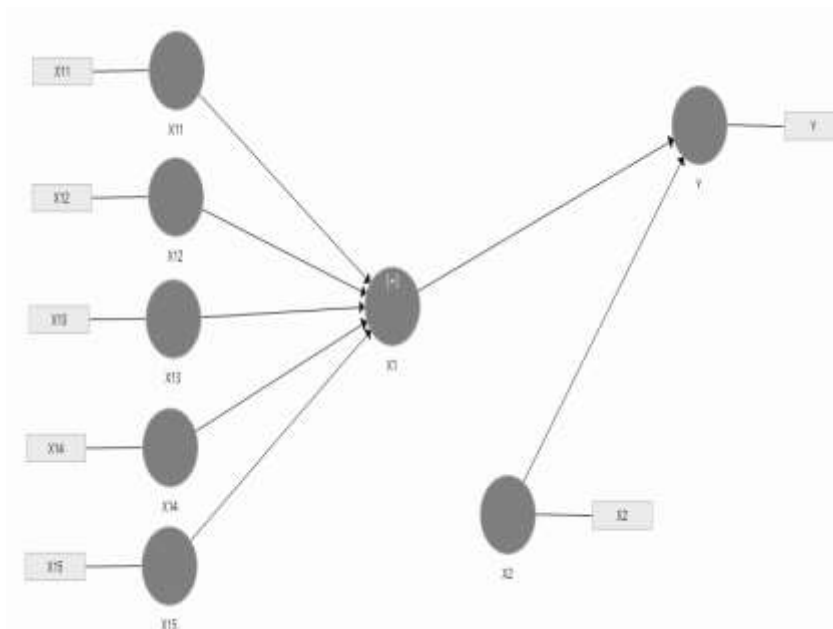


Figure 1. Research model

Based on Figure 1 that X1 as the big-five personality, X2 as knowledge of Kespro, Y as Healthy life motivation, X11 as conscientiousness, X12 as agreeableness, X13 as neuroticism, X14 as openness, and X15 as extraversion. Figure I describe, there are two structural models in this

study: first, the influence models X11, X12, X13, X14, and X15 on X1. So X1 is the endogenous unobserved variable, while X11, X12, X13, X14, and X15 are the exogenous unobserved variables; and second, the influence model X1 and X2 on Y. So, Y as endogenous unobserved

variables, while X1 and X2 as exogenous unobserved variables.

In a model there are 2 steps or 2 levels, they are dimensional level and variable level. At the variable level, X1 is the unobserved variable of the indicator or manifest variable X11, X12, X13, X14, and X15. However, at the dimension level, each of the variables X11, X12, X13, X14, and X15 is the unobserved variable of each indicator.

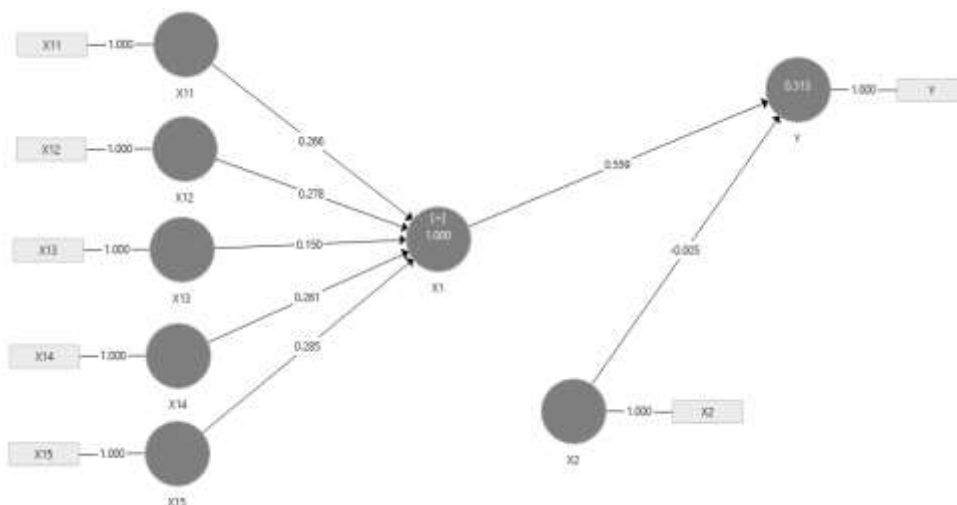
Constructs or unobserved variables in this structural equation include X1, X2, and Y at the variable level. Each of these unobserved variables has a manifest

indicator or variable in it, namely X1 consisting of X1 indicators consisting of X11, X12, X13, X14, and X15. While X2 consists of indicators X2 itself and Y consist of indicators Y itself. At the dimensional level, each of X11, X12, X13, X14, and X15 becomes the unobserved variable of the indicator itself.

