Original Research Article

THE RELATIONSHIP BETWEEN PERSONALITY AND PSYCHOLOGICAL WELL BEING TOWARD ADOLESCENTS IN DISASTER-PRONE AREAS IN PADANG CITY

Helena Patricia 1*, Chamy Rahmatiqa 2, Emira Apriyeni 1

1 Department of Nursing Science, Syedza Saintika Institute of Health Science, Padang, Indonesia
2 Department of Public Health, Syedza Saintika Institute of Health Science, Padang, Indonesia

*Correspondence: Helena Patricia
Department of Nursing Science, Syedza Saintika Institute of Health Science, Padang, West Sumatera, Indonesia

E-mail: helenapatricia77@gmail.com

Article Info:
Received: 16 September 2020
Revised: 4 November 2020
Accepted: 5 November 2020

DOI: https://doi.org/10.36720/nhjk.v9i2.203

Abstract

Background: Indonesia, particularly Padang City, West Sumatra, is a prone-area toward natural disasters related to geographical, geological and demographic conditions. Natural disasters give a very significant impact on physical, psychological and social. The psychological impact that most often appears in disaster cases is Post Traumatic Stress Disorder (PTSD). One who is prone to experiencing PTSD is adolescents. To prevent PTSD from occurring, good psychological well-being is needed. The factors that influence psychological well-being is personality.

Objectives: This study aimed to analyze the relationship of personality with psychological well-being toward adolescents in disaster-prone areas in Padang city.

Methods: This study is an analytical study with a cross sectional approach. This research was conducted in three disaster-prone districts in Padang City, namely North Padang, South Padang, and Koto Tangah. Data were collected through distributing questionnaires to 156 adolescents who were selected by accidental sampling. Data were collected using by questionnaires Ryff Psychological Well-Being Scale by Gao & McLellan (2018), consist of 18 item with Cronbach's alpha value 0.908 to measure the level of psychological well-being of adolescents and Jung Personality Scale by Nidhi et al., (2017) consist of 24 item with Cronbach's alpha value 0.087 to measure adolescent personality types.

Results: The results of this study found that 85 respondents (54.5%) had low psychological well-being, and 108 respondents (69.2%) had introverted personality types. The results of the bivariate analysis found a relationship between personality toward psychological well-being with 0.010 P value.

Conclusion: The results found that there was a relationship between personality toward psychological well-being adolescents in disaster-prone areas in Padang City. It is recommended for adolescents, parents and teachers to pay attention about the personality and support the students so that adolescents have high psychological well-being.

Keywords: Psychological Well-Being, Personality, Adolescent, Disaster-Prone Area.
INTRODUCTION

Indonesia is a disaster-prone region in the Southeast Asia region due to geographical, geological and demographic conditions that allow disasters to occur, whether caused by natural or non-natural factors (The Center for Crisis Management, Ministry of Health, Republic of Indonesia, 2018). One of the areas in the country of Indonesia that has a fairly high level of vulnerability to earthquakes and tsunamis is Padang City.

Natural disasters have had a very significant physical, psychological and social impact. Disaster events result in trauma to disaster victims. Natural disasters also leave psychological impacts on survivors. The psychological impact that most often appears in the cases of natural disasters is Post Traumatic Stress Disorder (PTSD) (Amin, M. K., 2016).

PTSD is a disorder that can form from traumatic events that threaten a person's safety or make a person feel helpless. People experiencing PTSD respond to traumatic events with fear and hopelessness. One who is prone to experiencing PTSD is adolescent. Adolescence is a period that is still unstable and vulnerable to various problems (Maurya, V., 2019).

To prevent PTSD from occurring, good psychological well-being is needed. Psychological well-being is a condition where individuals become prosperous and have the ability to accept themselves as they are, able to formulate life goals, develop positive relationships with others, be able to grow and develop independent personal potential, have autonomy and are able to control the environment (Wang, X., et al, 2010) (Hernandez, R., 2018).

Many factors can affect a person's psychological well-being, including the characteristics of a person such as age, gender, social and economic factors, occupation, education level, including factors of religiosity, personality, psychological distress, quality of life, coping strategies, self-concept, social support and self-efficacy. Based on many factors above, the most influence factors on psychological well-being is personality (Turashvil, T., Turashvili, M., 2015).

Based on data from the Regional Disaster Management Agency (BPBD) of Padang City, from 11 sub-districts there are 3 sub-districts that are potentially affected by the tsunami, namely North Padang, West Padang, and Koto Tangah. Based on the explanation above, the researchers conducted a research on factors related to psychological well-being toward adolescents in disaster-prone areas in Padang City. The objectives of this study were: To determine the relationship of personality, and psychological well-being toward adolescents in disaster-prone areas in Padang City.

