

The Prevalence of Psychological Distress among Adolescents: An Initial Study of Adolescents' Mental Health in Malang, Indonesia

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Abstract. This study is aimed to investigate the prevalence and risk estimate of psychological distress among adolescents in Malang, Indonesia. Gender-related patterns were examined in this study. This study used the Hopkins Symptoms Check-List 25 (HSCL 25) to measure psychological distress ("case" score ≥ 1.75), and a demographic questionnaire recorded age and gender of the participants. The study only ranged the City of Malang where nine high-schools were randomly selected to participate in this study, both private and public high-schools registered at the Department of Education in Malang. A total of 515 students between 14 – 19 years old had been participated. There is a significant difference in psychological distress level among male and female adolescents in the City of Malang ($p < 0.05$). Female adolescents tend to score higher level of psychological distress compared to their male counterparts. There are 53.2% adolescents reported high-level of psychological distress. The prevalence of psychological distress among adolescents in the City of Malang is distressing. Also, female adolescents are at higher risk to experience high psychological distress level compared to the males.

Keywords: Adolescents, gender, psychological distress.

Introduction

Previous research indicates that one in five adolescents is suffering from mental health problems worldwide (Kieling et al., 2011). Neuropsychiatric disorders have counted for 45% of the top cause of years lost because of a disability (YLDs) for adolescents (Gore et al., 2011). Furthermore, experiencing mental health problems in adolescence has been linked to 25-30% higher chance of dropping out of school (Fletcher, 2010), exposure to substance use (Ulibarri, Ulloa, & Salazar, 2015), violence (Panter-Brick, Eggerman, Gonzalez, & Safdar, 2009), and pathological use of internet (Lam & Peng, 2010). In more extended time, these factors may increase the possibility of developing psychological problems beyond childhood and adolescence (Kieling et al., 2011), especially those who lived in low-income and middle-income countries such as Indonesia.

According to Indonesia National Health Research (RISKESDAS), the prevalence of general population who suffers from high psychological distress level in Malang is 11.5% which ranked fourth across East Java (RISKESDAS, 2013). Psychological distress is undesirable subjective states in the form of depression and anxiety that has emotional and physical manifestation (Mirowsky & Ross, 2003). Experiencing the high intensity of psychological distress in a long-term may jeopardize one's mental health condition if it is not treated well (Mubasyiroh, Suryaputri, & Tjandrarini, 2017). Moreover, a previous study carried out among the adult population in the U.S. showed that female adult was at higher risk of developing psychological comorbidity compared to the male adult, and the onset was during adolescence (McLean, Asnaani, Litz, & Hofmann, 2011).

Nevertheless, adolescence is a pivotal phase to promote mental health and prevent further development of mental health problems in adulthood. The evidence shows that the onset of a large adult population with mental health problems are originated during their childhood and adolescence, as the earliest is six years old for anxiety disorder, 11 years old for behaviour disorders, and 15 years old for substance abuse (Merikangas et al., 2010).

Despite the importance and opportunities to implement mental health promotion programs for adolescents, there are minimal data on mental health among adolescents, precisely in Indonesia. The knowledge about the prevalence of potential factors associated with adolescent's mental health is often the early step to understanding the magnitude of the problem (Kieling et al., 2011). Thus, this study is aimed to investigate the prevalence and risk estimate of psychological distress among adolescents in Indonesia and in addition, gender-related patterns are examined as well.

Method

A cross-sectional study had been conducted between September and October 2018. The researcher adopted a simple random sampling derived from a sampling frame of high-schools registered under the Department of Education in Malang, Indonesia. There were three types of high-school; SMA, SMK, and MA. SMA is a high-school implemented nationally standardized curriculum, SMK is a vocational high school, and the MA refers to an Islamic-based-high-school. The participants of this study were high-school students whose ages ranged in between 14 to 19 years old registered in the selected (SMA/SMK/MA) in the City of Malang.

The psychological distress data were calculated by using Hopkin Symptoms Check-List 25 (HSCL-25). The HSCL-25 structured to measure anxiety (10 items) and depression (15 items) had been experienced for the past a week. Each item was assessed through 4 points of Likert scale ranging from 1 (not influenced at all) to 4 (highly influenced) (Kaaya et al., 2002; Svensson, Nygård, Sørensen, & Sandanger, 2009). Based on the calculation of the average score from 25 items and the cut-off for the 'case' are 1.75 and the results are suitable for the Asian population such as Indonesia (Thapa & Hauff, 2005; Turnip & Hauff, 2007). The score of ≥ 1.75 correspond shows a higher level of psychological distress where <1.75 correspond to a lower level of psychological distress. The Cronbach's alpha (α) of HSCL-25 in this study is 0.94.

