



Resilience: Mediator and Moderator of the Relationship between The Big Five Personality and Academic Stress (A Systematic Review)

Alhimni Fabiansyah¹, Almaas Adibah²

^{1,2}Department Psychology, Muhammadiyah Malang University, Indonesia

ABSTRACT

A systematic review was conducted of 24 international journals. The findings show that the personality of students according to the Five Factor Model (FFM) namely Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism affects how students deal with stressors in the academic environment & the level of academic stress they have. Trait neuroticism is a personality trait that tends to be positively correlated with academic stress, meaning that students with a high tendency for the trait neuroticism are more at risk of experiencing high academic pressure or stress. On the other hand, the other four traits (Openness, Conscientiousness, Extraversion, Agreeableness) will help students be more adaptive to the stress they are experiencing. In addition to personality which directly influences academic stress, resilience is also found as a mediator & moderator variable which also plays a role in the relationship between personality and academic stress.

Keywords: Academic Stress; Big Five Personalities; Resilience; Systematic Reviews

Introduction

Transition from high school years to college requires students to be able to adapt to the changes that occur. The campus environment provides various challenges and demands that need to be resolved well by every student. Not infrequently there are students who are unable to face the challenges, targets and assignments given in college. If students are unable to handle this, the pressure that comes will turn into a stressor that can cause stress.

Academic stress at University, as a factor that is detrimental to psychological health or emotional well-being, is a very recent research topic. In the University context, many potential stress factors have been documented and categorized, such as learning environment, campus culture, problems interpersonal or personal (de la Fuente, González-Torres, et al., 2021). Previous studies state that a student entering college will face various stressors (Wilson et al., 2022). Research conducted by Sharma (2018) also showed that significantly some students experienced stress and the majority stated that they had self-confidence about their academic skills and ability to succeed in completing their academic assignments.

Stress in lectures is usually called academic stress. Stress academic has found become source significant stress among student (Persike & Seiffge-Krenke, 2012). Stress This Can impact negative for performance academic student as well as mental health or psychological they (Felsten, 2002; Stoeber & Rambow, 2007). Individuals are very vulnerable to problem mental health during adulthood young, like Lots symptom disturbance psychology is starting appear during critical times in the period This (American Psychiatric Association, 2000). Study previously has find that consequence the most common psychological related with stress academic is depression and anxiety (Dyrbye et al., 2006; Stoeber & Rambow, 2007). Because there is connection between stress academics and symptoms psychological, important for researcher identify factor capable protector support student from disturbance psychological effect from stress academic (Cole et al., 2015).

Stress academic experiences experienced by everyone students and ways they respond every stressor influenced by various characteristic their personality have (Shokri et al., 2007 in Jacob et al., 2022). Study show that people with characteristic personality different manifest different reactions to stress, which in turn influence adjustment they are at the University (de la Fuente, González-Torres, et al., 2021). Sukumar & Kanagarathnam (2017) also investigate connection between characteristic features personality with stress academic and technical coping used by adolescents and revealed that factor personality own significant relationship with stress academic. Personality called as pattern consistent in think, feel and behave (Pervin, 2005). Schacter, Gilbert and Wegner, 2009 in Sahi & Raghavi (2016) suppose that personality is style characteristics permanent individual firm throughout his life. Personality with thereby works as organized whole in a way dynamic with action simultaneous from various subsystem psychological in self individual (Mayer, 2007).

The Big Five Personalities (BF), also known as Five Factors Model (FFM) and The OCEAN Model, the most representative framework general personality used in literature psychology moment This. The Big Five personality domains (*The Big Five Personalities*) are: Openness (O), Conscientiousness (C), Extraversion (E), Agreeableness (A) and Neuroticism (N) (de la Fuente, González-Torres, et al., 2021). There is proof that The

Neuroticism factor is predictor main its height stress level (Fuente, 2021). Xin et al. (2017) show that *Neuroticism*, *Extraversion* and *Openness* is variable related important with stress response . Study the show that More neuroticism tall predict stress based on response physiological like beat heart and activation cortisol , decrease affect positive and control more subjective low . Study it also shows that individual with *Extraversion* more big show more A little Activation cortisol to stress , and psychological well -being and resilience response , with A little enhancement influence negative . More scores tall in openness (*openness*) is also associated with response more cortisol A little .

