



## OPTIMISM AND SOCIAL SUPPORT AS PREDICTORS OF ACADEMIC STRESS

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### Abstract

Academic stress experienced by students is subject to a multitude of psychological and environmental determinants, including but not limited to optimism and social support. The present study endeavors to explore the predictive influences of optimism and social support on academic stress among junior high school students. A cohort of 80 students from junior high schools located in Banyumas, Central Java, Indonesia. was meticulously selected through a purposive sampling method. The participants were required to complete three standardized assessment tools: the Academic Stress Scale, the Optimism Scale, and the Social Support Scale. Each assessment tool underwent validation through content validity (item-total correlation  $> 0.30$ ) and exhibited commendable reliability, with Cronbach's Alpha coefficients registering at 0.806 for academic stress, 0.791 for optimism, and 0.772 for social support. The data were subjected to analysis via multiple regression techniques, employing a significance threshold of 0.05. The findings indicated that both optimism and social support serve as significant predictors of academic stress levels. In particular, elevated levels of optimism and perceived social support were correlated with diminished academic stress. levels of academic stress. These findings underscore the importance of fostering optimism and strengthening social support systems to mitigate academic stress in adolescents.

### Keywords

Academic Stress; Adolescent; Optimism; Social Support

## INTRODUCTION

The teenage years represent a transitional phase from childhood to adulthood, characterized by changes in physical, mental, cognitive, and social aspects. In the academic realm, the shift from elementary school to junior high school offers a new and enjoyable experience for some students, while simultaneously presenting challenges related to learning and academic stress for many others (de Moor and Branje, 2023).

As a result of anticipated changes, students may encounter various types of stress that can affect their mental, social, and academic performance, stress experienced by adolescents defined here as students within the school environment is referred to as academic stress (Chyu and Chen, 2022). According to (Hosseinkhani *et al.*, 2021) academic stress is a form of mental stress that arises from academic failures, which can lead to mental distress such as frustration.

Academic stress arises from a combination of related claims associated with academics that surpass the individual's adaptive power. This stress is triggered by high and excessive expectations for information, academic pressure, unfulfilled realistic ambitions, limited opportunities, and intense competition (Xu and Ba, 2022; Del Pino and Matud, 2024; Pérez-Jorge *et al.*, 2025). Some perspectives suggest that academic stress is a condition in which individuals experience psychological pressure manifested as frustration (Xu and Ba, 2022), alongside the presence of academic demands from the school environment (Becker and Börnert-Ringleb, 2025) and activities such as exams, homework, and class participation (Rure *et al.*, 2023).

Academic stress is primarily associated with perceived factors such as a lack of control over outcomes, the arbitrary nature of the assessment system, situational demands, and insufficient competition for learning and studying among those who are pressured to confront exams, complete homework, and participate in classes. The facilities for active learning and teaching are inadequate, and there is pressure from parents who expect success, as well as the constant demand for excellence in every exam taken (Dada, Babatunde and Adeleye, 2019; Zheng, Zhang and Ran, 2023; Mallaram *et al.*, 2024).

Academic stress associated with diversity can lead to negative outcomes (Xu and Ba, 2022). Adverse effects stemming from academic stress may manifest in behaviors such as failing to complete assignments and projects on time, which ultimately results in lower graduation marks, emotional disturbances, career issues, personal relationship failures, and the loss of a loved one. These factors can exacerbate academic stress levels and contribute to suicidal ideation, economic difficulties, and conflicts with parents at home, as well as a challenging learning environment. Consequently, this limits graduates' contributions, leading to a lack of self-confidence in personal performance and feelings of loneliness (Xu and Ba, 2022; Kong and Lam, 2024; Malakcioglu, 2024; Martinez-Huerta *et al.*, 2024).

