

RESILIENCE AS A PREDICTOR OF TRAIT ANXIETY IN LATE ADOLESCENTS WITH CHILDHOOD TRAUMA

Naftali Keisya¹, & Naomi Soetikno^{2*}

¹Faculty of Psychology, Tarumanagara University, Jakarta

²Faculty of Psychology, Tarumanagara University, Jakarta

Email: naomis@fpsi.untar.ac.id

*Corresponding author

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ABSTRACT

Childhood trauma experiences can produce negative contributions to mental health such as anxiety, which can develop into trait anxiety. The increase in trait anxiety can be reduced by the presence of resilience in a person. This study aims to determine the effect of resilience as a predictor of trait anxiety in late adolescents with childhood trauma. This study involved 158 late adolescents with childhood trauma, consisting of 111 girls and 47 boys with the purposive sampling method. The measuring instrument used in this study is the Indonesian translation of the Childhood Trauma Questionnaire-Short Form (CTQ-SF) for measuring childhood trauma, The Connor-Davidson Resilience Scale (CD-RISC) for measuring resilience, and the State-Trait Anxiety Inventory Form Y-2 (STAI Y-2) for measuring trait anxiety. Simple linear regression was used to analyze the data and obtained a significant result ($p = 0,001 < 0,05$, $t = -5,081$). The result of the study is resilience can predict the emergence of trait anxiety in late adolescents with childhood trauma, which indicates that the higher the level of resilience in a person, the lower the level of trait anxiety that exists, and vice versa.

Keywords: Resilience, trait anxiety, childhood trauma, late adolescents.

1. PREFACE

Childhood trauma happens more than it seems. At least 1 of 7 children experience violence and/or neglect [1]. American Psychological Association [2] in 2012 describing trauma as an emotional response to a frightening or dangerous event experienced and has a long-term negative effect on a person's physical or mental health. Meanwhile, childhood trauma is a form of trauma that arises and is experienced by someone in childhood. The impact of childhood trauma is far-reaching and long-lasting, with the effect lasting for more than 20 years on functional adults directly on mental health status and development in childhood [3]. Childhood trauma generally arises as a result of experiencing difficulties in childhood. When a child experiences difficulties in their childhood, they will show difficulties and stress due to the instability that occurs, which means they do not feel the security with their family that allows them to build strong and secure relationships later in life. If they cannot face the difficulties or adapt to it, they will experience trauma as a form of emotional response and result of the event. The impact of childhood trauma can be felt in the future, especially when entering adolescence. Several studies have shown that childhood trauma is associated with negative future life events [4–5]. Childhood trauma makes a negative contribution that appears in the form of an increase in mental health outcomes that harm individuals. The increase of developing panic disorder, anxiety symptoms or anxiety disorders, depressive symptoms, and suicidal behaviour, including suicidal planning and attempted suicide [6–8] is the conclusive evidence of the negative contribution of childhood trauma to a person's mental health in future lives.

The symptoms of anxiety felt by a person can develop into trait anxiety if a person cannot handle their anxiety well, so that they often experience state anxiety and have a general view of the world as something that can be threatening and dangerous [9]. Anxiety can also develop into trait anxiety due to the negative contribution of childhood trauma as traumatic events in childhood will affect a person's body and brain or mind in responding to real or perceived threats [10]. However, the impact of anxiety felt can be reduced with a thing inside a person called resilience. Resilience is a person's ability to rise and adapt when faced with difficulties or critical situations, trauma, and significant sources of stress that can determine how a person responds to traumatic events experienced [11]. Several studies show that resilience has a significant negative relationship with anxiety. The higher the level of resilience a person has, the lower the level of anxiety experienced. Conversely, the lower the level of resilience a person has, the higher the level of anxiety experienced [12–13].

Although many studies have shown a relationship between resilience and anxiety, or how resilience can predict anxiety, few studies examine the relationship or the effect of resilience to trait anxiety. In addition, based on previous research conducted by Reiser et al. [14] in 2014 and Huh et al. [15] in 2017, it was found that there is still little research showing that childhood trauma can increase trait anxiety in a person. Therefore, the researcher wanted to find out more about two problems: (1) How resilience can predict the emergence of trait anxiety in late teens with childhood trauma and how; and (2) How childhood trauma can increase trait anxiety. The researcher believes this study will be a new finding because there were no previous studies directly showing resilience can predict the emergence of trait anxiety.