With a two-step model like this, it is expected that the direct effect of X1 on Y, X2 on Y, the direct effect of each X11, X12, X13, X14 and X15 on X1, and the indirect effect of X11, X12, X13, X14, and X15 on Y be expected by X1.

### Result and Discussion

The validity and reliability analysis was carried out at the outer model stage. Based on the PLS concept above, then the results of the outer model analysis in this research data are as follows:



More detail is described in the outer model table, that shown in table 1 below.

*Table 1.  
 Outer loading*

	X1	X11	X12	X13	X14	X15	X2	Y
X11		1.000						
X11	0.837							
X12			1.000					
X12	0.856							
X13				1.000				
X13	0.514							
X14					1.000			
X14	0.828							
X15						1.000		
X15	0.863							
X2							1.000	
Y								1.000

Based on the data in table 1, shows that the reliability of the indicators aims to assess whether the indicators of measuring unobserved variables are reliable or not. From table 1, the value of the outer loading can be seen that all indicators of the outer loading value are > 0.7 except for X13 against X1. So based on

the validity of outer loading, it is stated that all indicators are valid in convergent validity. Except for X13 against X1. However, because this research is still newly developed, the value limit of outer loading can still be accepted as valid with the criteria still above the value of 0.5.

The next step is to examine whether there is multicollinearity at the outer model level. The results are based on the Outer Model VIF values in table 2.

*Table 2.  
 Multicollinearity*

Variabel	VIF	Note	Variabel	VIF	Note
X11	1.000	inmulticollinearity	X14	1.000	inmulticollinearity
X11	2.220	inmulticollinearity	X14	2.124	inmulticollinearity
X12	1.000	inmulticollinearity	X15	1.000	inmulticollinearity
X12	2.320	inmulticollinearity	X15	2.398	inmulticollinearity
X13	1.000	inmulticollinearity	X2	1.000	inmulticollinearity
X13	1.186	inmulticollinearity	Y	1.000	inmulticollinearity

Table 2 shows that there is no indicator with the Outer Model VIF value  $> 5$ , so there is no multicollinearity problem at the outer model level.

The next step is to analyze construct reliability. Construct reliability is measuring the reliability of unobserved variable constructs. The value that is considered reliable must be above 0.70. Construct reliability is the same as Cronbach's alpha (Table 3).

Table 3.  
 Composite reliability and Cronbach's Alpha

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
X1	0.843	0.874	0.890	0.626
X11	1.000	1.000	1.000	1.000
X12	1.000	1.000	1.000	1.000
X13	1.000	1.000	1.000	1.000
X14	1.000	1.000	1.000	1.000
X15	1.000	1.000	1.000	1.000
X2	1.000	1.000	1.000	1.000
Y	1.000	1.000	1.000	1.000

#### Internal Consistency Reliability

Internal Consistency Reliability measures how well an indicator can measure its unobserved constructs. The tools used to assess this are composite reliability and Cronbach's alpha. Based on table 3, it can be seen that all constructs have Cronbach's Alpha values  $> 0.7$ , so it can be said that all of these constructs are reliable. For example, Cronbach's Alpha from the unobserved variable X1 is  $0.843 > 0.7$ , then X1 is reliable. And for X2, Y, and X11, X12, X13, X14, and X15 respectively, because the nature of the relationship with the indicator is formative, there is no internal consistency reliability analysis.

