THE INFLUENCE OF LIFE STRESSORS ON MENTAL HEALTH DISORDERS IN ADOLESCENTS

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ABSTRACT

Based on the 2018 mental health data for adolescents in Indonesia, it was found that 9.8% experienced emotional mental disorders with symptoms of depression and anxiety among those aged >15 years. Adolescent mental health significantly influences their individual futures and has broader implications for families and communities. Emotional issues in adolescents can serve as life stressors, which, in turn, become a risk factor affecting their mental health. This research aims to investigate the influence of life stressors on the mental health of adolescents. This study adopts a quantitative approach with an observational design. The population comprises adolescents in Tegal City, and data collection employs the Cluster Random Sampling technique. The sample size, determined using the Slovin formula with a 0.05 error level, is set at 510 individuals. Data are collected through a questionnaire distributed via Google Forms. The data analysis utilizes multiple linear regression analysis.The research findings indicate a significant influence of life stressors on Mental Health Disorders. It can be inferred that life stressors play a substantial role in mental health disorders among adolescents, highlighting them as risk factors for mental health issues in this demographic. The involvement of parents, teachers, community leaders, and the surrounding society is crucial in providing guidance and positive role models for adolescents.This study sheds light on the urgency of collective efforts in addressing life stressors and promoting mental well-being among adolescents, emphasizing the pivotal roles of key stakeholders in the community.

Keywords: adolescent; life stresors; mental health

INTRODUCTION

The WHO reports that 450 million people worldwide have mental disorders, of which 20% occur in the younger generation. (Michelle O'Reilly, 2015). It is estimated that 50% of all mental disorders occur by the age of 14 and 75% by the age of 18. (Keles et al., 2020) According to the 2017 Global Health Data Exchange survey data, 27.3 million people in Indonesia experience mental health problems. This means that one in ten people in the country has a mental health disorder. For adolescent mental health data in Indonesia alone in 2018, there was a 9.8% prevalence of mental emotional disorders with symptoms of depression and anxiety for adolescents aged > 15 years. When a teenager's mental health is depressed, signs can be seen such as lack of energy, decreased appetite, disturbed sleep patterns / difficulty sleeping, and also excessive worry. What can be done to overcome adolescent mental health by providing understanding to adolescents to be able to realize that their anxiety is a natural thing. Anxiety experienced by adolescents is a normal and healthy function that can make us alert to threats, and help us to take action to protect ourselves.

(UNICEF, 2020) Adolescents' mental health can affect their future as individuals and affect their families and communities. Therefore, it is a growing concern for both health institutions and academic researchers.

Based on the results of the national school-based health survey (junior and senior high school) conducted by the Indonesian Ministry of Health published in 2015, it is stated that there are ten behavioral factors that are at risk to adolescent health, one of which is disturbed mental and emotional health. From the three regions surveyed, namely Sumatra, Java and Bali, outside Java and Bali, the results showed that (39.7% of male students and 51.98% of female students) experienced loneliness, and (38% of male students, 46.14% of female students) experienced excessive anxiety or worry, (57.73% of male students and 66.82% of female students) experienced emotional disturbances and had excessive worry and even suicidal thoughts. (Dafnaz & Effendy, 2020) Mental and physical health stability affect each other. Mental health disorders are not just hereditary complaints. The demands of life that result in excessive stress will lead to poor mental health. (Fitri nuritasari, 2021)

Stress is prone to occur in adolescents due to various factors including the high pressure in the adaptation process, the desire to be accepted by the environment, the desire to be independent and the increasing need for access to technology and other needs. This will trigger emotional problems in adolescents. (Aziz et al., 2021) Emotional problems in adolescents can cause life stressors. Life stressors are one of the risk factors that can affect adolescent mental health. Adolescents who experience high life stressors, such as family conflict, academic pressure, or trauma, can have a higher risk of experiencing mental health problems in this study we want to find out how much influence life stressors have on mental health in adolescents. Based on this background, we are interested in conducting research on the influence of life stressors on mental health in adolescents. The purpose of this study was to determine the influence of stressors on mental health in adolescents in Tegal City.

METHOD
This type of research uses quantitative with an observational approach. The purpose of this study was to determine the effect of life stressors on mental health in adolescents. The population in this study were adolescents in Tegal City. The population in this study based on data from the Population and Civil Registration Office in Tegal City in 2022 was around 25,906 people. (Badan Pusat Statistik Kota Tegal, 2023) Respondents in this study are adolescents, the categories of which are early adolescents: having an age range between 10-14 years, middle adolescents: having an age range between 15-17 years, and late adolescents: having an age range between 18-21 years. (Berlinger, 2014) The sample in this study was adolescents in Tegal City, and data collection used Cluster Random Sampling technique. The number of samples in this study based on calculations with the Slovin formula with an error rate of 0.05, the sample used was 510 people. The data collection technique is by filling out a research questionnaire via google form by respondents, before which a validity test has been carried out to determine the feasibility of the items in a list (construct) of questions and reliability to see the consistency of an instrument. (Nursalam, 2020) Based on the results of the validity test, the test results with Pearson Correlation show that all statement items which are indicators of the independent variable and the dependent variable can be declared valid because they have a calculated r value of more than r table (0.361) while the reliability test shows that the Cronbach Alpha value of the Life Stressors variable (X1) is 0.702 So it can be concluded that all statements in the questionnaire from this stressor show reliable results because they have a Cronbach Alpha of more than 0.6. In this study, the data analysis used Multiple Linear Regression analysis test. Multiple linear regression test is to explain the