Anxiety and Trait Anxiety

Spielberger [16] in 1983 divides anxiety into two dimensions. That is state anxiety and trait anxiety. These two dimensions can be measured using the respective self-report scales in STAI, namely STAI-S (STAI State Scale) and STAI-T (STAI Trait Scale), as has been done by several previous studies [17–18]. State anxiety is a temporary change in the emotional state of being anxious when receiving a stimulus that is considered harmful with the characteristics of fear, anxiety, discomfort, and an increase in heart rate. State anxiety can be experienced by everyone and is different for each individual, depending on the duration of its occurrence, frequency, and severity. State anxiety will pass when the existing threat has disappeared [10]. Based on the explanation above, we can conclude that state anxiety is the same as anxiety in general. Meanwhile, trait anxiety is anxiety that relatively persistent that makes a person judge an existing stimulus as something more dangerous and threatening. [19].

As explained above [9–10], state anxiety can develop into trait anxiety due to the increasing frequency of state anxiety and the negative contribution of childhood trauma as the cause of anxiety is often associated with childhood trauma [6–7], [10], [14–15], [20]. Traumatic events in childhood will affect a person's body and brain or mind in responding to real or perceived threats [10]. It can be proved by research reports by Reiser et al. [14] that someone who experiences traumatic events, especially difficulties in life in childhood, such as physical abuse and sexual abuse, will have increased trait anxiety as a college student. Other study by Huh et al. [15] have also suggested that trait anxiety will be significantly higher in someone with a history of childhood emotional abuse compared to other types of childhood trauma. If the anxiety experienced is not treated, a person will have difficulty to carrying out daily tasks or schedules and the release of more stress hormones, resulting in increased body weight, cognitive decline,

immune system deficiencies, cholesterol, increased risk of heart disease, dementia, depression, insomnia, and an increased risk of other mental illnesses [21–22].

Childhood Trauma, Trait Anxiety, and Adolescents

A person with trait anxiety can be seen by their showing anxious behaviour. The phenomenon of anxious behaviour as a result of negative contributions that arise from childhood trauma can be seen clearly as a symptom of anxiety experienced by late teens in the form of oral behaviour that they do, such as biting nails, biting lips, or chewing non-food objects, which is often founded in someone in their late teens as a habit that aims to reduce the anxiety experienced [23–25]. This behaviour of biting nails or chewing non-food objects usually begins in childhood and will increase in adolescence [26]. This can be seen clearly in several world celebrities who have developed these habits from a young age until now, such as Britney Spears and D.O from the EXO group with the habit of biting their nails, Halle Berry and Krystal from the f(x) group with the habit of biting their lips, and Baekhyun from the EXO group and Taeyeon from the Girls Generation group with a habit of biting their fingers [27–30]. In addition, other anxious behaviours that may be experienced by adolescents are persistent headaches or stomach pains, shortness of breath, gastrointestinal problems (such as nausea or vomiting), irritability or restlessness, lack of sleep or frequent nightmares, unable to sit up silently and moving frequently, tantrums frequently, spends more time alone and avoids social activities, discusses fears and worries over and over, and declines in educational performance such as skipping class, dropping grades, and/or being afraid to speak or ask questions in class [31].

Based on the Adverse Childhood Trauma (ACE) study conducted by the Center for Disease Control [32] in 1997, the experiences of childhood difficulties include physical abuse, emotional abuse, sexual abuse, physical neglect, emotional neglect, mental illness, household violence, and substance abuse. In the data recorded by the Ministry of Women's Empowerment and Child Protection of Indonesia (Kemen PPPA) in the Women and Children Information System or known as Simfoni PPA [33] from January 1 to July 23 2021, there were around 5,463 cases of violence against children with the highest total age of victims in Indonesia ages 13 to 17 years with a total of 3,122 cases. This data on violence against children shows a significant increase of 39.3% with the number of new cases, as many as 2,149 cases in just 44 days, starting from January 1 to June 9, 2021, in the Simfoni PPA data. These data indicate that the risk factors for the emergence of childhood trauma as a result of experiencing difficulties are highest at the age of teenagers of age 13 to 17 years old. According to Hurlock [34], adolescents are somebody in the transition process from childhood to adulthood, which divided into early adolescents (12 to 15 years old), middle adolescents (15 to 18 years old), and late adolescents (18 to 21 years old). It is believed