A comprehensive survey involving 700 children and adolescents in China revealed that academic stress has emerged as a significant source of stress and a contributing factor to depression among students, aligning with findings from studies conducted in other nations (Chen *et al.*, 2012). Those who endure negative emotions stemming from academic pressure are particularly affected. Additionally, a study performed at a university in Ghana indicated that an unpleasant academic experience can lead to stress, accompanied by negative emotions such as tension, frustration, and anger (Tyagi, 2025; Wu *et al.*, 2025; Zhu *et al.*, 2025). Several factors influence academic stress, which can be categorized into external and internal factors. External factors include stressors, social support, lifestyle standards, education, time, and financial resources, while internal factors encompass coping strategies and personality traits such as optimism (Sarafino and Smith, 2014). This research primarily emphasizes the role of social support and optimism in influencing academic stress.

One of the factors influencing academic stress is social support (Shelley E Taylor, 2015). Social support can be defined as both real and perceived assistance from the community, social networks, and close friends. This support can be instrumental or emotional (Sullanmaa *et al.*, 2025). Instrumental support involves actions that provide direct help to those in need, such as nursing someone, while emotional support pertains to the expression of care, love, or trust (Sullanmaa *et al.*, 2025). Social support encompasses the involvement of others, which includes emotional concern, material assistance, and honest

feedback regarding a situation (Chen and Lemmer, 2025). Several perspectives define social support as the assistance received by individuals from their surrounding environment, which can manifest as emotional support or tangible aid, leading to feelings of being cared for and aiding individuals in their self-adaptation (Baron-Epel *et al.*, 2025; Liu, Yoon and Carney, 2025).

Research indicates that individuals who receive low social support from friends and classmates are associated with higher levels of depression and social anxiety, leading to a diminished sense of self-worth (Patel and Wang, 2025). Furthermore, elevated levels of anxiety and emotional problems can lead to chronic diseases. Conversely, high social support can result in lower levels of stress experienced by individuals (Sarafino and Smith, 2014), with greater support being a predictor of overall better health (Kristianto and Yudianto, no date; Pathak *et al.*, 2025).

Wilks and Spivey, (2010) explain that the presence of supportive individuals can influence the academic pressure faced by students, thereby helping them to reduce stress. Additionally, social support contributes to a decrease in excessive self-worry (Lewis-Morrarty *et al.*, 2015). This leads to improved interpersonal relationships (Yang *et al.*, 2016).

Optimism is a significant factor influencing academic stress (Shelley E. Taylor, 2015). It is characterized as the belief held by an individual to behave positively when confronted with problems, without fear of failure or the obstacles that may arise (Spivey, 2025). Furthermore, optimism is regarded as a method through which one views potential outcomes positively while maintaining a realistic perspective on future challenges (Leonard and Sommerville, 2025). Kumar, Verma and Lata, (2025) describe optimism as a general tendency to expect favorable outcomes and to maintain a belief that good things will occur. An optimistic person tends to exhibit healthier lifestyle behaviors, experiences lower levels of depression, and enjoys enhanced mental health and psychological well-being. Conversely, pessimistic individuals are more likely to encounter feelings of despair, burdensome emotions, failure, and even depression and suicidal thoughts (Maryam and Chusnah, 2025).

According to Barseli, Ahmad and Ifdil, (2018), optimistic students experience lower levels of academic stress because they are more capable of meeting school demands. Although optimism is generally perceived as a relatively stable characteristic of an individual, research indicates that adults can become more optimistic over time, and that optimism can be developed during life transitions (Scheier and Carver, 2018). This is due to the fact that optimism can evolve throughout one's life journey and can be nurtured and cultivated through interventions (Chang, 2025).

