The Effect of Neuroticism on Psychological Distress in Medical Students

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Abstract. Psychological distress is a stress which gives a negative impact on mental and physical health. It also caused anxiety, worries, depression and psychiatric disorder. Psychological distress has several causal, such as individual behaviour, there are several behavioural traits such as neuroticism. Individual who has neuroticism behaviour are prone to stress, anxiety and insecurities. This research are aimed at understanding the effects of neuroticism towards psychological distress in college student. The research method used quantitative with 70 college students as sample. Big Five Personality (BFI) and The Kessler Psychological Distress Scale (K10) are used as scaled for measurement. The data is analysed through simple linear regression with SPSS 23 for Windows. The result showed that neuroticism gives impact on psychological distress in college student in 17.5% and has positive relationship which means, the higher neuroticism the higher psychological distress in college students.

Keywords: Neuroticism, psychological distress

Introduction

Psychological distress is commonly found in general population, and estimated around 5-48% of total population. Psychological distress often viewed as a part of normal life, as consequences of misfortune, such as suffering from daily life transition, challenges and loss, in education, work, exile or persecution (Joseph & Abraham, 2018). Psychological distress defines “as a constant experience of unhappiness, anxiety, anger and problematic interpersonal relationship”. Psychological distress refers to various negative feelings which leads to mental disorder and mood swings. High-tension psychological pressure is proven related to the increase usage of certain substance and poor school performance (Shaheen, Jahan, & Shaheen, 2014). Meanwhile, Distress is an inappropriate term that usually refers to subjective stress responses that are unpleasant like anxiety and depression. Sometimes, it also used to describe behaviour and medical symptoms (such as, somatic distress) (Fink, 2006).

Psychological distress is public health problem and its effects spreading intensely among young generation population faster than before. Even though mental health problem affect the whole society, but psychological disorder among college students is found higher than public population. Around the world, research shows that, high level of psychological problem are found in college student, more than 50% of them reported depression symptoms right after their study started. Research in North America and Europe all of them shows fact higher than average population (Kumar, 2016).

From there faculties, Engineering, Medical and Social Sciences, college students who attend medical school have higher level psychological distress (Kumar, 2016). They experienced quite large psychological disorder in the early process of their term. Even tough several distress is viewed as normal, a viewed as a part of medical training and could motivate several students, but not all of them sees distress as constructive factor. For many students, distress evokes feelings of fear, incompetence, uselessness, anger, and guilt (Dyrbye, Thomas, & Shanafelt, 2005). Students who experience psychological distress report academic difficulties, use of prohibited substances, suicide, and violence (Jaisoorya et al., 2017). In psychological distress medical students can interfere with academic performance, academic achievement, reduce mood (mood) and increase anxiety at the time of the exam (Dendle et al., 2018).

There are several factors affects psychological distress, such as (1) intrapersonal factors of personality traits, based on a study found that personality types of neuroticism have a relationship with negative emotions (depression and anxiety), (2) situational factors consisting of physiological (physical) factors, cognitive and social factors (Halgin & Whitbourne, 2010). One approach in personality is a dispositional approach, assuming that personality consists of relatively stable internal characteristics into behavioural references. Personality traits are considered as several building blocks that shape personality. Recently, there are five personality dimensions which often called the big five, whom focus on nature and not on personality types. Nature is sustainable quality, an individual has properties in a different area. A person can have a higher or lower level in some traits. Thus in this approach, each personality can be described as how strong variations of certain characteristics (Dahriyanto & Tresnawati, 2016).

Five major personality traits have five factors with special features. Although called the big five, it does not mean that there are only five personalities, if there are not thousands of features classified into five groups called personality dimensions. These dimensions are extraversion, agreeableness, conscientiousness, neuroticism, and openness. The nature of neuroticism personality, refers to an individual who has a high level to be nervous, temperamental, emotionally sentimental...
and vulnerable, on the other hand, people who have lower levels will be calm, proud of themselves, emotionally and strongly (Dahriyanto & Tresnawati, 2016). There are several types of personality types that are vulnerable to the stressors that occur around them, in a study that examined the role of the Big Five Personality on psychological distress obtained significant results on personality types of neuroticism that significantly influence psychological distress, while the other four personality (extraversion, openness, agreeableness and conscientiousness) get the results of a negative correlation to psychological distress (Shaheen et al., 2014).