According to Erik Erikson in Papalia & Martorell [35] about his theory of the stages of human psychosocial development, a person will enter the 5th stage of psychosocial development in adolescence, namely Identity versus Role Confusion. At this stage, adolescents will begin to search for their identity, explore and conclude their identity, and also will face confusion about their identity and roles if they do not get the right encouragement and feel unsure of their beliefs and desires. Ghandour et al. [36] state that there are 10.5% of adolescents in the United States who are diagnosed with anxiety with a ratio that is twice as large as children aged 5-11 years old. So, adolescents are estimated to be one of the age groups with the most occurrences of anxiety

[37]. It can be explained through attachment theory and stages of psychosocial development. Based on the attachment theory proposed by Mary Ainsworth et al. [38–39] in 1971 and 1978, a child will develop an attachment to caregivers in their childhood. A person with childhood trauma is more likely to develop an insecure attachment that makes them vulnerable to anxiety [20]. Then, according to the stages of psychosocial development, a person in adolescence will experience more challenges in exploring and inferring self-identity and also begins to increase independence oneself as a transition process from childhood to adulthood with even greater demands and challenges. It may also be the cause of late adolescents aged 18 to 21 years old, especially in freshmen and senior year, reporting higher levels of anxiety than early adolescents [40], with the prevalence of women having up to two times higher likelihood of experiencing anxiety compared to men [37], [41].

Resilience and Trait Anxiety

Besides research that states that someone who has experienced childhood trauma shows negative outcomes in the form of difficulties that they have experienced, either through life events or mental health, such as anxiety, several well-known famous figures show the opposite. Oprah Winfrey, who is known as a celebrity and entrepreneur in the United States, experienced trauma in her childhood, that is, physical and sexual abuse from the age of 9 to 14 years old by her relatives. However, Oprah proved herself capable of facing all the difficulties she experienced and achieving success in her adult life [42]. Another famous figure is Nicki Minaj, who experienced physical abuse and domestic violence during her childhood and managed to face the trauma and achieve a successful life as a celebrity in her adult life [43]. The two figures can also point out that not everyone with childhood trauma will experience the negative impacts that exposure to the traumatic event has produced. There are also survivors of childhood trauma who can re-adapt in the face of traumatic events experienced due to a source of strength in the individual called resilience.

Resilience is a person's ability to rise and adapt when faced with difficulties or critical situations, trauma, and significant sources of stress that can determine how a person responds to traumatic events experienced [2], [11]. Resilience can also reduce the negative outcomes of a child's trauma exposure or even prevent a child from experiencing traumatic experiences in childhood, regardless of the significant risk factors they face [44]. Resilience can act as a protective factor that shows a protective effect on mental illness [13] [21], and significantly predicts a person's mental health status [40], which is the more resilient someone, the better their mental health is [13]. In addition, research by Setiawati et al. [13] shows a high negative correlation between resilience, state anxiety, and trait anxiety. This research indicates a significant negative relationship between resilience and the two dimensions of anxiety, regardless of the difference in anxiety levels based on the two dimensions in the study, namely state anxiety. (33%) and trait anxiety (26.9%).

2. RESEARCH METHOD

Participants in this study were male or female individuals with a participant age range ranging from 18 to 21 years old who had a traumatic experience in childhood, obtained from the Childhood Trauma Questionnaire-Short Form (CTQ-SF) score. The purposive sampling technique was conducted by distributing an online questionnaire link to prospective participants

aged 18 to 21 years old with childhood trauma who agreed to be participants in this study. Then, the researcher will re-screen all of the questionnaire results to ensure that all participants meet the criteria, that is, having childhood trauma through CTQ-SF. Data analysis was performed by using simple linear regression technique to determine the direction and magnitude of the relationship between resilience and trait anxiety.

The Connor-Davidson Resilience Scale (CD-RISC) was used to measure the resilience variable. The reliability test of CD-RISC yielded a Cronbach's Alpha value of 0,947. The Connor-Davidson Resilience Scale (CD-RISC) consists of 25 items and is a unidimensional instrument. Connor & Davidson (2003) suggests that there are 5 aspects of assessment in CD-RISC, namely: (a) personal competence, high standards, and tenacity; (b) trust in one's instincts, tolerance of negative affect, and strengthening effects of stress; (c) positive acceptance of change, and secure relationship; (d) control; and (e) spiritual influences.