Consequently, research that investigates the relationship between young children's experiences in a school context and their tendencies to behave optimistically is greatly needed. This research can inform intervention strategies aimed at enhancing the positive mental health of children and adolescents within the school environment (Greenberg, 2010; Weare and Nind, 2011). Based on the description of the study above, it supports the notion that the development of tasks during adolescence significantly contributes to the growth of optimism and social support. However, this research evaluates the importance of factors that foster optimism and social support in adolescents, with a major focus on the challenges they face, such as academic stress, within the educational environment. Furthermore, there

is limited knowledge about other developmental tasks that may play a role in fostering optimism and social support during adolescence. Therefore, the researcher aims to investigate optimism and social support as predictors of academic stress in adolescents. The findings of this research are expected to serve as valuable material for psychological interventions targeting adolescents, particularly students.

## **METHODS**

This study employs a quantitative approach utilizing an ex post facto design (Creswell, 2019). The research was conducted at one of the First Intermediate Schools in Banyumas, Central Java, Indonesia. Data collection was carried out using purposive sampling, targeting students aged 11-15 years enrolled in the First Intermediate School. The criteria for selection included schools that implement three official languages in their teaching activities (Indonesian, English, and Mandarin). Data collection for this study involved three questionnaires: an academic stress questionnaire, an optimism questionnaire, and a social support questionnaire.

The academic stress questionnaire is based on the components outlined in the theory by (Sarafino and Smith, 2014), which includes four components: (a) physiological, (b) cognitive, (c) emotional, and (d) behavioral social, comprising a total of 17 statement items. The optimism questionnaire is derived from (Seligman, 2008) and consists of three dimensions: (a) permanence, (b) pervasive, and (c) personalization, with a total of 18 statement items.

The social support questionnaire, referencing (Sarafino and Smith, 2014), includes four aspects: (1) emotional support, (2) appreciation support, (3) instrumental support, and (4) informational support, comprising over 19 statement items. The measurement tools were tested for reliability and validity. Content validity was ensured through an item selection process. The selection of items was based on the item-total correlation coefficient, where items with a coefficient of  $<0.3$  were deemed to have insufficient power to differentiate between good and poor responses and were excluded from the data collection process.

The outcomes of the data analysis revealed the reliability of the academic stress scale (Cronbach's alpha = 0.806), the optimism scale (Cronbach's alpha = 0.791), and the social support scale (Cronbach's alpha = 0.772). Based on the results of the measurement tool testing, it can be concluded that all three measurement tools utilized are considered reliable ( $r > 0.60$ ) (Nurgiyantoro and Gunawan, 2017). According to the results of the item selection process, the number of items designated for each scale in the study is 12 items for the academic stress scale, 14 items for the optimism scale, and 15 items for the social support scale. The analysis techniques employed in this research initially included assumption testing (normality assessed by Kolmogorov-Smirnov) and hypothesis testing (Multiple Regression Analysis) with the assistance of the SPSS program.

## **FINDINGS AND DISCUSSION**

Table 1 shows results that third variable that is stress academic, optimism and support social show results mark significant ( $p = 0.200$ ). This means third variable own normal

distribution is  $p > 0.05$  (value significance more big from 0.05, namely  $0.200 > 0.05$ ). So that third variable normally distributed because mark significant every variable  $> 0.05$ .

**Table 1 Normality Test Results**

Tests of Normality			
	Kolmogorov-Smirnov <sup>a</sup>		
	Statistics	Df	Sig.
Unstandardized Residual	.059	80	.200 *

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The results of the data analysis in table 2 show mark average from variable stress academic ( $m = 46.20$ ,  $SD = 7.653$ ,  $Median = 48.00$ ,  $Mode = 36^a$ ), variable optimism ( $m = 68.74$ ,  $SD = 9.042$ ,  $Median = 70.50$ ,  $Mode = 67^a$ ), and the variables support social ( $m = 56.66$ ,  $SD = 7.218$ ,  $Median = 57.50$ ,  $Mode = 62^a$ ). Table 2 shows data range from stress academics, optimism, and support social in a way consecutive namely (27 - 60 ; 49 - 87 ; and 35 - 70).