#### Uni-dimensionality Model Analysis

The Uni-dimensionality test is to ensure that there are no problems in the measurement. The Uni-dimensionality test was carried out using indicators of composite reliability and Cronbach's alpha. For these two indicators the cut-value is 0.7. So based on table 3, all constructs have met the Uni-dimensionality requirements because the value of composite reliability is  $> 0.7$ . For example, the composite reliability of the unobserved variable X1 is  $0.890 > 0.7$ , then X1 is reliable. Whereas for X2, Y, and X11, X12, X13, X14, and X15 respectively, and there is no composite reliability because the nature of the relationship with the indicator is formative.

*Convergent Validity*

To determine the achievement of the convergent validity requirement, the Average Variance Extracted (AVE) is used, all constructs have reached the convergent validity requirements because all AVE values are > 0.50. For example,

AVE of the unobserved variable X2 is 0.626 > 0.5, then X2 is a valid convergent. Whereas for X2, Y, and X11, X12, X13, X14, and X15 respectively. There is no AVE analysis because the nature of the relationship with the indicator is formative.

*Discriminant Validity*

Discriminant validity aims to test the extent to which unobserved constructs that differ from other constructs. High discriminant validity indicate that a construct is unique and can explain the phenomenon being measured. By comparing the root value of the AVE (Fornell-Larcker Criterion) with the interrelation value between unobserved variables, the construct is valid. The root of Average Variances Extracted (AVE) must be higher than the interrelation between unobserved variables. The Average Variances Extracted (AVE) is shown in table 4.

Table 4.  
 Average Variance Extracted (AVE)

	X1	X11	X12	X13	X14	X15	X2	Y
X1	0.791							
X11	0.837	1.000						
X12	0.856	0.685	1.000					
X13	0.514	0.304	0.360	1.000				
X14	0.828	0.580	0.613	0.322	1.000			
X15	0.863	0.644	0.637	0.346	0.683	1.000		
X2	-0.079	-0.085	-0.029	0.017	-0.071	-0.111	1.000	
Y	0.559	0.456	0.512	0.183	0.431	0.547	-0.049	1.000

Based on table 4, all the roots of the AVE (Fornell-Larcker Criterion) for each construct are greater than their correlation with other variables. The AVE Root is 0.791 and the AVE values are 0.626. The value of 0.791 is greater than the correlation with other constructs at the variable level, with X2 of -0.079 and with Y of 0.559.

The same case with other unobserved variables, where the root of AVE > Correlation with other constructs.

Because all the unobserved variables of the root of AVE are > their correlation with other constructs, the discriminant



validity requirements in this model have been met, as listed in table 4.

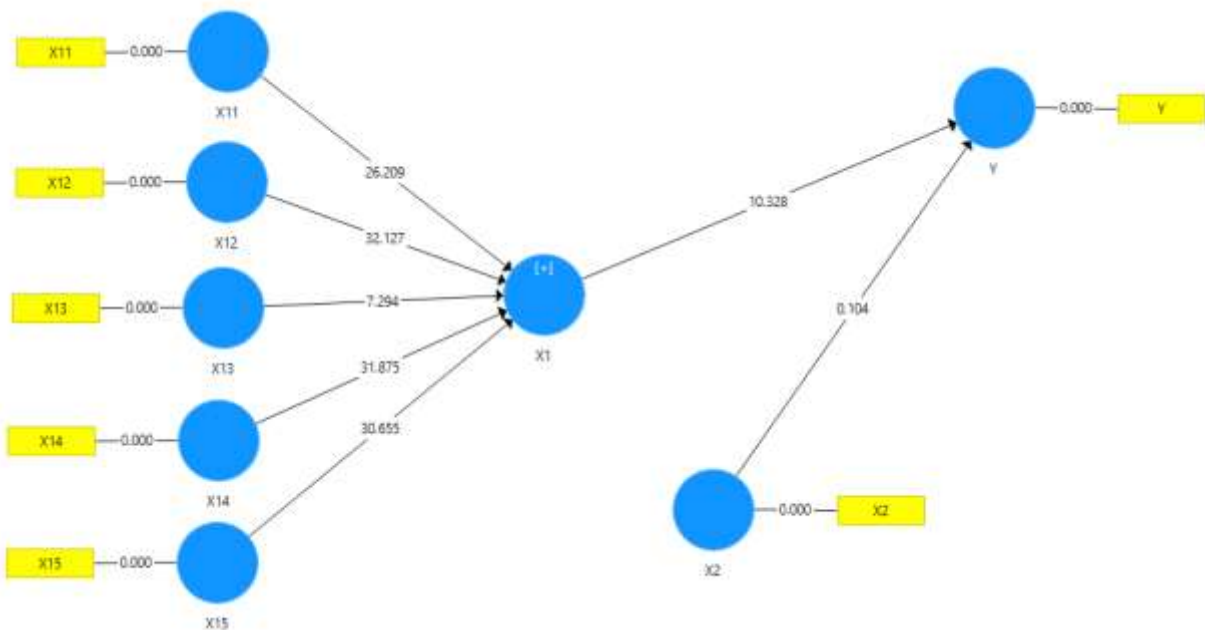
The cross-loading value of each construct is evaluated to ensure that the correlation of the construct with the measurement item is greater than that of other constructs. Cross-loading is another method for determining discriminant validity, by looking at the cross-loading value. If the loading value of each item on the construct is greater than the cross-loading value. The cross-loading table can be shown in table 5.