The State-Trait Anxiety Inventory Y-2 Form (STAI Y-2 Form) was used to measure the trait anxiety variable. The reliability test of STAI Y-2 Form yielded a Cronbach's Alpha value of 0,894. In this study, the researcher will only use the Trait Anxiety Scale (Form Y-2), which is 20 items that measure trait anxiety in participants.

Childhood Trauma Questionnaire-Short Form (CTQ-SF) was used to measure the childhood trauma variable. The reliability test of CTQ-SF yielded a Cronbach's Alpha value of 0,927. The CTQ-SF consists of 28 statement items that measure five main dimensions of childhood trauma (Bernstein & Fink, 1998), namely: (a) physical abuse; (b) emotional abuse; (c) sexual abuse; (d) physical neglect; and (e) emotional neglect. In scoring, participants will be judged to have no childhood trauma (none), have low childhood trauma (low), moderate childhood trauma (moderate), and severe childhood trauma (severe). The score results are different for each sub-category of childhood trauma based on existing scoring notes.

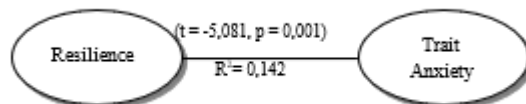
Based on all of the data obtained, the participants in this study amounted to 158 of 191 respondents. There was a deletion of 33 participants' data who did not meet the research criteria. There were 47 participants (29.7%) male and 111 participants (70.3%) female. Based on the age category, the participants in this study had an age range between 18-21 years old, with 7 participants (4.4%) aged 18 years old, 14 participants (8.9%) aged 19 years old, 27 participants (17.1%) aged 20 years, and 110 participants (69.6%) aged 21 years old. Based on monthly income/pocket money, there are 38 participants (24.1%) with income/pocket money of < IDR 500.000, 43 participants (27,2%) with income/pocket money of IDR 500.000 – 1.000.000, 38 participants (24,1%) with income/pocket money of IDR 1.000.000 – 2.000.000, and 39 participants (24,7%) with income/pocket money of > IDR 2.000.000. A total of 56 participants (35.4%) had working status, and 102 participants (64.6%) did not work. In addition, a total of 22 participants (13.9%) had only one type of childhood trauma, and a total of 136 people (86.1%) participants had > 1 childhood trauma. Based on the type of childhood trauma, there are 112 participants (21.4%) experienced emotional abuse, 90 participants (17.2%) experienced physical abuse, 110 participants (21%) experienced sexual abuse, 106 participants (20.3 %) experienced emotional neglect, and 105 participants (20.1%) experienced physical neglect.

3. RESULT AND DISCUSSION

Based on the results of the variable tests carried out, the model was statistically significant, $F = 25,817$, $p = 0,001$. This result shows that resilience has a significant effect on trait anxiety. Resilience explained 14.2% of the variance of trait anxiety, $R^2 = 0,142$. The results show that resilience ($t = -5,081$, $p = 0,001$) significantly predicts trait anxiety. It also shows that the test results are in accordance with the research hypothesis, so H_0 is rejected.

Figure 1.

Overview of Simple Linear Regression Test Results for Resilience with Trait Anxiety.



The result of studies conducted on late adolescents with childhood trauma regarding resilience and trait anxiety show that resilience negatively predicts the emergence of trait anxiety, which is a new finding because there were no previous studies directly showing that resilience can negatively predict the emergence of trait anxiety. Previous research has only shown a negative influence between resilience and anxiety in general, in which the higher the resilience a person has, the lower the level of anxiety, and vice versa [13], [35].

An additional analysis was conducted to further analyze the correlation between childhood trauma variables and trait anxiety. The results of the tests conducted are in line with researchers' estimates regarding the correlation between childhood trauma and trait anxiety. It was found that childhood trauma had a significant positive effect on trait anxiety. Childhood trauma can also predict trait anxiety significantly. The higher the value of childhood trauma in late adolescence, the higher the value of trait anxiety, and vice versa. It can indicate that childhood trauma can trigger or increase trait anxiety in a person. In accordance with the attachment theory proposed by Mary Ainsworth et al. [38–39], trait anxiety can develop from anxiety that very vulnerably experienced by someone with childhood trauma due to an insecure attachment as the result of not achieving attachment between a person and his caregiver in his childhood.