METHODS

Study Design

This research is a descriptive analytic research with a cross-sectional study method. The dependent variable is psychological well-being and the independent variable is personality.

Setting

The data collection of this research was carried out from April to July 2020 in Junior High Schools which are very close to the beach in three disaster-prone districts in Padang City, namely SMP N 40 in North Padang, SMP N 35 in South Padang and SMP N 34 in Koto Tangah.

Research Subject

The population in this research is all adolescents in Junior High Schools which are very close to the beach in three disaster-prone districts in Padang City. The numbers of samples in this study were 156 respondents who were selected by accidental sampling technique. The data were obtained by using a questionnaire of psychological well-being, and personality.

Instruments

The data were obtained by using two questionnaires that conducted a validity and reliability test. Questionnaire to measure
psychological well-being was modified from Ryff Psychological Well-Being Scale (Gao, J & McLellan, R, 2018). The original questionnaire consisted of 24 items, modified by the researcher into 18 items with reasons to avoid the boredom of the respondents. Modifications were made by paying attention to the proportion of each domain in the questionnaire by combining several questions with almost the same meaning, namely consisting of 3 question for each domain, namely autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance. After being modified, the validity and reliability tests were carried out to 15 adolescents, with the results of Cronbach’s alpha value 0.908 and the item-total Correlation value ranges from 0.54 to 0.71, which means a reliable and valid questionnaire.

Questionnaire of personality used Jung Personality Scale (Nidhi et al., 2017). This questionnaire is used to divide individual personalities into 2 large groups with focus to each domain. Extrovert personality consists of 4 question each item for sensing, thinking, and judging domains. Meanwhile, Introvert personality consists of 4 question items for each domain of intuiting, feeling, and perceiving. The validity and reliability test results for this instrument are 0.087 Cronbach’s alpha value and the item-total Correlation value ranges from 0.49 to 0.69 which means a reliable and valid questionnaire.

Data Analysis

The data analyses used in this study were univariate, and bivariate. Univariate analysis was used to see the frequency distribution of each of the studied variables. Bivariate analysis with Chi-square test was used to examine the relationship between psychological well-being and personality.

Ethical Consideration

This study pays attention to the basic principles of research ethics which include autonomy, beneficence, non-maleficence, anonymity and justice, according to local regulations, no formal ethical scrutiny was required or undertaken. This research implemented based by permit letter number 98/STIKES-SS/III/2020

RESULTS

Univariate Analysis of the Variables

The results of this study on 156 respondents showed that 85 respondents (54.5%) had low Psychological well-being, 108 respondents (69.2%) had introverted personality types toward adolescents in disaster-prone areas of Padang City (Table 1).

Table 1 The Results of the Univariate Analysis of Psychological Well-Being and Personality Type in Disaster-Prone Areas in Padang City from April until July 2020 (n = 156).

| Variables          | Categories | Frequency (f) | Percentage (%) |
|--------------------|------------|---------------|----------------|
| Psychological Well-Being | Low | 85            | 54.5           |
|                     | High       | 71            | 45.5           |
|                     | Total      | 156           | 100.0          |
| Personality Types  | Introvert  | 108           | 69.2           |
|                     | Extrovert  | 48            | 30.8           |
|                     | Total      | 156           | 100.0          |

Sources: Primary Data of Questionnaire, 2020.

Analysis of the Relationship of Personality with Psychological Well-Being toward Adolescents in Disaster-Prone Areas in Padang City using Chi Square Test

The results of the bivariate analysis found a relationship of personality (0.010), toward psychological well-being. The majority of low psychological well-being was found in 60.0% of adolescents who have introverted personality types (Table 2).
Table 2 The Result of the Analysis of the Relationship of Personality with Psychological Well-Being toward Adolescents in Disaster-Prone Areas in Padang City using Chi Square Test (n = 156).

| Personality Types | Psychological Well Being |           |       |       |       |       |
|-------------------|--------------------------|-----------|-------|-------|-------|-------|
|                   | Low (%)                  | High (%)  | Total |       |       |       |
| Introvert         | 51 (32.7)                | 34 (21.8) | 85    | 54.5  | 57    | 36.5  |
| Extrovert         | 34 (21.8)                | 57 (36.5) | 91    | 57    | 51    | 32.7  |
| Total             | 85 (54.5)                | 71 (45.5) | 156   | 100.0 |       |       |

*p-value = 0.010

Sources: Primary Data of Questionnaire, 2020.

DISCUSSION

The results of the Univariate analysis showed that more than half of the respondents had low Psychological Well Being, and introvert personality type. During adolescence, Psychological well-being seems to have its own developmental idiosyncrasy and differs significantly from later ages. The manifold changes that occur at these ages (physical, physiological, cognitive, emotional, behavioral, social, relational and institutional) make adolescence an exceptionally plastic period of life (Viejo, Carmen, 2018).

