

Validation of Dark Triad Personality Scale

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Abstract. *The Dark Triad Personality scale consists of three measured dimensions; Machiavellianism, Narcissism and Psychopathy. This research was done by doing test adaptation. The reason is for the scarcity of measuring instruments about personality, many measuring instruments about personality but which reveal about the bad personality of employees which will ultimately affect employee performance not yet found in Indonesia. The Dark Triad Personality scale can be used in several aspects, such as (1) indicating traits of individual who have tendency to characterize pathologies behaviour that can harm themselves and others, (2) revealing counterproductive behaviour to employees. The purpose of this study is to reveal the psychometric characteristics of Dark Triad Personality scale, the development and testing of the validity by using factor analysis, and the reliability of measuring instruments. The research subjects were 380 employees of both private and government agencies. The results have shown that there are 16 valid items with a loading factor is more than 0.50 reliability 0.846. Machiavellianism Reliability = 0.778 Narcissism = 0.73 and Psychopathy = 0.823.*

Keywords: Validation, dark triad personality scale.

Introduction

An important part of the organization and industry is the owner of capital, capital or capital and employees. Employees become an important part of the company because they become the driving force of the company. Industry and organization actors have a tendency for productive work behaviour and counter-productive work behaviour. Moreover, Sackett & DeVore (in Anderson et.al 2005) state that productive work behaviour is good work behaviour, an important role in industrial and organizational life in success. Counter-productive work behaviour is manners done intentionally and contrarily to the interests of the organization. So as to find out the three traits trends that contain bad behaviour and provide a direct influence on interpersonal behaviour, the measuring instrument is needed in conducting assessments.

Furthermore, efforts to meet the needs of the test that can be used for assessing employee performance behaviour is to adapt the existing measurement tools, namely Short Dark Triad (SD3). This measuring instrument consists of three traits, there are Machiavellianism, Narcissism and Psychopathy. This measuring instrument can be used to find out the bad personality of employees which will ultimately affect employee performance. In previous studies (O'Boyle Jr., Forsyth, Banks & Mc Daniel, 2012), it is explained that there is a relation between narcissism and unsatisfactory upsurge in final assignment, unhealthy leadership and negative work results.

The use of tests is adapted from abroad for psychologists collides with different cultures, so as to

they will usually do adaptation first by adjusting the tests to be matched with various factors that are owned by the population subject to tests, one of which is culture. Based on the explanation above, it can be identified that causes problems in using psychological measurement tools from lies on the presence of different cultures with different test results, which are behavioural samples so that the test characteristics obtained in the form of validity and reliability of measuring instruments will be diverse. Departing from these thoughts, the authors need to adapt in Indonesian and known the validity and reliability of the scale before being used in assessing employee work behaviour.

This current research is aimed to reveal the characteristics of development and to test the validity and reliability of the Short Dark Triad (SD3) measuring instrument by using confirmatory factor analysis.

This study provides benefits in the field of industrial psychology and psychology measurement, such as (1) one of the bases in carrying out evaluation programs which can improve employee performance (2) From the preparation and development of the Short Dark Triad (SD3) scale a test that meets the principles measurement in the industrial field (3) diagnosis aspect in individual or classical.

Literature Review

Short Dark Triad Personality (SD3)

Dark Triad Personality is three traits in individuals who have a tendency to characterize pathological behaviour that can harm themselves and others. Dark Triad Personality consists of Machiavellianism,

Narcissism and Psychopathy. Spain et.al (2013) state that Dark Triad Personality is the boundary between normal personality and clinical level pathology and it is considered as a differentiator from the Big Five Personality.

Prior Research

The development of Short Dark Triad (SD3) measuring instrument is carried out by Daniel N. Jones and Delroy L. Paulhus. The development of this measuring instrument is based on the theory of Machiavellianism, narcissism, and psychopathy. The development of the first measuring instrument for machiavellianism consists of 13 items, narcissism consists of 13 items, and psychopathy consists of 15 items. After experiencing a series of studies, the item is reduced to 27 items.

Previous research on Dark Triad Personality carried out by (O'Boyle Jr, Forsyth, Bangks & Mc Daniel, 2012) states that individuals who have high scores on narcissism trait has a high tendency of counterproductive behaviour.

