



Original Research

ADAPTATION TRAINING FOR MENTAL RESILIENCE OF ADOLESCENTS USING THE ROY ADAPTATION MODEL APPROACH

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ABSTRACT

Introduction: Adolescence is a critical period for improving mental health because more than half of mental health problems begin at this stage, and many of them persist into adulthood. This situation is further exacerbated by the fact that many of these adolescents do not receive the specialized care they need. This research aims to determine the effect of adaptation training on increasing mental health resilience in adolescents using the Roy adaptation model approach.

Method: The design of this research is quasi-experimental with a pre-test-post-test control group design. The research was conducted on a group of adolescents with a sample size of 100 respondents divided into two groups, namely the experimental group with 50 respondents and the control group with 50 respondents using a purposive sampling technique. The intervention given to adolescents is adaptation training which is given for 6 weeks consisting of 6 activity sessions. The instrument used in this research is the Adolescent Resilience Questionnaire (ARQ) measuring adolescent resilience and their capacity to achieve positive outcomes despite stressors). Test analysis to determine the differences before and after treatment using the Wilcoxon Paired test calculation and to test the differences between two paired samples, the data scale form used is an ordinal scale, while for the difference test the Mann Whitney test is used.

Results: The results of the Mann-Whitney test show that there is a difference between the experimental and control groups with a p-value of 0.000, so it can be concluded that adaptation training can increase the mental resilience of adolescents.

Conclusions: Adaptation training can increase the mental resilience of adolescents and provide benefits for schools for the development of promotion and prevention of adolescent mental problems.

Keyword: adaptation; adolescents; mental health; resilience

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1. INTRODUCTION

Mental health according to law number 18 of 2014 mental health is a condition where an individual can develop physically, mentally, spiritually, and socially so that the individual is aware of his abilities, can overcome pressure, can work productively, and can contribute to his community (Ruskandi, 2021). This also means that mental health has an influence on a person's physical condition and will also interfere with productivity. Adolescence is an important period for developing social and emotional habits that are important for mental well-being. Mental health is

very important to support the productivity and quality of physical health. Mental or psychiatric disorders can be experienced by adolescents (Kufiyak, 2015).

The prevalence of emotional mental disorders as indicated by symptoms of depression and anxiety for those aged 15 years overreaches around 6% of Indonesia's population or the equivalent of 11 million people. Adolescents (15-24 years) have a depression percentage of 6.2%. Severe depression will result in a tendency to harm oneself (self-harm) and even commit suicide. As many as 80 - 90% of suicide cases are the result of depression and anxiety. Suicide cases

in Indonesia can reach 10,000 or the equivalent of every hour there is a suicide case. According to sociologists, 4.2% of students in Indonesia have thought about suicide. Among students, 6.9% had the intention to commit suicide, while another 3% had attempted suicide. Depression in adolescents can be caused by several things such as pressure in the academic field, bullying, family factors, and economic problems (Kementerian Kesehatan, 2018). Based on the results of research in 2022, the level of adolescent resilience is in the low resilience category, namely 48% and the level of adaptation to stress is low, 56%.

Adolescence is one of the best times in life. This is the time of peak health and strength. On the other hand, during this period of life, there is the greatest tendency to engage in risky behavior that endangers the health and well-being of adolescents (Ostaszewski, 2020). This is also a time when young people become more vulnerable to mental problems including depression, suicidal behavior, eating disorders, drug use, and other addictive behaviors. The success or failure of adolescent development depends on the risks and protection they face, so the concept of resilience in adolescents is very important to develop (Mesman et al., 2021). Resilience is defined as a multisystemic dynamic process of successful adaptation or recovery in the context of risk or threat. The main components of resilience are risks or threats to people or systems, for example, abuse, natural disasters, mental health problems, and the criteria used to evaluate successful adaptation or recovery (Ostaszewski, 2020).

Resilience theory provides a framework for understanding why some adolescents exposed to a range of risks do not develop negative health or social outcomes and, contrary to expectations, grow up successfully (Höltge et al., 2021). The concept of resilience includes compensatory and protective models to explain how positive factors operate to help adolescents cope with risks. Compensation models indicate "positive factors" that offset the negative effects of risk factors. Meanwhile, the protective factor model describes "protective factors" that moderate the relationship between risk factors and negative outcomes. These two types of factors are known in the literature under the two terms "protective factors" or "promotive factors" (Zimmerman et al., 2013).

