

The Effect of Cognitive Behavior Therapy (CBT) to Reduce Generalized Anxiety Disorder (GAD) in Adolescents Based on Gender

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ABSTRACT

General Anxiety Disorder (GAD) can occur in adolescence which can cause uncontrolled feelings of worry about various situations or daily activities. This study aims to examine Generalized Anxiety Disorder (GAD) in reducing GAD based on gender. Respondents in this study were junior high school students at school X. A total of 23 respondents (10 males and 13 females) met the criteria. This study used the one group pretest-posttest design method. The instrument was the Hamilton Anxiety Rating Scale (HARS). The hypothesis test uses Paired Sample T-test with the result $p = 0.001$ ($p < 0.05$). This shows a significant decrease in anxiety in both male and female adolescents after being given CBT. Based on gender, female adolescents have greater anxiety than males. After being given CBT, both have the same decrease in anxiety.

Keywords: Cognitive Behavior Therapy, Anxiety, Adolescents, GAD

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INTRODUCTION

Adolescence is a transitional period in life. It is an important part of life in the developmental cycle. During adolescence, changes in the hormonal system occur so that a person experiences many changes in himself. According to DSM-5, anxiety is a feeling of excessive fear that occurs in a person which has an impact on the disruption of daily activities. The causes of anxiety disorders are quite varied. Anxiety disorders are divided into several types (phobia, social anxiety disorder, separation anxiety disorder, panic disorder, and generalized anxiety disorder) (Oktamarina et al., 2022). Based on survey published by the WHO (2017), as many as 3.6% or 264 million people worldwide suffered from anxiety disorders in 2015. As many as 23% or 60.5 million of them came from Southeast Asia.

According to Pasiak (2009), anxiety in women is found more than anxiety in men. Women tend to show higher anxiety disorders (Purwoningsih, 2018). In women there is twice the increase in the incidence of panic, GAD, and specific phobias compared to men. According to Papatungan (2019) anxiety that occurs in women is more common than men because women have greater feelings of fear. Women experience more anxiety disorders

and fewer men experience anxiety (WHO, 2021). According to Newman et al. (2020), the symptoms of anxiety disorder Generalized Anxiety Disorder which stems from somatic, emotional and cognitive habits. Interventions that can be given to individuals experiencing Generalized Anxiety Disorder, namely CBT, have been shown to reduce symptoms of GAD experienced by individuals.

General Anxiety Disorder is a type of anxiety disorder characterized by feelings of uncontrollable worry about various situations or daily activities (Suharnadi & Ardi 2024). General Anxiety Disorder is a common and disabling condition that is often undiagnosed and untreated, GAD can increase the risk of suicide (De Martini et al., 2019). Anxiety is often described as a feeling of uncertainty and can affect a person's psychological state, encompassing aspects of feelings, behaviors and physiological responses. Individuals experiencing anxiety may experience disturbances in personal balance, with symptoms such as tension, restlessness, discomfort, fear and sweating. A person experiencing anxiety tends to feel separated from a feeling of freedom (Hayat, 2014). According to Sigmund Freud (Andri & Dewi, 2007) it is divided into three, namely Reality Anxiety, Neurosis Anxiety and Moral Anxiety.

Cognitive Behavior Therapy is a psychotherapeutic approach that focuses on the relationship between thoughts, feelings, and behaviors. Cognitive Behavior Therapy aims to help individuals identify by changing negative thought patterns or cognitive distortions that can cause emotional and behavioral problems (Beck, 1967). The history of Cognitive Behavior Therapy dates back to the 1960s, developed by Aaron T. Beck, a psychiatrist who found that "many emotional disorders stem from false or irrational thinking" (Beck 2011). Explains that CBT is a combination of cognitive approaches using behavioral techniques to control anxiety and avoidance behavior that can lead to cognitive changes and behavioral changes. The selection of CBT Intervention techniques is an approach that provides more assistance to help problems related to thinking and inappropriate perspectives Rani, (2022).

Based on this, this research aims to determine the effect of CBT on GAD in adolescents in terms of gender. It is hoped that this research can provide valuable insight for mental health practitioners, educators and policy makers in creating an environment that supports mental health for generations.

METHOD

Respondent in this study were students at SMP X Banjarmasin City. The Hamilton Anxiety Rating Scale (HARS) test was used to determine students who had general anxiety disorder. The researcher applied the Non Probability Sampling method with a purposive sampling technique. It is selects a group of subjects based on certain characteristics that are considered relevant and related to the characteristics or characteristics of the population to be studied.

The anxiety level scale that will be used by the researcher is an adaptation scale from HARS (Hamilton Anxiety Rating Scale). This scale consists of items, each of which is determined by a series of aspects of anxiety. In this study, the validity test was measured

using Pearson's Product Moment. Questions on the questionnaire are considered valid if r value is $> r$ table. This can also be seen in the Sig. value < 0.05 , then there is a correlation between the variables that are connected. Conversely, if the Sig. value is > 0.05 , then there is no correlation. The r table value for 30 samples with 5% significance is 0.361 (Anggraini et al., 2022).