**Table 2. Statistics descriptive research data**

Statistics	Academic Stress	Optimism	Support Social
Mean	46.20	68.74	56.66
Median	48.00	70.50	57.50
Mode	36 <sup>a</sup>	67 <sup>a</sup>	62
Std. Deviation	7,653	9,042	7.218
Minimum	27	49	35
Maximum	60	87	70

The results of the analysis in table 3 show that F value = 316.277 and p value = 0.000 on the variable support more social and optimism small from alpha value (0.05). This is means, support social and optimism predict resilience in adolescents.

**Table 3. Analysis results regression multiple**

ANOVA <sup>a</sup>					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	4124.705	2	2062.352	316,277	.000 <sup>b</sup>
Residual	502,095	77	6,521		
Total	4626.800	79			

a. Dependent Variable: sa

b. Predictors: (Constant), ds, op

Table 4 shows results analysis regression multiple p value = 0.000 ( $< 0.05$ ), p This can concluded that optimism and support social as predictor stress academics on students. Contributions variable optimism and support social views from F value = 316.277,  $P = 0.000$ ,  $R \text{ square} = 0.891$ . R value square or coefficient determination as big as 0.891, meaning there

is donation effective by 89.1% of variable optimism and support social in a way together to stress academic , while the remaining 10.9% is unexamined variables in study This .

**Table 4, Coefficients Determination**

		R		Std. Error of the Estimate		R Square Change		F Change		Sig. F Change	
Model	R	R Square	Adjusted R Square						df1	df2	
1	.944 <sup>a</sup>	.891	.889	2,554		.891		316,277	2	77	.000
a. Predictors: (Constant), ds, op											

Research findings indicate that social support and optimism serve as predictors of resilience in adolescents. Academic stress has been identified as a significant source of stress among students (Ho, Nguyen and Nguyen, 2023). According to (Ho, Nguyen and Nguyen, 2023), the assessment of adolescents' school-related issues emerges as the most stressful factor in their lives. Some researchers have discovered that adolescents experiencing high levels of academic stress are more likely to exhibit significant depressive symptoms (Deng *et al.*, 2022).

Academic factors are the primary source of stress for many students, followed by physical, social, and emotional factors. The majority of stressed students report low self-esteem, and approximately half score high on the depression scale (Mansoor, Malik and Waqas, 2025). Literature results indicate that higher stress levels are associated with poorer academic performance (Sohail, 2013). The increasing academic pressure on children and adolescents leads to a lack of self-confidence in their personal achievements (Liu *et al.*, 2025). The effects of academic stress can potentially lead to health issues, such as chronic diseases, cardiovascular problems, and weakened immune systems. Optimistic individuals tend to have increased motivation to pursue goal-oriented behaviors (Jiang *et al.*, 2022; Kappes *et al.*, 2023).

An optimistic individual employs a more strategic, problem-focused approach, utilizing adaptive coping strategies that enhance their ability to adapt and function proactively when confronted with negative life events, in contrast to a pessimistic individual (Nes and Segerstrom, 2015). Research indicates that optimism serves as a protective factor for mental health, alleviating psychological stress and reducing anxiety and depression (Rand *et al.*, 2020). Not only does optimism play a crucial role, but emotional support from family has also been shown to increase dedication and motivation to achieve academic success (Budescu and Silverman, 2016). Furthermore, support from teachers has been linked to enhanced academic motivation (Camacho *et al.*, 2021).

When academic pressure surpasses an individual's personal capacity, it can lead to psychological tension and social isolation, resulting in a mismatch that may ultimately lead to depression (Rice *et al.*, 2012; Zhao, 2016). This situation can cause emotional and physical stress, academic maladaptation, as well as discomfort related to environmental factors, language, and eating patterns (Hoang, 2021; Yin and Ko, 2023). Research findings demonstrate that optimism and social support contribute to a reduction in academic stress by 89.1%. This can be explained by the fact that optimism and social support are significant

components of an individual's environmental attitude and personality, enabling them to transform problems into challenges and fostering a belief in their ability to overcome difficulties.