By general , literature confess role personality to level stress academic (Ebstrup et al., 2011), performance academic (Shokri O., 2007 in de la Fuente et al., 2021)and coping (Connor-Smith & Flachsbart, 2007). High neuroticism tend make student stress , make they more prone to . *Extraversion* , *Openness* and also *Agreeableness* role as factor protector below stressful (de la Fuente, Santos, et al., 2021)conditions . Enhancement traits personality Possible help in increase ability For manage stress and maybe leads to achievement more academic Good (Jacob et al., 2022).

The level of resilience also plays a role important in reduce or increase level stress academic circles student (Hussain & Thakur, 2019). Most of the researcher agree with definition general resilience as ability For withhold trouble , recover from stress and experience negative (Prince-Embury S, 2017). Expand definition that , resilience is also ability For progress and grow in respond difficulties and challenges , ie For find strength through difficulty (Ryan et al., 2019). Resilience No limited to people with experience traumatic , literally general beneficial For progress learn and to deal with challenge typical in University (Backmann et al., 2019)context .

Previous evidence show resilience as Skills main For student (Turner et al., 2017), relate positive with involvement academic , *academic persistence* (Hartley, 2011), mental health , wellbeing (Ayala & Manzano, 2018), and settings self (Artuch-Garde et al., 2017; DeRosierME, 2013).Gloria & Steinhardt (2016) investigate connection between resilience and stress , for know is resilience protect somebody from effect stress with characteristic worry or symptom depression . Research result disclose that resilience protect somebody from influence stress with characteristic anxiety and symptoms depression .Rfos-Risquez et al. (2016) investigate connection resilience and *academic burnout* . Findings disclose that There is significant relationship between resilience and *academic burnout* . This result show importance develop resilience and make it happen part important from self student (Hussain & Thakur, 2019).

Resilience possible individual For overcome situation stress with competence . For student resilience play role important For overcome related stress with academic . Student with resilience tall found more A little affected by stress academic compared to with those who have resilience low . One study disclose that There is correlation negative between stress academics and resilience (Mathur Professor & Sharma, 2015). Also have found that resilience protect somebody from influence stress with characteristic anxiety and symptoms depression (Gloria & Steinhardt, 2016)

Resilience has also been repeatedly linked to the Big Five personality factors; all studies show evidence that high resilience , also characterized by high scores on all factors big five personality traits (emotional stability, extraversion, openness, agreeableness and conscientiousness)(Hjemdal et al., 2006 dalam Cazan & Truța, 2015). Personality is an internal protective factor for individual academic resilience (Tamannaieifar & Shahmirzaei, 2019). Thus, it can be said that individuals who have academic resilience are shown to have good personal qualities and can encourage academic success (Rachmawati et al., 2021). Understand influence personality and resilience to stress perceived academics can help in formulate method possible interventions help student For overcome pressure academic . This , in turn , can help student with characteristic different personalities and resilience For reduce level stress they . Therefore That study This try For know connection between variable the .

There is a number of review previously that had been see factors or variable What only you can influence academic stress Student . But the review discusses about role personality and resilience in Minimize academic stress student Still Not yet found . A number of results study showing that personality in a way direct nor in a way No direct through role variable mediation resilience relate or influence academic stress level student . So that based on matter the researcher want to do review systematic to a number of research that has been done For know connection personality and resilience as well as How its influence to academic stress level student.

Method

Criteria Inclusion and Exclusion

The author determines the limitations in this review , so that criteria inclusion in study This covers : first , article research that discusses about connection or influence *big five personality* on academic stress ; *big five personality* against resilience academics , relationships or influence resilience against academic stress , as well article study about resilience as variable mediation / moderation connection between *big five personality and* academic stress . Second , articles study with criteria subject student . Third , only a type of quantitative research and review. Fourth , English language journals . Fifth , research articles published 2013 to 2023.