Table 5.  
 Cross factor loading

	X1	X11	X12	X13	X14	X15	X2	Y
X11	0.837	1.000	0.685	0.304	0.580	0.644	-0.085	0.456
X12	0.856	0.685	1.000	0.360	0.613	0.637	-0.029	0.512
X13	0.514	0.304	0.360	1.000	0.322	0.346	0.017	0.183
X14	0.828	0.580	0.613	0.322	1.000	0.683	-0.071	0.431
X15	0.863	0.644	0.637	0.346	0.683	1.000	-0.111	0.547
X2	-0.079	-0.085	-0.029	0.017	-0.071	-0.111	1.000	-0.049
Y	0.559	0.456	0.512	0.183	0.431	0.547	-0.049	1.000

Conclusion on this model:

All items or indicators have met the validity and reliability requirements and there is no multicollinearity between indicators. Then the next step is an analysis of the inner model



*according to the results of the inner model above, the summary of the results shows that:*

- 1. All of the p value of the indicator on the latent variable < 0.05 so that all indicators are valid and reliable on the construct.*
- 2. The direct effect of X1 on Y is significant.*
- 3. The direct effect of X2 on Y is not significant.*
- 4. The indirect effect of X11, X12, X13, X14 and X15 on Y are all significant.*
- 5. The total effect of each X11, X12, X13, X14 and X15 on Y is all significant.*

### **Discussion**

*Based on the results which have been explained that all the construction loading indicators are more than the cross-loading value. For example, in the construct of big-five personality, all factors contain the indicator value that is greater than the cross-loading value of other constructs. For example, the conscientiousness indicator has a loading value of 0.837 which is greater than the cross-loading of other constructs, namely -0.085 to Knowledge of Kespro and 0.456 to Healthy life motivation.*

*Based on the estimation of the path coefficient between constructs to see the significance and level of its relationship and to test the hypothesis. The magnitude of the parameter coefficient of the big-five personality variable on the motivation to live a healthy life is 0.559 which means that there is a positive influence of the big five personalities on the motivation to live a healthy life or it can be interpreted that the value is getting better. This shows that a good big-five personality makes the motivation to live a healthy life even better. One unit increase in big-five personality will increase healthy life motivation by 55.9%. Based on the results of calculations using bootstrapping or resampling, it shows that the estimation test results of the big-five personality coefficient on the motivation to live a healthy life bootstrap results are 0.556 with a value of 10.328 p-values 0.000 <0.05, then hypothesis 1 is accepted or which means that the direct influence of big-five personality on life motivation healthy significant or statistically significant.*

*The coefficient of the Knowledge of Health and Safety on the Healthy life motivation is -0.005, which means the better the value of Health Knowledge and Knowledge of the Motivation of Healthy Living, the lower*

*the value of Healthy Living. One unit increase of big-five personality will reduce motivation to live a healthy life by 0.5%. Based on the results of calculations using bootstrap or resampling, the estimated coefficient of the Kespro Knowledge test on Healthy Living Motivation obtained a bootstrap value of -0.004 with a t value of 0.104, so the p-value is  $0.917 > 0.05$  so that  $H_0$  is accepted or means indirect effect. The knowledge of Kespro towards Healthy Life Motivation was not statistically significant. Meanwhile, the direct influence of conscientiousness, agreeableness, neuroticism, openness, and extraversion on the big five personalities all showed a p-value  $< 0.05$ , so all of them were significant for the big five personalities.*