Several resilience concepts are particularly valuable in the context of adolescent mental health and well-being. That includes a supportive school environment, effective parent-child communication, and meaningful extracurricular activities. Adolescents have the potential to control their development and actively influence the adaptation process because of their extraordinary plasticity (Mesman et al., 2021). Therefore, research on adaptation training with the Roy adaptation model approach in adolescents contributes to adolescent resilience so it becomes the topic of this research.

2. MATERIALS AND METHODS

This research is a quasi-experimental research design using a pre-test-post-test control group design. The research was conducted on a group of adolescents at MAN 2 Jember with a total sample of 100 respondents divided into two groups, namely the experimental group of 50 respondents and the control group of 50 respondents using a purposive sampling technique.

The intervention given to the youth was adaptation training which was given for 6 weeks consisting of 6 activity sessions (Alimohammadi et al., 2018). Before the intervention was given to each group, researchers carried out mental resilience measurement activities to determine the picture of adolescents' mental resilience before the action. The first session in the Adaptation training is to explain the concepts of mental health and resilience. The second session discusses how to improve coping. The third session focuses on how to adapt to the environment. In the fourth session, strategies to achieve adaptation in different modes. The fifth session is evaluation and future follow-up. The time required for each session is 40-50 minutes for each meeting. After the entire training is carried out, researchers will measure the adolescent's mental resilience again to find out the extent of the influence of the training on the teenagers' mental resilience.

The instrument used in this study was the Adolescent Resilience Questionnaire (ARQ) measuring the resilience of adolescents and their capacity to achieve positive results despite stressors (Gartland et al., 2011). It includes measures of resilience within the self and the family, school, peer, and community domains. 12 sub-scores can be grouped into the domains of self, family, peers, school, and community, including negative cognition (self), emotional insight (self), empathy (myself), social skills (myself), beliefs (myself, self), connectedness (family), availability (family), connectedness (peers), availability (peers), a supportive school environment (school), connectedness (school), and connectedness (community) (Gartland et al., 2011).

The data obtained from the measurement results were properly processed using the statistical package for the social sciences (SPSS) version 21 which was then analyzed to determine differences in mental health resilience before and after being given adaptation training activities using the Roy adaptation model approach and knowing comparisons between groups. experimental and control groups. The data were then analyzed to find out the differences before and after treatment through the calculation of the Wilcoxon Paired test which is a nonparametric statistical tool used to test the differences between two paired samples. The next test used to determine the comparison between the two groups is the Mann-Whitney test. This research has received ethical approval from the ethics commission with Ethics Number: 087/KEPK/UDS/III/2023.

3. METHODS

The type of research in this study was pre-experimental with a pre-test-post-test design. The research was conducted on adolescents in Islamic boarding schools in Jember Regency with a sample size of 80 respondents. The inclusion criteria in this study were adolescents who lived in Islamic boarding schools, aged 13 to 14 years, and continued schooling in the Islamic boarding school's environment, while the exclusion criteria in this study were adolescents who had limitations in communicating and adolescents who only learn informal education. Sampling in this study used a purposive sampling technique where the researcher selected samples based on the inclusion criteria and the criteria of the researcher.

The intervention in this study was assertive training which was given for a month at a boarding school. Assertive training activities are given in 4 sessions and each session is given every week with a duration of 60-80 minutes. The activities for each session are session 1, adolescents are trained to be able to recognize themselves, change thoughts and feelings, and practice assertive behavior, Session 2 adolescents are trained to express their wants and needs and how to fulfill them, session 3 adolescents are trained to establish social relationships in meeting their needs and Session 4 adolescents trained to maintain assertive behavior change in a variety of situations. Assertive training aims to enable adolescents to be able to behave assertively in expressing their anger. Assertive training is a nursing modality therapy in the form of behavioral therapy, where adolescents will learn to express angry feelings appropriately or assertively so that they can relate to other people, be able to state what they want, what they like, what they want to do, and the ability to make someone feel comfortable talking about themselves.