Research conducted by (Song, Fu and Wang, 2019) indicates that social support is related to academic stress. (Marhamah and binti Hamzah, 2017) demonstrated that students who scored high on social support reported lower levels of academic stress. Furthermore, extensive research in the workplace has shown the benefits of social support as a source of power that helps employees manage work demands (Bakker and Demerouti, 2017). (Harter, 2012) clarifies that social support originates from family, classmates, teachers, and friends. Social support is crucial for school-aged children because, during this period, support from various parties, such as family, not only serves as a role model for information but also provides protection, encouragement, and access for children to engage actively in their environment (Poole *et al.*, 2013).

Social support activities undertaken by teenagers can foster positive social interactions with friends and peer groups. Through these interactions, they can alleviate pressure, which can subsequently lead to improved psychological health (Zhao, Liu and Wang, 2015). In addition to support from friends, teachers also provide professional assistance at school, offering sound advice to students facing psychological challenges (Sisask *et al.*, 2014). Individuals who perceive higher levels of social support tend to have a more positive outlook when dealing with negative evaluations in social interactions, thereby contributing to lower levels of social anxiety (Zeidner, Matthews and Shemesh, 2016). Conversely, a high level of social support related to school can serve as a protective factor for adolescents, preventing them from engaging in health-risk behaviors, particularly the use of substances such as smoking, marijuana, and alcohol intoxication (Hargreaves, 2012).

Individuals who believe they can resolve every issue are referred to as optimistic individuals (Slamet, 2014). Those with an optimistic outlook can confront all problems with a proactive response, engage in future planning, maintain unwavering hope, and perceive failure as a challenge that can be addressed, as well as seek assistance (Roellyana and Listiyandini, 2016). Consequently, teenagers facing academic challenges require an optimistic attitude to effectively tackle their academic issues, as well as to embrace acceptance, maintain steadfast hope, and plan for resolving academic problems while actively seeking solutions throughout the process, even if it means reaching out for help from friends, teachers, or parents.

An optimistic individual possesses the belief that positive outcomes will occur in the future (Carver and Scheier, 2017). They tend to exhibit better physical and mental health, along with enhanced academic learning and achievement (Conversano *et al.*, 2010; Tripathi and Chaturvedi, 2014). (Oberle *et al.*, 2018) discovered that experiencing a positive school environment characterized by supportive peer groups, nurturing relationships with adults, and low levels of peer victimization was simultaneously linked to the optimism of students in the fourth grade. Furthermore, belonging to a supportive peer group was associated with an increase in student optimism from fourth to seventh grade, independent of factors such as gender, age, English as a second language, and socioeconomic status.

Over the decades, the significance of optimism as a positive indicator for mental health during childhood and adolescence has been emphasized (Gillham and Reivich, 2004). This notion is further supported by various studies conducted by (Lorenzo-Blanco *et al.*, 2016), which indicate that Latino teens are at a higher risk of experiencing stressors and poor mental health. Furthermore, optimism has been shown to be beneficial in overcoming stress and enhancing mental health (Taylor *et al.*, 2020). (Oberle *et al.*, 2018) elaborated on the importance of optimism for teenagers, particularly during their developmental phase, which is often marked by crises that can lead to increased stress. However, this period also presents opportunities for the development of optimism. Based on the explanations provided by the various studies mentioned above, it can be concluded that optimism and social support are positively correlated with academic stress in teenagers. Therefore, it can be asserted that both optimism and social support serve as predictors that can influence academic stress in adolescents.

## CONCLUSION

The findings indicated that optimism and social support are important predictors of academic stress. This implies that students with elevated levels of optimism and strong social support typically experience reduced academic stress. Consequently, researchers recommend enhancing the academic environment, adopting strategies that address both problems and emotions as preferred methods for alleviating stress, utilizing student counseling services, engaging in extracurricular activities, and modifying policies designed to assist students in managing identified stressors, which can enhance psychological and emotional well-being.

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