*The dynamics of motivation also need to be considered, as argued by Virgil Zeigler-Hill, Jennifer Vrabel, Destaney Sauls and Mark Lehtman, who relate it to two broad approaches to understanding personality, each processing separately from the other, focusing on; (1) personality structure or (2) personality processes (Corr, 2020). The opinion of Zeigler-Hill et.al above strengthens research data related to the interaction of big-five personality factors with healthy living motivation that personality*

*structure or personality processes are closely related to motivational dynamics.*

*The negative relationship between knowledge about Kespro and motivation to live healthy can also be caused by the low content of material on reproductive health given to students. However, referring to the opinion of Anderson et.al that knowledge is presented in terms of the deployment activation system (Anderson & Pirolli,*

*1984; Collins & Loftus, 1975; Roediger & McDermott, 1995; abinowitz, 2017). Furthermore, Rabinowitz explains that in such a system, concepts are represented as “nodes” which are connected by association links in the network. Each node has associated its level of activation and is initially in a resting state (Rabinowitz, 2017). This means that the relationship of knowledge can be positive with the motivation to live healthy if it is associated with other variables.*

*According to the research of Peacock, Perry, & Morien (2018) in their research on individual tendencies in behavior to take medical action in order to maintain their physical health, the results of this study stated that most people reported motivation related to physical health, but others with perceived affective motivation*

responses. The larger groups cite prevention of death and take surgery as their last resort to a higher degree.

### Conclusion

Based on the explanation of outer and inner stage model above, then it can be concluded that; first, all  $p$  indicator value to unobserved variable  $< 0.05$  that all indicator is valid and reliable to the construct; second,  $X1$  direct effect to  $Y$  is significant; third,  $X2$  direct effect to  $Y$  is insignificant; fourth, the indirect effect of each  $X11$ ,  $X12$ ,  $X13$ ,  $X14$ , and  $X15$  to  $Y$  is significant; and fifth, the total effect of each  $X11$ ,  $X12$ ,  $X13$ ,  $X14$ , and  $X15$  to  $Y$  is significant.

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### References

- Abelin, T., Brzezinski, Z. J., Carstairs, V. D. L., eds. (1987). *Measurement in Health Promotion and Protection*. Copenhagen: World Health Organization and the International Epidemiological Association.
- Anderson, L. W., Krathwohl, D. R. (2001). *A taxonomy for learning teaching and assessing: a revision of bloom's taxonomy of educational objectives*. In L. W. Anderson, D. R. Krathwohl, P. W. Airasian, K. A. Cruikshank, R. E. Mayer, P. R. Pintrich, M. C. Wittrock (Ed), *Book (A bridged)* (pp. 25-76). New York: Pearson Boston.
- Apers, C., Derous, E. (2017). *Are they accurate? Recruiters' personality judgments in paper versus video resumes*. *Computers in Human Behavior*, 73, 9–19.  
<http://dx.doi.org/10.1016/j.chb.2017.02.063>.
- Avey, J. B., Luthans, F., Mhatre, K. H. (2008). *A call for longitudinal research in positive organizational behavior*. *Journal of Organizational Behavior*, 29(5), 705–711.  
<https://doi.org/10.1002/job.517>
- Bergeron, B. (2003). *Essentials of Knowledge Management*. New Jersey, Canada: John Wiley & Sons, Inc.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., Krathwohl, D. R. (1956). *Taxonomy of Educational Objectives: Cataloging and Classification Quarterly*. London: Longmans, Green and Co Ltd.
- Byrnes, J. P. (2016). *Piaget's cognitive-developmental theory*. *The Curated*