The Short Dark Triad (SD3) dimension:

- a) Machiavellianism. Machiavelli Personality consists of; (1) having confidence in the effectiveness of tactics and manipulative in dealing with others, (2) having a cynical view of human nature and (3) having the view in seeking benefits transcends the principles of life (O'Boyle et al, 2012).
- b) Narcissism. Narcissism is a trait that has a high self-image, a fantasy of control, a fantasy of fantasy success in admiration and a desire to love oneself more by others.
- c) Psychopathy. Psychopathy is characterized by a lack of concern and mechanisms of social regulation, impulsiveness and lack of guilt while endangering others.

Validity and reliability

The criteria for measuring psychology can be expressed as a good measuring tool, namely being able to provide reliable information. The criteria consist of validity and reliability (Azwar, 1997).

Validity

Validity is the accuracy of tests in measuring something that must be measured. Gronlund (1982) generally defines validity as the extent to which test results can be used for the intended purpose. Test validity consists of content validity, construct validity, and criteria-based validity (criteria-based validity consists of predictive validity and concurrent validity). The validity of the test content refers to the extent to which a set of questions are seen from their contents measures intended to be measured. The construct validity questions, the measurement results with the reflecting instrument, the construction of the test theory that underlies the preparation of the measuring instrument. The validity of

the criteria is seen from the extent to which the measurement results with the measurement tool in question are equal or similar to the results of other measurements used where the criteria can be in the present time or future time. If this criterion is now or in the near future can be utilized, it is called concurrent validity. Then, if the new criteria can be used later, it is called as predictive validity.

Factor analysis

Factor analysis is a procedure for identifying items or variables based on their similarity. The similarity is shown by high correlation. Items that have a high correlation will form a crowd of factors (Widiarso, 2009).

In factor analysis, it allows researchers to 1) test the accuracy of the model (goodness of fit test) factors formed from items of measuring instrument 2) test the equality of measurement units between items, 3) test the reliability of items on each factor measured, 4) test for invariant items in the population. Confirmatory factor analysis is used to evaluate the measurement model which tests the validity and reliability of latent constructs. Factor analysis is an extension of the Exploratory Factor analysis. Moreover, researchers must determine the number of factors and the relationship between factors with the latent construct based on the theory.

Reliability

Suryabrata (2000) states that the reliability of measuring instruments shows the extent to which measurement results with these tools can be trusted. The reliability of the measuring instrument also shows that the measurement error cannot be determined with certainty, but it is only estimated.

Reliability is consistency can also be said to be the extent to which the results of a measurement can be trusted (Azwar, 1997). Reliability coefficients based on informal agreements are as high as possible, reliability coefficients according to Nunnally (1978) and Kaplan in Saccuzo (1989) reliability coefficients 0.7 to 0.8 are considered good enough. The reliability obtained from the measuring instrument The Short Dark Triad (SD3) is 0.72.

Adaptation test

Test adaptation is the adjustment of test material due to cultural differences or in the same culture with different test characteristics. Adaptation tests include cultural adaptation and test takers.

Test adaptation steps: (1) Understand the characteristics of the test which include theoretical foundation, operational definition, standard administration, standard test format made with certain forms which have purpose, characteristics of test takers which include age and education. (2) Translating or adapting the measuring instrument which includes differences in language constructs or idioms, observing local terms, and rationalizing each item. (3) Items that

have been translated are later reviewed. A review of items is conducted to determine whether or not the item is considered good and met the criteria for qualitative assessment before being measured. (4) Psychometric data in the form of statistical calculations regarding the test, namely validity and reliability (Soekarti, 2003).

Methods

Dark Triad Personality was an individual trait who had a tendency to characterize pathological behaviour that could harm themselves or others. The Dark Triad Personality consisted of Machiavellianism, Narcissism D3) is behavior or trait in aberrant individuals. The Dark Triad personality scale was a measuring tool used to determine weaknesses or deviant behaviour of employees.

The research subjects participated were both private and government agencies. The number of participants in this study were 380 employees.