Aspects that meet the validity test and item discrimination test (feelings of anxiety, tension, fear, sleep disturbances, intellectual disorders, feelings of depression, somatic symptoms, sensory symptoms, cardiovascular symptoms, respiratory symptoms, gastrointestinal symptoms, autonomic symptoms, and behavioral symptoms)

Reliability calculations can be done if the questionnaire is valid when the validity test is carried out. This research instrument has a good level of reliability with an Alpha's Cronbach value (0.799). The Hamilton Anxiety Rating Scale (HARS) questionnaire is declared reliable with Alpha's Cronbach > 0.60 .

FINDING AND DISCUSSION

RESEARCH RESULT

Respondents in this study were 23 adolescent students Junior High School (SMP) in Banjarmasin City. Distribution of respondent characteristics based on gender consisted of 10 male adolescents (43.48%) and 13 female adolescents (56.52%). There was a decrease in anxiety scores in respondents after the posttest.

Table 1. Normality Shapiro-Wilk Test

	Statistik	df	Sig.
<i>Pretest</i>	0,965	10	0,846
<i>Posttest</i>	0,876	10	0,118

The normality assumption test uses the Shapiro-Wilk test which is used for testing on samples ≤ 50 . Data normally distributed in the normality test if $p > 0.05$. The distribution of pretest and posttest anxiety scores in all respondents is normal.

Table 2. Homogeneity Test

	Levene Statistic	df1	df2	Sig.
<i>Pretest</i>	0,607	1	21	0,445
<i>Posttest</i>	0,039	1	21	0,845

Homogeneity test to determine whether the data of the two groups have the same variance. Homogeneity test results are homogeneous, if the p value > 0.05 (Adriansyah et al., 2015). Based on table Homogeneity Test, the results of the pretest and posttest homogeneity test are $p = 0.445$, while the posttest $p = 0.845$ ($p > 0.05$), which means that the pretest and posttest data as a whole are homogeneous.

Table 3. Paired Sample T-test

Pretest-Posttest	t	df	Sig. (2-tailed)
Anxiety in adolescents	100,798	22	0,001
Anxiety in adolescent boys	6,530	9	0,001
Anxiety in adolescent girls	8,435	12	0,001

Researchers used the parametric Paired Sample T-test in hypothesis testing to test the anxiety experienced by adolescents before and after the CBT intervention. There is a significant decrease in anxiety ($p = 0.001$). This shows that the H_a hypothesis is accepted because the significance value is <0.05 .

DISCUSSION

The results showed there was a decrease in anxiety in all adolescents after being given CBT therapy with $p = 0.001$. Analysis based on gender, the male adolescent group ($p = 0.001$) and the female adolescent group ($p = 0.001$), there was a significant decrease after CBT therapy. This shows that the therapy provided can successfully reduce anxiety in both male and female adolescent groups. This is supported by descriptive data, where there was a decrease in anxiety scores after the intervention was given to 23 respondents. An approach through Cognitive Behavior Therapy (CBT) can help a person be more effective and rational when dealing with problems or situations that can cause fear and anxiety Tanaya & Yuniartika (2023). Cognitive behavior therapy is carried out so that a person can control the feelings of anxiety that exist in him, give positive thoughts to the environment, and reduce negative thoughts that exist in him (Fauziah & Kesumawati, 2021). Research by Grahatama et al. (2021), explained that the provision of CBT had a significant effect in reducing group anxiety effectively reducing student anxiety by 45%. This can also be seen from the Paired Sample Test output ($p = 0.001 <0.05$) which shows a difference in the degree of anxiety before and after the CBT intervention.

In terms of gender characteristics, in the results of this study, the average student is dominated by female students as many as 13 respondents while male students are 10 respondents. Based on the number of respondents, female adolescents experience more anxiety disorders. Based on the results of research by Beck & Steer (1993), early research on gender on anxiety levels showed that women with anxiety disorders had an average score that was four points higher than men who experienced anxiety disorders. The reason women are higher than men is because women tend to have concerns about the situation (Rinaldi & Yuniasanti, 2020). In a study conducted by Erawean (2013), it was found that women (76.5%) experienced more anxiety than men (60.0%). The results of paired T-test research obtained p value 0.001 (<0.05) which means there is an effect of cognitive behavioral therapy on anxiety levels. The mean in this study decreased by 3.50 where the pretest results showed an average of 15.08 while the posttest results showed a mean of 11.58.

CONCLUSION

Adolescents who have Generalized Anxiety Disorder disorder are given Cognitive Behavioral Therapy intervention for female and male adolescents in SMP X in Banjarmasin city. Cognitive Behavioral Therapy (CBT) is able to reduce having Generalized Anxiety Disorder (GAD) in adolescents. Cognitive Behavioral Therapy (CBT) is able to reduce Generalized Anxiety Disorder (GAD) in male adolescent groups and female adolescent groups.

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