The measuring instrument used for assertive behavior is using The Assertiveness Inventory questionnaire which has been modified into Indonesian and then tested for validity and reliability first with results >0.789 . The data that has been obtained from the measurement results are processed properly using the statistical package for the Social Sciences (SPSS) version 21 program. The data that has been entered into the SPSS is then analyzed using the Wilcoxon Paired test where this test is used to determine differences in the results of adolescent assertive levels before and after the assertive training activities. This research has obtained permission from the National Unity and Political Agency of Jember Regency with letter No. 072/955/415/2020.

4. RESULTS

Univariate analysis was carried out to obtain an overview of the distribution, frequency, and proportion of variables, namely demographic data and level of resilience in adolescents in both the

experimental and control groups. The results of research conducted on 100 respondents based on demographic data and levels of resilience in adolescents can be presented in Table 1-4. The calculation results show that of the 100 respondents in the experimental group, 40% of the respondents were 16 years old. Then 42% of respondents in the control group were 16 years old. The gender of the teenagers in this study shows that of the 100 respondents in the experimental and control groups, 50% of the respondents were female. Then 50% are men. Meanwhile, looking at where teenagers live shows that of the 100 respondents in the experimental group, 68% of respondents lived at home. Then 62% of respondents were in the control group (Table 1).

The calculation results show that of the 100 respondents in the experimental group before being given the intervention, 68% had negative resilience. Then 76% of respondents in the control group had negative resilience behavior (Table 2). The calculation results show that of the 100 respondents in the experimental group after being given the intervention, 86% had positive resilience. Then 66% of respondents in (the control group had negative resilience behavior Table 3).

Based on the Wilcoxon test, it shows that in the experimental group, there is an effect of adaptation training on increasing mental health resilience in adolescents using the Roy adaptation model approach with a P-value of 0.000. Meanwhile, the control group shows a p-value of 0.25, which indicates there is no change before and after the activity.

Based on the results of the Mann-Whitney test, there is a difference between the experimental group and the control group with a p-value of 0.000. This research concludes that there is an influence of adaptation training on the mental resilience of adolescents using Roy's adaptation theory approach (Table 4).

5. DISCUSSION

The results of this study explain that adaptation training with the Roy adaptation model approach is very effective in increasing adolescent mental resilience. The training given to adolescents was carried out in 5 sessions where the first session explained the concepts of mental health and resilience. The second session discusses how to improve coping. The third session focuses on how to adapt to the environment. In the fourth session, strategies for achieving adaptation in different modes. The fifth session is evaluation and future follow-up.

Various factors affect mental health in adolescents. The more risk factors adolescents face, the greater the potential impact on their mental health. Factors that may contribute to

Table 1 Results of Frequency Description of Demographic Data Based on Age in Adolescents

Age in Adolescence	Experimental Group		Control Group	
	Frequency	Percentage	Frequency	Percentage
15 years old	8	16.0	6	12.0
16 years old	20	40.0	21	42.0
17 years old	15	30.0	17	34.0
18 years old	7	14.0	6	12.0
Total	50	100.0	50	100.0

Age in Adolescence	Experimental Group		Control Group	
	Frequency	Percentage	Frequency	Percentage
Man	25	50.0	25	50.0
Woman	25	50.0	25	50.0
Total	50	100.0	50	100.0

Adolescents Residence	Experimental Group		Control Group	
	Frequency	Percentage	Frequency	Percentage
Stay at home	34	68.0	31	62.0
Stay at Kos	16	32.0	19	38.0
Total	50	100.0	50	100.0

Table 2 Data Frequency Description Results Based on Level of Resilience in Adolescents Before Intervention

Age in Adolescence	Experimental Group		Control Group	
	Frequency	Percentage	Frequency	Percentage
Positive Resilience	16	32.0	12	24.0
Negative Resilience	34	68.0	38	76.0
Total	50	100.0	50	100.0

Table 3 Results of Data Frequency Description Based on Level of Resilience in Adolescents After Intervention

Age in Adolescence	Experimental Group		Control Group	
	Frequency	Percentage	Frequency	Percentage
Positive Resilience	43	86.0	17	34.0
Negative Resilience	7	14.0	33	66.0
Total	50	100.0	50	100.0

Table 4 Results of the Wilcoxon Test of Adaptation Training on Increasing Mental Health Resilience in Adolescents Using the Roy Adaptation Model Approach.