This study obtained ethical clearance from the Faculty of Psychology at the Universitas Muhammadiyah Malang. There were nine high-schools randomly selected to participate in this study consisted of three SMA, four SMK, and two MA. The researchers collected the data in a class-based, where the researchers gave a brief explanation of the research to the participants and a password allowed the participants to access the online questionnaire. Each participant was given a written informed consent before they continued to fill in the online questionnaire. The students who participated in this study received a small sign of appreciation, so did the selected schools. In total, there were 515 students participated in this study.

The data were analyzed by using SPSS for Windows version 22.0. First, descriptive statistics were computed for the psychological distress level, age, and gender to verify missing data and violated scores. There were no violated scores identified, but five missing data were discovered. In total, there were five participants with the identified missing data deleted from the analysis. Second, a chi-square test was employed to calculate the prevalence and the risk estimate of psychological distress level concerning to gender.

Result

Results of this study are shown through Table 1 and Table 2.

Table 1. Description of samples by age and psychological distress level based on gender

Description	Male N = 184 (35.7%)	Female N = 331 (64.3%)	p
Age			
14 - 16	155 (30.1)	269 (52.2)	0.397
17 - 19	29 (5.6)	62 (12.1)	
Psychological distress*	103 (20)	138 (26.8)	0.002
Low level (<1.75)	81 (15.7)	193 (37.5)	
High level (≥ 1.75)			

*p<0.05. **p<0.01.

As described in Table 1, the majority age of the samples are in between 14 – 16 years old. Significantly, more female adolescents have been reported to obtain a high psychological distress level (37.5%) compare to their male counterparts (15.7%; p<0.05). Therefore, the prevalence of psychological distress among adolescents in Malang is 53.2%.

Table 2. Risk estimate of psychological distress (≥ 1.75) based on gender

Description	Value	CI 95%
The risk ratio of the psychological distress case	0.813	0.71 – 0.93

Table 2 shows that the risk of female adolescent to suffer high psychological distress level is 0.81 (95% CI=0.71 – 0.93; p=0.002) higher compared to their male counterparts.

Discussion

Gender differences are the profound findings in this study. Female adolescents are at higher risk of experiencing a higher intensity of psychological distress than male adolescents, and they are more likely to experience high psychological distress level. This finding is analogous with previous research carried out among adolescent's population attending school in Norway. It is identified that psychological distress is higher among female school students (Dalen, 2014).

Moreover, the prevalence of psychological distress among adolescents in Malang is counted at 53.2%. The distressing number may be due to various social changes occurred in the 21st century that cause detrimental effects on adolescent's mental health status (Bor, Dean, Najman, & Hayatbakhsh, 2014). In recent years, there are many countries which experience an affluence and worsening income inequality (Organisation for Economic Cooperation and Development, 2011), the high disparity of economic status associated with the development of mental health problems (Langton, Collishaw, Goodman, Pickles, & Maughan, 2011; Luthar & Barkin, 2012). The changing family environment may worsen adolescent's mental health status as well, such as parental mental health problems (Fatori, Bordin, Curto, & de Paula, 2013; Schepman et al., 2011) and parenting style (Myklestad, Røysamb, & Tambs, 2012). Furthermore, the rapid development of technology and increasing digital exposure may be distinct factors in current time, including increasing in screen-time, social media, and internet connectivity that are associated to the heightened mental health problems among adolescents (Carli et al., 2014; Hoare, Milton, Foster, & Allender, 2016; O'Keeffe & Clarke-Pearson, 2011; Primack, Swanier, Georgioupolos, Land, & Fine, 2009).

Largely, this study provides an estimation of the mental health problems among adolescents and shows the magnitude of the problems served as a forewarning of what we may face in the future. Moreover, this study has

shown that the importance of promoting adolescent's mental health to prevent further development of mental health problems, notably for female adolescents are at higher risk compared to male adolescents. Fostering a gender-sensitive of mental health promotion programs for adolescents is essential as an investment of better mental health status and longevity of the youth generation.

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