The measuring instrument was Short Dark Triad (SD3) developed by Jones D.N and Paulhus D.L which consisted of 27 items based on 3 factors. This measuring instrument had been tested for its validity and reliability. Reliability test that had been done was obtained at 0.74. The reason for using this measurement tool was because there was no tool used in Indonesia. Then, this instrument was needed to know the deviant behaviour of industry stakeholders.

This test adaptation process still had some weaknesses. The adaptation of this test was a preliminary study in testing the validity and reliability of measuring instruments. Hence, in testing the validity and reliability of this scale, it was used until the test was adapted or translated. There had been no changes or revisions to the items so that if this scale was used, then the items received with revisions must be revised and the items must be replaced and later be tested. Moreover, re-analysis would be interpreted whether or not they can be directly used or must be revised. This procedure only covered the validity and reliability, while the revisions and subsequent trials were carried out in future studies.

Quantitative item analysis was calculated by using AMOS 24 software. Based on the results of the analysis, further analysis was carried out to see the characteristics of items that met the criteria.

Result

Based on the data analysis, from 27 items, 11 of which with loading factor is less than 0.50 (1, 2, 3, 4, 11, 15, 17, 18, 20, 25, 26). After fulfilling the goodness of fit, it is found that RMSEA = 0.077 less than 0.8 CFI = 0.890 and GFI = 0.654 has met the criteria. There are 16 items that meet the loading factor above 0.50, namely (5, 6, 7, 8, 9, 10, 12, 13, 14, 16, 19, 21, 22, 23, 24, 27). This item fulfils all domains of measurement. The reliability of the measuring instrument is 0.849. Machiavellianism Reliability = 0.778 Narcissism = 0.73 and Psychopathy = 0.823. In the third study conducted by Jones D.L, he has mentioned that reliability of Machiavellianism = 0.76

Narcissism = 0.78 and Psychopathy = 0.73. Based on these results, the Dark Triad personality scale can be said to be reliable between the original measuring instruments and those that have been adapted relatively close to the same.

Discussion

Based on the results of data analysis, from 27 items, there are 9 of which whose factor loading values are less than 0.50 (1,3,4,11,15,17,20,25,26). Unfortunately, there are 18 remaining items that do not meet the goodness of fit, namely CMIN chi square = 4.53 $p = 0.00$. CMIN is a normal chi square the size is divided by the degree of freedom. The model is supposed to be fit if it has a p value > 0.00 . CMIN values received are, from 2 and if < 1 then it can be said to be very fit. RMSEA = value, 097, cannot be said to be fit because more than 0.80, William and O, Boyle 2011 the RMSEA value is < 0.06 - < 0.08 . The values of CFI = 0.624 and GFI = 0.65 so that they do not meet the fit model in the measurement. The recommended CFI and GFI values for fit are 0.09. The next step is to ovarize between errors according to the index modification suggestion, namely (e3: e4; e23: e24; and e25: e27) because it is still not fit so a reduction is made on items that still have a loading factor, of 0.50 (item 2 and 18) and constain 1 on each factor.

After fulfilling goodness of fit, RMSEA = 0.07 and less than 0.80 CFI = 0.89 and GFI = 0.91 already meet the criteria. There are 16 items that meet the loading factor above 0.50, namely (5, 6, 7, 8, 9, 10, 12, 13, 14, 16, 19, 21, 22, 23, 24, 27). This item fulfils all domains of measurement. The reliability of the measuring instrument is = 0, 85.

In the Machiavellianism dimension, invalid items are no (1, 2, 3, 4). On this item, it shows the individual's courage to use reason creatively and deceptively while Indonesian organizational culture has a culture of fear of acknowledging having done dirty practices actually also do. Individuals are identified as having Machiavellianism tendencies usually also have Psychopathic tendencies (Paulhus & Williams, 2002). In item No. 2 it can be revised because the loading factor is 0.453 and even be included in the test series.

Narcissism dimensions are 4 invalid items (11, 15, 17, 18). This dimension reveals the tendency of employees to be narcissistic, showing off where the culture in Indonesia has difficulty showing off what it has done. Paulhus & Williams (2002) state that narcissism is a behavioral aberration in which individuals who experience narcissism deviations also have a tendency to psychopathy. Narcissism also correlates with IQ where items in the narcissism dimension fall not due to cultural bias but high IQ in the research subject. In item No. 8 it can still be revised because the loading factor is 0.42. It can even be stated in a series of tests.