Whereas criteria exclusion in study This that is : First , article research discussing *the big five personality*, resilience and academic stress outside the educational context . Second , it is not written in English . Third , study research that uses method qualitative or mixture . Fourth , outside type article study quantitative or reviews and articles research whose methods are not clearly described .

Procedure Search Literature

first step in planning review systematic is formulate question study use SPIDER method (*Sample, Phenomenon of Interest, Design, Evaluation, and Research Type*) . Questions that have been formulated in review systematic This is , is there is connection between *big five personality and* academic stress ? And how resilience role as a mediator between connection *big five personality and* academic stress ? After determine question research , next

writer determine keywords search based on variables and questions research that has been determined . Search words used that is *Resiliency* , *Resilience* , *Resilience* , *Academic Resilience* , *Academic Resilience* , *Big Five Personality* , *personality*, *Academic Stress and Academic Burnout* , *Burnout* . Keywords the used For look for article on the databases Scopus , Google Scholar , Semantic Scholar, SagePub , Ebsco , Wiley, PubMed and ResearchGate. After finding articles that match the keywords search , researcher do check duplication of articles later next by screening titles and abstracts using the help of the Zotero application and Rayyan.

Data Extraction

Writer get a total of 994 articles from database search , then done check duplicate and continue filter all journal that has been get away based on title and abstract . Furthermore journal reviewed and analyzed based on text complete . Amount end reviewed article based on criteria inclusion totaling 24 articles.

Results and Discussion

Students at universities experience a variety of stressors and facing many challenges in (Son et al., 2015) recent educational settings , such as adjustments to a different environment than school to college high , management of their expenses (Rahat & İlhan, 2016), adaptation to new culture, style communication and relationships new , independence from their parents , preparation for the future (Kim, 2011 in Tamannaefar & Shahmirzaei, 2019), and development new friendship (Salami, 2011). Therefore, they are may experience anxiety, depression, emotional extremes , failure and dropping out of college because of stress excessive (Banyard & Cantor, 2004; Dyson & Renk, 2006; Simsek, 2013; Thurber & Walton, 2012).

In recent years, an increasing number of researchers have made great efforts to identify individual characteristics that influence the relationship between arousal and stress reactions, and some empirical data confirm the idea that personality is an important factor in identifying, responding to, and approaching stress. (Sing Chai, 2015). Personality traits have been defined as protective factors in the development of resilience or resilience , which is grouped Grothberg (1996) into personal strength (*I am*), personal skills (*I can*), and support factors social (*I have*). *I (I am)* refers to the inner strengths and personal attributes presented by resilient individuals that can be predictors of resilience and that can also be associated with classic personality traits classic (McCrae & Costa, 1986). Theory resilience try to explain academically achievement in students who experience negative psychological disorders and environmental situation (Reis et al., 2004). Adaptation and academic success at university also requires high resilience (Munro & Pooley , 2009 in Tamannaefar & Shahmirzaei, 2019).

Table 1

List of articles and findings

No.	Writer	Subject	Findings
1.	(de las Olas Palma-García & Hombrados-Mendieta , 2014)	479 participants from the province of Malaga (Spain) comprised from 304 social workers and 175 student .	The results of the regression analysis confirm that personality traits have an influence and predict resilience in students and social workers.
2.	(Cole et al., 2015)	431 Ghanaian University Students	Ego resilience supports effect negative from stress academic to mental health in the sample Ghanaian students .
3.	(Cazan & Truța , 2015)	41 Romanian students from a number of faculty	Resilience predict reducing academic stress .
4.	(Shi et al., 2015)	2925 students from 4 colleges high in Liaoning province , China.	Personality relate with level anxiety in students and resilience mediate connection between personality and anxiety .
5.	(Sing Chai, 2015)	148 diploma and undergraduate students from college high located in Kuala Lumpur, Malaysia.	Personality predicting stress and coping in college students .
6.	(García-Izquierdo et al., 2017)	113 students nursing	Students who have high resilience tend more A little experience <i>burnout</i> .
7.	(Sahi & Raghavi , 2016)	100 students (50 men and 50 women). range aged 18-23 years	Personality correlated with level resilience and stress.