Psychological well-being is an important aspect in one’s life as it is refers to positive mental health. Psychological well-being is often defined as some combination of positive affective states such as happiness and functioning with optimal effectiveness in individual and social life (Adyani, L., Suzanna, E., Safuwan, S., & Muryali, M., 2019).

Regarding the adolescents who were respondents in this study, it was also found that more than half of adolescents had an introverted personality type. This result is in line with the research of Ludtke O et al, who conducted a study toward adolescents at a university. The results of the study indicated that the majority of students had a tendency towards an introverted personality type. This is related to the task of developing adolescents who are still trying to find identity which have an impact on changing attitudes and behavior of these adolescents (Ludtke, O, Roberts, B.W, Trautwein, U, Nagy G, 2011).

Personality is defined as the characteristic sets of behaviors, cognitions, and emotional patterns that evolve from biological and environmental factors. While there is no generally agreed upon definition of personality, most theories focus on motivation and psychological interactions with one's environment. There are two types of personality, the introverts are those in whom reflective thought inhibits and postpones action and expression: the extroverts are those in whom the energies liberated upon the stirring of any propensity flow out freely in outward action and expression (Donahue, M & Benson, P., 2010).

Introversion is the state of being predominantly interested in one's own mental self. Introverts are typically perceived as more reserved or reflective. Introverts often take pleasure in solitary activities such as reading, writing, or meditating. An introvert is likely to enjoy time spent alone and find less reward in time spent with large groups of people. Introverts are easily overwhelmed by too much stimulation from social gatherings and engagement, introversion having even been defined by some in terms of a preference for a quiet, more minimally stimulating external environment. They prefer to concentrate on a single activity at a time and like to observe situations before they participate, especially observed in developing children and adolescents. They are more analytical before speaking (Brooks, S. K, et al, 2016).

The results of the bivariate analysis showed that there was a relationship between personality and psychological well-being. The majority of low psychological well-being is found in adolescents who have introverted personality types. Psychological well-being is made up of six dimensions: (1) autonomy, or the ability to regulate our own behavior, resist social pressure and follow our convictions; (2) environmental mastery, or the ability to manage the context and daily activities; (3) personal growth, which includes a continuous process of
developing our own potential; (4) positive relationships with others, defined as the establishment of close, trusting and meaningful bonds with others, as well as showing concern for the well-being of others; (5) purpose in life, or setting objectives and goals which give meaning and direction to our lives; and (6) self-acceptance, or the ability to have a positive attitude and feelings of satisfaction and acceptance of ourselves. Each of these dimensions represents what it means to be healthy, well and fully functioning, and articulates the different challenges that people face in their effort to achieve positive functioning (Mercedes, G.L., Carmen, V., Rosario, O.R, 2019).

Fauziah M., Handarini D. M., Muslihati said that psychological well-being is influenced by various factors both internal factors (such as self-concept and personality) and external (such as social support). In this research, it is also identified that self-concept is the strongest variable which correlate with psychological well-being compared with the other variables; social support and personality variable. There is a positive correlation between psychological well-being, self-esteem and gratitude (Fauziah, M., Handarini, D. M., Muslihati., 2018).

Therefore, the individual will develop a positive attitude and have high psychological well-being. Social support itself is also one of the factors to achieve psychological well-being of a person among other factors such as age, sex, social status, religiosity and personality. The results of the research by Marrero, RJ & Abella M, explained that there was a significant relationship between introvert-extrovert personality types and psychological well-being. Teens with extrovert personality types had high psychological well-being compared to introverted personality types who had lower psychological well-being (Marrero, RJ & Abella, Mónica., 2012).

CONCLUSION

Conclusion in this study, there was more than half of the respondents had low Psychological Well Being, and more than half of the respondents had Introvert personality type. There was a relationship between personality toward psychological well-being adolescents in disaster-prone areas in Padang City.

SUGGESTIONS

It is recommended for adolescents, parents and teachers to pay attention about the personality and Psychological Well Being of adolescents and hope parents and teachers can give social support the students so that adolescents have high psychological well-being.

ACKNOWLEDGMENT

This study was funded and supported for publication by Department of Nursing Science, Syedza Säintika Institute of Health Science, Padang, Indonesia and Directorate General of Higher Education, Ministry of Education and Culture.

DECLARATION OF CONFLICTING INTEREST

There is no conflict of interest in this research.

FUNDING

Thank you for the scientific article writing grant given by Directorate General of Higher Education, Ministry of Education and Culture Indonesia.

AUTHOR CONTRIBUTION

Helena Patricia: Prepare research proposal, conducting research permit, colecting data, compile research report, writing manuscript, publish journal, writing a book about psychology in nursing, and presentation of result report.