Psychopathy Dimensions reveal that there are 3 invalid items, item no (20, 25, 26). This dimension is difficult to reveal because Psychopathy is sometimes not

recognized by individuals. The loading factor in the very small item 20 shows less match between items with dimensions. In item No. 26 shows a negative loading factor and this shows inconsistencies between items with dimensions. Item no 26 is incompatible with Indonesian culture where free sex is considered taboo. Item No 26 should be replaced. Subjects may be doing facking goods because they feel the item is not appropriate. Research conducted by (Patnaik, 2011) states that culture in individuals will influence the behavior of individuals in the organization. Another trend is that if the person doing it is an individual who has been declared psychopathic will act outside of ethics and norms. Using an assessment of individual deviant behavior is expected to form a healthy organization. Healthy organization consists of organizational performance and employe well being. While employe well being consists of job satisfaction of employees and healthy employees. Healthy employees include socially, mentally and physically healthy (Patnaik, 2011). Mental health can be identified by using The Dark Triad personality scale. This scale is expected to be used to uncover employee deviant behavior so as to avoid employee counterproductive behavior and achieve a healthy organization.

Conclusions

Based on the results of data analysis, it can be concluded that the Short Dark Triad measuring instrument consists of 27 items, there are 11 items whose loading factor are less than 0.50 (1, 2, 3, 4, 11, 15, 17, 18, 20, 25, 26). After fulfilling the godnes of fit RMSEA = 0.077 less than 0.8 CFI = 0.890 and GFI = 0.654 has met the criteria, there are 16 items that meet the loading factor above 0.50, namely (5, 6, 7, 8, 9, 10, 12, 13, 14, 16, 19, 21, 22, 23, 24, 27). Reliability of measuring instruments is 0.849. Machiavellianism Reliability = 0.778 Narcissism = 0.73 and Psychopathy = 0.823.

Items number 2 and 8 can still be maintained because each has a loading factor close to 0.50 which is 0.453 and 0.421 respectively. In item No. 26 must be replaced because it is not in accordance with Indonesian culture. The implication of this research is that this measuring instrument can be used in Indonesia by using 16 items that meet the loading factor because it has filled all three-dimensional measuring domain areas that meet the item.

If possible, you can use 18 items by including items number 2 and 8.

References

- Abbot R.A, Ploubidis G.B, 2006. Psychometric evaluation and Predictiv Validity a Strong and difficulty in UK Bird Cohor Women Items. *Journal Healt Qual Life Out Come*. Vol 4
- Anderson, N., Ones, D., Sinundang, / Viswesvaran, C. (2005). *Handbook of Industrial, Work, and Organizational Psychology* Volume I Personnel Psychology. London: A Sage Publication Company.
- Azwar, S. 2013. *Reliabilias and Validias* of edition II. Yogyakarta: Student Library
- Dn, T. Y., Yyepg, T., Yyepg, T., & Yyepg, T. (2005). *Ronald K. Hambleton, Peter F. Merenda, Charles D. Spielberger-Adapting educational and psychological tests for cross-cultural assessment-L. Erlbaum Associates (2005)*.
- Embretson, S & Gorin, J. 2001. Improving Construct Validity With Cognitive Psychology Principles. *Journal of Educational Measurement*. 38 (4), 343-368
- Nunnaly.J.C.1994. *Psychometric Theory*.New York. MC Graw Hill.Inc
- Patnaik, J. B. (2011). Role of Work Culture in Improving Organizational Health. *Amity Journal of Applied Psychology*, 2 (1),40-48. <https://doi.org/10.1109/ASPAA.2005.1540198>
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36 (6), 556-563. [https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)
- Soekarti, 2003. *Diktat Kuliah Sistem Pengelolaan Tes*. Yogyakarta: Not Published
- Suryabrata, 2000. *Pengembangan Alat ukur Psikologi*. Yogyakarta: Andi Offset
- Widiarso.W 2009. *Handout Mata Kuliah Psikometri*. Faculty of Psychology UGM. Not published.