relationship of one independent variable / response (Y) with two or more independent variables / predictors (X1, X2, ... Xn). (Alene et al., 2018) The purpose of the multiple linear regression test is to predict the value of the independent variable / response (Y) if the values of the independent variables / predictors (X1, X2, ..., Xn) are known. Besides that, it is also to be able to know what is the direction of the relationship between the independent variable and the independent variables. (Yuliara, 2016)

RESULTS
Characteristics of Respondents
Respondents in this study amounted to 510 people consisting of adolescents in Tegal City with the characteristics of respondents in the following table 1.

Table 1.
Characteristics of Respondents

Variable	f	%
Age		
17	74	14,5
18	173	33,9
19	116	22,7
20	69	13,5
21	24	4,7
22	19	3,7
23	13	2,5
24	22	4,3
Total	510	100,0
Gender		
Female	377	73,9
Male	133	26,1
Total	510	100,0
Education		
SD	5	1,0
SMP	14	2,7
SMA	252	49,4
Sarjana	239	46,8
Total	510	100,0
Jobs		
Not Working	132	25,9
Student	248	48,6
Private Employee	92	18,0
Self - Employed	30	5,9
Civil Servant	8	1,6

Based on the research results in table 1, that the characteristics of respondents were mostly 18 years old as many as 173 (33.9%), the gender of respondents was mostly female as many as 377 (73.9%), and the education of respondents was mostly high school as many as 252 (49.4%), while based on work most of the respondents were students as many as 248 (48.6%).

Multiple linear regression analysis
From the regression equation above, it can be explained that. The constant value (a) = 0.442 means that it can be assumed that if the independent variable, namely Life Stressor, is constant or zero, then mental health disorders (Y) are equal to the constant, namely 0.442. While the Life Stressor Coefficient (X1) = 0.302 can be interpreted that if there is an increase in the Life Stressor variable, mental health disorders (Y) will increase by 0.302.

Table 2.
Multiple linear regression analysis

		Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	,442	,159		2,784	,006		
	Life_Stressor	,302	,079	,173	3,820	,000	,499	2,005

Partial Regression Coefficient Test (t test)
The t statistical test shows how much influence one independent variable individually explains the variation in the dependent variable.

Table 3.
Partial Regression Coefficient Test (t test)

		Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	Model	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	,442	,159		2,784	,006		
	Life_Stressor	,302	,079	,173	3,820	,000	,499	2,005

From the results of the Partial Regression Coefficient test (t test) states that the Life Stressor Variable sig value is 0.000, p < 0.05, meaning Ho is rejected and Ha is accepted. This shows that Life Stressor has an effect on Mental Health Disorders.

Simultaneous Regression Coefficient Test (F Test) and Determination Test (R2)
The F test is used to measure the feasibility of the regression model that has been created. Meanwhile, the coefficient of determination (R2) test is used to measure how far the ability of the independent variable to explain the variation in the dependent variable. (Danang sunyoto, 2013) From the results of the simultaneous regression coefficient test (f test) with the Anova test, it is known that the sig. value in the F test is 0.000. Because the sig value. 0.000 <0.05, it can be concluded that life stressors affect the dependent variable, namely Mental Health Disorders. Then the determination test (R^2) is carried out. The coefficient of determination (R^2) test is used to measure how far the ability of the independent variable to explain the variation in the dependent variable. The coefficient of determination is between zero and one. The results of the determination test (R^2) show the R square value of 0.485 or equal to 48.5%. This figure means that life stressors on mental health disorders are 48.5% and the remaining 51.5% is influenced by other factors.

DISCUSSION
From the results of the analysis using multiple linear regression, the constant value is 0.442 and the Life Stressor Coefficient (X1) = 0.302, it can be interpreted that if there is an increase in Life Stressors, mental health disorders (Y) will increase by 0.302. Likewise, the results of the Partial Regression Coefficient test (t test) state that Life Stressor sig value of 0.000, p < 0.05 indicates that Life Stressor affects Mental Health Disorders. It can be concluded by researchers that life stressors have a major influence on mental health disorders, meaning that life stressors are a risk factor for mental health in adolescents. The results of the simultaneous regression coefficient test (f test) with Anova show that life stressors affect Mental Health Disorders. While the R square value is 0.485 or equal to 48.5%. meaning that, life stressors on mental health disorders are 48.5% and the remaining 51.5% is influenced by other factors, this is in accordance with the results of research by Umjani 2022 which states that coping stress has a positive and significant effect on student mental health. The magnitude of the influence of coping stress on mental health reaches 47.9% while the remaining 52.1% is influenced by