Individuals with neuroticism are prone to stress, have unrealistic ideas, have coping responses that are maladaptive, depressed, anxious and insecure (Paul T. Costa, Jr., 2015). Personality of neuroticism is strongly associated with an increased risk of depression and psychological distress (Navrady et al., 2017). But in the study (Batty, McIntosh, Russ, Deary, & Gale, 2016) it was found that neuroticism had no effect on distress and suicide relationships, neuroticism could not predict the level of depression and suicide. This study was conducted to determine the effect of neuroticism personality traits on psychological distress on medical students in the city of Malang.

**Method**

This study chooses research subjects by using a quota sample, with this method the researcher determines how many samples can be respondents in our research. Researchers determined that respondents from this study amounted to 70 active medical students at Malang Islamic University in Malang City. Based on the gender of active male students there were 32 people and 38 female students.

The two scales used in this study are: Big Five Personality (BFI) developed by John and Srivastava consisting of 44 items. Items or statements in BFI that are used in this study are only related to neuroticism. The number of neuroticism items in BFI is 8 items. Neuroticism is divided into several aspects, namely Anxiety, Angry hostility, Depression, Self-consciousness, Impulsiveness, and Vulnerability (John, O. P., & Srivastava, 1999). The scale has been tested for reliability and the results of Cronbach Alpha are 0.852 which means reliable. The Kessler Psychological Distress Scalae (K10) is a scale containing 10 items that can measure a person's level of psychological distress. This K10 item is based on the level of anxiety and symptoms of depression over the past 4 weeks. Examples of items are: "how often do you feel hopeless?" And "how often you feel nervous?" Subjects report the frequency of each of these experiences on a five-point scale ranging from "always" to "never" (Sunderland, Mahoney, & Andrews, 2013). The scale has been tested for reliability and got the Cronbach Alpha result of 0.922 which means it is very reliable.

This study consists of three procedures, namely preparation, data collection and data analysis. First examine the search for material and problems that exist. Then the researchers prepared the scale and distributed it to 70 medical students from Malang Islamic University in the city of Malang. After getting the data, the data will be analyzed with the SPSS 23 for Windows program. The process begins with counting which will then be explained and drawn conclusions based on the results of the process.

**Result**

This research was conducted to see how the role of burnout as a mediation between neuroticism and psychological distress in medical students. The subjects of this research were medical students who had been studying at universities in Malang. The total subjects in this study amounted to 70 people who are active medical students at Malang Islamic University in Malang.

This study was to explore the relationship between variables X and Y that have been analysed and the result is known as coefficient value of 0.744 (β = 0.419), with t = 3.802 and significance of p <0.05. Accordingly, neuroticism significantly had a positive effect on psychological distress (or c ≠ 0). With a R2 value of 0.175, it meant that the influence of neuroticism on psychological distress was 17.5%. Based on this description, value of R = 0.175 which meant the effect of neuroticism on psychological distress was 17.5% with a significance value of p <0.05.

**Discussion**

According to the results above, there was a significant relationship between neuroticism on psychological distress in medical students, this result can be seen from the P value obtained that is equal to 0,000 smaller than 0.05. Neuroticism personality factors can be one of the factors causing psychological distress in medical students, these results are consistent with research conducted by (Navrady et al., 2017) which shows that neuroticism results are strongly associated with an increased risk of depression and higher psychological distress. The higher the neuroticism personality, the easier it will be to increase distress in that person. The nature of neuroticism, an individual who has a high level of being nervous, temperamental, emotionally sentimental and emotionally vulnerable (Dahriyanto & Tresnawati, 2016).

In this research we find several factors whom caused psychological distress, and one of them is neuroticism. The role of neuroticism effects on personality traits, and has influenced on the increase of psychological distress in medical students.

**Conclusion**

The conclusion of this research are: there was a significant relationship between neuroticism and psychological distress in medical students. Furthermore,
there were various factors that affect psychological distress of medical students, such as the nature of neuroticism personality that significantly affects psychological distress, which meant that the higher the neuroticism of a person, the higher the psychological distress felt by medical students.

References