Based on the results of the analysis of additional data on the resilience variable in terms of differences in income/pocket money and working status of late adolescents with childhood trauma, it was found that there was no significant difference. Although there was no significant difference, it was found that participants with income/pocket money $>$ IDR 2.000.000 and non-working status had a higher level of resilience. As Antcliff et al. [45] state, income/pocket money and one's work status were included in the adversity factor, one of the factors that can affect a person's resilience, where someone with high resilience will try to face these difficulties through existing protective factors, such as family, community, and others. Participants with income/pocket money $>$ IDR 2.000.000 and the status of not working indicated that they experienced less adversity in the economic field and higher protective factors. This can be shown based on the high amount of income/pocket money and the full support from the family in financing the participants' lives so that participants do not need to work at this time compared to other participants. Meanwhile, there is a significant difference in resilience in late participants based on gender differences, where men have a higher level of resilience than women. It can be explained through the vulnerability factor that can affect a person's resilience in the form of

innate characteristics that can prevent a person from using his abilities and opportunities as well as possible [45]. Based on gender roles in society, men are encouraged to be masculine and independent when facing a problem or difficulty, and thus leading to men who find it easier to face existing difficulty by using various abilities, strengths, and other sources that can help them. In contrast, women tend to be more dependent and rely on outside help in the form of social support from family, community, friends, and so on [46–47]. There are supporting study by Sambu & Mhongo [48] in 2019 that are in line with this study and showing that men are more resilient than women.

Furthermore, results of the analysis of additional data on the trait anxiety variable, which were reviewed based on differences in income/pocket money and working status of late adolescents with childhood trauma, showed no significant differences in participants. Although there was no significant difference, it was found that participants with income/pocket money < IDR 500.000 and working status had a higher level of trait anxiety. It is in line with the existing theory, namely the social evaluation threat, which is one of the dimensions of trait anxiety, related to various specific threatening situations. Social evaluation threat shows that a person will feel threatened when part of himself is judged by others, such as in terms of income/pocket money [49]. It can be concluded that participants with the lowest income/pocket money category (< IDR 500.000) sense a threat from other people's assessment of their low income/pocket money, thereby increasing the level of trait anxiety that exists compared to participants in the higher category of income/pocket money.

Furthermore, the status "working" of the participants can be used as an influential factor for anxiety in the form of environmental factors, which include life stressors, such as difficulties or pressure at work [50–51]. Participants with working status will feel higher anxiety due to the pressures and challenges experienced at work compared to participants with non-working status. Meanwhile, based on the trait anxiety variable in terms of sex differences between late adolescents and childhood trauma, significant differences were found, in which female participants had a higher level of trait anxiety than men. Previous studies show that women have a higher prevalence of anxiety levels with up to two times higher likelihood of experiencing anxiety than men [41], [52]. In line with this research, the results of the data analysis conducted by the researcher show that women have higher levels of trait anxiety than men. This can be caused by differences in biological conditions and reactions to events and experiences by women and men. Women have blood pressure and pulse rates that are more reactive to anxiety, differences in brain chemistry, and hormonal fluctuations, tend to be more susceptible to stress and are more likely to experience physical and mental abuse than men [53]. In addition, differences in gender roles in the community can be one of the reasons why women have higher trait anxiety than men. Men are generally encouraged to be masculine in dealing with something that is feared, which then leads to a higher level of anxiety and greater exposure, resulting in the disappearance of the feeling or response of fear and anxiety felt by men [46], whereas this generally does not apply to women.

Based on the results of the simple linear regression test, resilience predicted the emergence of trait anxiety significantly. So, it was concluded that H₀ was rejected because the test results were in accordance with the research hypothesis. Thus, if the resilience value of late adolescents with childhood trauma is high, then the value of trait anxiety will be low. On the other hand, if the resilience value of late adolescents with childhood trauma is low, then the trait anxiety value will be high.

4. CONCLUSIONS AND RECOMMENDATIONS

This study still has various limitations, such as the unequal distribution of participants based on age and gender. In addition, researchers are still unable to carry out further analyzes related to resilience and trait anxiety in late adolescents with childhood trauma based on the types of traumas, trauma intensity, and accumulation of childhood trauma experienced by participants. However, this study has several advantages, such as adding to the new discovery that resilience can negatively predict trait anxiety. In addition, this study can show a positive correlation between childhood trauma and trait anxiety.

Suggestions for further research are to find out more deeply whether there is a difference in the effect of resilience on trait anxiety in late adolescents with childhood trauma based on the type of traumas, trauma intensity, and the cumulative number of traumas possessed by participants. In addition, further researchers could use participants with medium to high childhood trauma scores, not just participants with traumatic experiences in childhood.

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