- Reference Collection in Neuroscience and Biobehavioral Psychology*, 543–552.  
<https://doi.org/10.1016/B978-0-12-809324-5.23519-0>.
- Colquitt, J. A., Lepine, J. A., Wesson, M. J. (2014). *Organizational Behavior: Improving Performance and Commitment*. New York: McGraw-Hill Education.
- Crowl, T. K., Kamisrky, S., Podell, D. M. (1997). *Education Psychology Window on Teaching*. Dubuque: A Times Mirror Company.
- Dicker, G. (2004). *Kant's Theory of Knowledge: An Analytical Introduction*. New York: Oxford University Press.
- George, J. M., Jones, G. R. (2012). *Understanding and Managing Organizational Behavior* (6th ed.). New Jersey: Pearson Education, Inc.
- Higgins, E. T. (2012). *Beyond Pleasure and Pain* (R. R. Hassin, Ed.). Oxford University Press.
- Humphries, B. (1989). *Contemporary theories of knowledge*. *Teaching Philosophy*, 12(1), 51–53.  
<https://doi.org/10.5840/teachphil19891215>.
- Hutchison, E.D., Charlesworth, L.W., Cummings, C. (2011). *Theoretical perspectives on human behavior*. In E. D. Hutchison (Ed.), *Dimensions of human behavior: Person and environment* (4th ed.) (pp. 34-69). Los Angeles: Sage Publications.
- Ivancevich, J. M., Matteson, M. T., Konopaske, R. (1990). *Organizational Behavior and Management*. Homewood, IL: BPI/Irwin.
- John, O. P. (1990). *The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires*. In L. A. Pervin (Ed), *Handbook of personality: Theory and research* (pp. 66-100). New York: The Guilford Press.
- Khatibi, M., Khormae, K. (2016). *Learning and personality: A review*. *Journal Education of Management Study*, 6(4), 89–97.
- Lehrer, K. (1990). *Theory of Knowledge (Dimension of Philosophy Series)*. Colorado: Westview Press.
- Mayer, J. D. (2007). *Asserting the definition of personality*. *The Online Newsletter for Personality Science*, 1(1), 1–4.
- McCrae, R., Costa, P. (1996). *Toward a new generation of personality theories*. In J. S. Wiggins, (Ed), *The Five-Factor Model of Personality: Theoretical Perspectives* (pp. 51-87). New York: The Guilford Press.
- Moeller, D. W. (2005). *Environmental Health*. Cambridge: Harvard University Press.
- Morgan, C. T., King, R. A., Weisz, J. R., Schopler, J. (1986). *Introduction of Psychology* (7th ed.). India: The McGraw-Hill Companies. Inc.
- Neuman, Y. (2014). *Personality from a cognitive-biological perspective*. *Physics of Life Review*, 11(4), 650–686.  
<http://dx.doi.org/10.1016/j.plrev.2014.09.002>.
- Pakdel, B. (2013). *The historical context of motivation and analysis theories individual motivation*. *International Journal of Humanities and Social Science*, 3(18), 240–247.
- Piaget, J. (1978). *Behavior and Evolution*. New York: Pantheon Books.
- Rabinowitz, M. (2017). *The interaction between knowledge, strategies, metacognition, and motivation*. *Psychology of Learning and*

*Motivation*, 67, 35–52.

<https://doi.org/10.1016/bs.plm.2017.03.002>.

Rhodewalt, F., Peterson, B. (2008). *The self and social behavior: The fragile self and interpersonal self-regulation*. In F. Rhodewalt (Ed.), *Personality and Social Behavior* (pp. 49–78). New York: Psychology Press, Taylor & Francis Group, LLC.

Satchell, L. P., Davis, J. P., Julle-Danière, E., Tupper, N., Marshman, P. (2019). *Recognising faces but not traits: Accurate personality judgment from faces is unrelated to superior face memory*. *Journal of Research in Personality*, 79, 49–58.

<https://doi.org/10.1016/j.jrp.2019.02.002>.

Schimmack, U., Oishi, S., Furr, R. M., Funder, D. C. (2004). *Personality and life satisfaction: A facet-level analysis*. *Personality and Social Psychology Bulletin*, 30(8), 1062–1075.

<https://doi.org/10.1177/0146167204264292>.

Shani, A. B. R., Docherty, P. (2003). *Learning by Design: Building Sustainable Organizations*. Maden: Blackwell Publishing.

White, J. K., Hendrick, S. S., Hendrick, C. (2004). *Big five personality variables and relationship constructs*. *Personality and Individual Differences*, 37(7), 1519–1530.

<https://doi.org/10.1016/j.paid.2004.02.019>