Chamy Rahmatiqa: Assisting the head of research in managing the research, such as conducting research permit, colecting data, compile research report, and presentation of result report.
Emira Apriyeni: Assisting the head of research in managing the research, such as writing manuscript, publish journal, and writing a book about psychology in nursing.

ORCID
Helena Patricia
None.

Chamy Rahmatiqa
None.

Emira Apriyeni
None.

REFERENCES
Adyani, L., Suzanna, E., Safuwan, S., & Muryali, M. (2019). Perceived Social Support and Psychological Well-Being among Interstate Students at Malikussaleh University. *Indigenous: Jurnal Ilmiah Psikologi*. 3 (2). 98-104.

Amin, M. K. (2016). Post Traumatic Stress Disorders Post-Disaster: Literature Review Post Traumatic Stress Disorders Post-Disaster: *Jurnal Kesehatan Al-Irsyad (JKA)*. 2016: X(1).67-73.

Brooks, S. K., Dunn, R., Amlôt, R., Greenberg, N., & James Rubin, G. (2016). Social and Occupational Factors Associated With Psychological Distress and Disorder Among Disaster Responders: A Systematic Review. *BMC Psychology*, 4(1), 1–13.

Donahue, M & Benson, P. (2010). Religion and the Well-Being of Adolescents. *Journal of Social Issues*. 51. 145 – 160

Fauziah, M., Handarini, D. M., Muslihati. (2018). Self-Esteem, Social Support, Personality and Psychological Well Being of Junior High School Student. *Jurnal Pendidikan Humaniora*. March 2018, Vol. 6 (1) pp. 17–23

Gao, Jie & Mclellan, Ros. (2018). Using Ryff’s scales of psychological well-being in adolescents in mainland China. *BMC Psychology*. 6. 10.1186

Hernandez, R., Bassett, S. M., Boughton, S. W., Schuette, S. A., Shiu, E. W., & Moskowitz, J. T. (2018). Psychological Well-Being and Physical Health: Associations, Mechanisms, and Future Directions. *Emotion Review*, 10(1), 18–29.

Ludtke, O, Roberts, B.W, Trautwein, U, Nagy G.(2011). A random walk down university avenue: Life paths, life events, and personality trait change at the transition to university life. *Journal of Personality and Social Psychology*. 2011;101(3):620–637

Marrero, RJ & Abella, Mónica. (2012). The Contribution of Personality to Psychological Well-Being: An Exploratory Study. *Psychology of Satisfaction*. 41 -65.

Maurya, V. (2019). Natural Disasters, Psychological Well-Being and Resilience: Concerns related to Marginalized Groups: *International Journal of Research and Analytical Reviews (IJRAR)*. 6 (1) 270-275

Mercedes, G.L., Carmen, V., Rosario, O.R. (2019). Psychological Well-Being during Adolescence: Stability and Association with Romantic Relationships. *Frontiers in Psychology*. Vol.10 (1). 1772 -1778

Nidhi, S., Murphy, O., Strategists, L., Helena, C., Oscar, T., Life, M., Management, C., View, O., Steps, S., & Nidhi, S. (2017). FITS Personality Type Assessment based on the Research of Carl G Jung. *International Journal for Innovative Research in Multidisciplinary Field*, 3(3), 124–132.

The Center for Crisis Management, Ministry of Health, Republic of Indonesia. (2018). Kementrian kesehatan RI. Obtained from http://www.depkes.go.id/penanganan-krisis/ On February 23, 2019.

Turashvil, T., Turashvili, M. (2015). Structural Equation Model of Psychological Well-Being: A Georgian Exploration. *Proceeding - Social and Behavioral Sciences*. (2015) Vol. 4 (9).

Wang, X., Shinfuku, N., Gao, L., Shen, Y., Zhang, H., & Zhao, C. (2010). Post-
earthquake Quality of Life and Psychological Well-Being: Longitudinal Evaluation in a Rural Community Sample in Northern China. *Psychiatry and Clinical Neurosciences*, 54(4), 427–433.

Viejo, Carmen & Gómez-López, Mercedes & Ortega-Ruiz, Rosario. (2018). Adolescents’ Psychological Well-Being: A Multidimensional Measure. *International Journal of Environmental Research and Public Health*. 15. 10.3390.

**Cite this article as:** Patricia H. Rahmatiqa, C., Apriyeni, E. (2020). The relationship between personality and psychological well-being toward adolescents in disaster-prone areas in Padang city. Nurse and Health: Jurnal Keperawatan, 9 (2), 244-250. [https://doi.org/10.36720/nhk.jv9i2.203](https://doi.org/10.36720/nhk.jv9i2.203)