other variables. (Umjani et al., 2022). The results of another study conducted in Pekanbaru showed that the majority of adolescents experienced abnormal mental emotional conditions as much as 36.1%, and 35.2% of adolescents with normal mental emotional conditions, and 28.7% of adolescents with borderline mental emotional conditions, this is very dangerous for the mental health of these adolescents and can have an impact on adolescent development and adolescent daily life. (Malfasari et al., 2020) Lack of being able to socialize with their peers either in the home environment or at school, causing the individual to be less accepted among their peers and limiting the individual to interact actively in peer groups, peers are very influential on the mental emotions of adolescents because in this phase of development adolescents at this age consider relationships with peers very important, if relationships with peers are disrupted it will result in disruption of the daily activities of adolescents. (Istiqomah, 2017) Persistent patterns of good and changing mental health are more common than adult poor mental health (Menassa et al., 2023).

Other studies have shown that risk factors for life stressors can influence mental health disorders in adolescents. These risk factors can be individualized, contextualized (environmental influences), or generated through interactions between individuals and their environment. Risk factors coupled with psychosocial vulnerability and resilience in an adolescent can lead to typical emotional and behavioral disorders in adolescents. These risk factors can be individual factors, such as genetic/constitutional factors and lack of social skills, and psychosocial factors, such as family disharmony. (Landolt et al., 2023) The results of research conducted by ningrum 2023 state that there is a relationship between parenting patterns and mental health in adolescents. Parenting is a positive/negative interaction between parents and children which includes maintenance, guidance, education, and training of mental attitudes of independence, responsibility and discipline to achieve the process of becoming an adult. parenting is defined as a form of parental attention to children to develop, meaning that it is a process to establish a relationship between parents and children so that there will be a sense of trust, a sense of love and affection that is woven continuously on an ongoing basis (Ningrum, 2023).

Other studies suggest economic changes and educational expansion lead to more stress in schools. Meanwhile, educational stressors lead to mental health problems. Studies using survey data of adolescents in 33 European countries over 12 years show that school stress increases with economic change. Economic change and educational expansion make stress more dangerous. (Högberg, 2021) Adolescence may be associated with stress-related psychological dysfunction. The adolescent brain may be particularly sensitive to stress. Stress results in changes in the structure of the adolescent brain. Understanding these structural changes may shed light on adolescent vulnerability. (Romeo, 2017). Life stressors can trigger mental health disorders in adolescents. When faced with stress, the body releases the hormones adrenaline and cortisol, which can contribute to mental health disorders. In addition, the social environment also affects adolescents' mental health. The dynamic life of humans can lead to various problems and solutions for human life, so the social environment can leave a great impact on adolescent mental health (June Grube, 2021).

Adolescents who experience high life stressors, such as family conflict, academic pressure, or trauma, may have a higher risk of experiencing mental health problems. Mental health is very important for everyone because it is related to behavior at every stage of life. If a person's mental health is disturbed, there will be a lot of unwanted things that happen that we very often encounter and even feel is stress. Stress is a condition where we feel pressured by

something, but we can still solve it well. But if the problem or pressure is too heavy, we can be sure that the person who feels it will experience depression. (Rahmayanthi et al., 2021)

Stressors predict changes in the level of psychopathology symptoms in children and adolescents over time. Other studies have also shown that psychopathology symptoms predict changes in stress levels over time. The implication of these findings is that there is now conclusive evidence of the importance of stressors in the development of child and adolescent psychopathology. (Kathryn E. Grant, Bruce E. Compas, Audrey E. Thurm, 2010) Stress is prone to occur in adolescents due to various factors including the high pressure in the adaptation process, the desire to be accepted by the environment, the desire to be independent and the increasing need for access to technology and other needs. This will trigger emotional problems in adolescents. (Gintari et al., 2023) While the results of Rhaina's research state that mental disorders such as stress and depression experienced by adolescents that occur on a prolonged basis can affect physical health, especially on blood pressure which results in hypertension (Yasin et al., 2022). Based on the results of this study, adolescent mental health is important in determining the quality of the nation. To create quality adolescents, it is necessary to take various concrete action efforts by preparing a strong and resistant young generation in facing various kinds of life challenges. In order for adolescence to be passed well, it is very important the role of parents, teachers, community leaders and the surrounding community in providing guidance and examples for adolescents.

CONCLUSION

Based on the results of the study, it shows that there is an influence of life stressors on mental health in adolescents. The R square value is obtained 0.485 or 48.5%. This shows that, life stressors on mental health disorders are 48.5%, meaning that life stressors have a major influence on mental health disorders, and life stressors are a risk factor for mental health in adolescents. It is suggested that it is important to support the mental and physical well-being of adolescents. Government and educational institutions have an important role in creating an environment that supports effective learning, reduces academic stress and improves adolescent health well-being.

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