Group	Z	Asymp. Sig. (2-tailed)
Experimental Group Wilcoxon Test	-5.196 ^b	.000
Control Group Wilcoxon Test	-2.236 ^b	.025
Uji Mann Whitney	-3.752	.000

stress during adolescence include exposure to adversity, pressure to conform to peers, and identity exploration. The influence of the media and gender norms can exacerbate the discrepancy between the realities of adolescents' lives and their perceptions or aspirations for the future. Other important determinants include quality of life for adolescents and relationships with peers. Violence (especially bullying at school), harsh parenting and severe social problems in the school environment are recognized as mental health risks (Bluhm et al., 2014).

Love and support as well as strong relationships with family and loved ones can have a direct and positive influence on mental health for adolescents. In fact, a good emotional connection can reduce the likelihood of adolescents experiencing mental health problems. Mental health promotion aims to promote positive mental health. The way that can be done is to improve psychological well-being, competence, human resilience, and create conditions and a supportive environment (World Health Organization, 2020). Mental health promotion can be done by collecting data

related to the incidence of these disorders so that people increase their awareness and gain knowledge regarding the problem (Rogers & Pilgrim, 2014).

Mental health in adolescents is a condition in which individuals have visible well-being themselves who can realize their potential, can cope with normal life pressures in various situations in life, can carry out productive and productive activities, and can contribute to the community (Rogers & Pilgrim, 2014). Mental health in adolescents is a state and process of being and being integrated and whole. The purpose of adaptation training conducted for school adolescents is to improve life processes to promote adaptation, with adaptation being a process and result of individual thoughts and feelings that use awareness and choice to create human and environmental integration (Roy, 2011).

The adaptation training model approach for adolescents in this study is to use the Roy adaptation approach. The royal adaptation approach is problem-solving in process and describes the approach in five stages, namely "1. Behavior and stimulation assessment, 2. Diagnosis, 3. Goal setting, 4. Planning, 5. Intervention and evaluation" (Roy, 2011). The main concepts of Roy's Adaptation Model include the individual as an adaptive system, the environment, health, and nursing goals. As an adaptive system, an individual is defined as a whole with parts that function as a whole for a purpose (Amidos, 2018). The environment is defined as all conditions, circumstances, and influences that surround and influence human development and behavior as an adaptive system with special consideration of human resources.

Roy's Adaptation Model defines innate and acquired coping processes as two sub-systems (Jennings, 2017). The regulatory subsystem consists of neurochemical and endocrine responses. Internal and external stimuli include social, physical, and psychological factors. The congenator subsystem is more related to attention, memory, learning, problem-solving, decision-making, excitement, and defense status (Alimohammadi et al., 2018). The four modes of adaptation defined in Roy's Adaptation Model are physiological mode, self-concept, role function, and interdependence. Nurses help meet individual needs in adaptation mode (Jennings, 2017).

Adaptation training for adolescents with the Roy adaptation approach is an intervention

method to increase mental resilience in adolescents where the resilience approach to prevention is a strength-based method that focuses on increasing the assets and resources possessed by adolescents. Resilience research on the compensatory and protective effects of ethnic identity, support, and prosocial engagement helps inform the development of after-school programs to prevent youth violence (Zimmerman et al., 2013). Resilience theory is a strengths-based conceptual framework that focuses on how promotive factors help disrupt the path from risk to negative outcomes (Sapienza & Masten, 2011). Resilience theory can also guide the development of prevention programs designed to enhance promotive factors that help youth cope with the devastating consequences of risk. In this research, researchers focus on promotive factors in the form of social support and prosocial involvement with adaptation training activities using the Roy adaptation approach as a form of increasing mental resilience in adolescents. The intervention strategies implemented in this study focus on resilience and translate into programs that help strengthen individual assets and contextual resources that help youth overcome adversity (Zimmerman, 2011).

6. CONCLUSION

The mental resilience approach with Roy's adaptation approach is strength-based prevention that focuses on utilizing the assets and resources possessed by adolescents. Adaptation training can increase the mental resilience of adolescents and provide benefits for schools for the development of promotion and prevention of adolescent mental problems."

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