8. (Ercan, 2017)	392 students bachelor	Sub- dimensions of five characteristics personality big show significant difference in a way statistics based on resilience . Three sub-dimensions of five characteristics personality big — i.e conscientiousness , neuroticism , and extroversion — together accounted for 34% of the total score resilience .
9. (García-Izquierdo et al., 2017)	218 students nursing	Students who were indicated to have a higher level of resilience obtained higher scores in <i>academic efficacy</i> and lower scores in <i>burnout</i> .
10. (Lee et al., 2017)	184 students Korean medicine	Personality predict level <i>burnout</i> in students .
11. (Tamannaefar & Shahmirzaei , 2019)	368 student kashan university	Resilience academic correlated positive with <i>Openness</i> , <i>Conscientiousness</i> , <i>Extraversion</i> , <i>Agreeableness</i> and correlated negative with neuroticism.
12. (Hussain & Thakur , 2019)	200 students aged 18 – 25 years .	Resilience and academic stress are highly negatively correlated between male and female students .
13. (Rachmawati et al., 2021)	116 students	resilience is demonstrated by having competence, self-confidence, character, commitment, interest and self-control to overcome the difficult situations they face. Commitment is an important aspect for individuals to be resilient in academic situations.
14. (Galindo-Domínguez & Bezanilla , 2021)	200 Students	Five Model personality traits contribute significantly to developing positive academic self-efficacy . A number of personality contribute to distress and eustress.
15. (Janatolmakan et al., 2021)	240 students nursing and midwifery	Low resilience followed with level high <i>burnout</i> .
16. (de la Fuente, Santos, et al., 2021)	1,126 Students	(1) proactive resilience reflects factors perceived self-efficacy and ability to change adaptively; (2) reactive factors from resilience is usually associated with withstanding the experience of change, uncertainty or trauma.
17. (Fullerton et al., 2021)	306 students	Resilience n as resource factors directly predict well-being and mental adjustment l.
18. (Findyartini et al., 2021)	1040 Student	coping mechanisms , personality traits, and Academic performance may predict resilience among medical students.
19. (de la Fuente, González-Torres, et al., 2021)	405 students Woman	factors predict resilience positively, and resilience negatively predicting factors and symptoms of academic stress. Special mediation model analysis, with each personality factor, confirmed different mediating relationships that emerges in linear regression analysis
20. (Fruth, 2022)	580 students in Taiwan	Personality traits can be used to identify students are at risk of negative emotional states f .

21. (George Jacob et al., 2022)	203 students	personality has a high influence on academic stress perceived and coping styles they adopt to deal with stress .
22. (Chen et al., 2022)	613 students	Resilience and personality are two important mediators between psychological stress and <i>burnout</i> .
23. (Gong et al., 2023)	1680 students	Resilience is a mediating variable for the influence of learning stress on <i>burnout</i> .
24. (Ramirez-Asis et al., 2023)	378 students	The neuroticism personality type shows a greater tendency to suffer from <i>burnout</i> in students

Table 1 shows a number of journal research that discusses about relationship between *big five personality* with academic stress , and roles resilience as mediator or moderator variable in connection the . The dominant personality assessment model in recent years is *big five personality* . This suggests that there are five main factors of personality: *Openness , Conscientiousness , Extraversion , Agreeableness and Neuroticism* (OCEAN)(Costa & McCrae, 1992; Goldberg, 1993; Paunonen, 2003) . Scientist views personality as a group of basic behavioral tendencies that influence thoughts, emotions, and actions, and that are related to the individual's primary mechanisms in facing difficulties (de las Olas Palma-García & Hombrados-Mendieta, 2014).

Traits help overcome difficulties, such as good humor, being socially responsible, adaptable and tolerant, having good self-esteem, self-discipline and self-control, as well as having planning, problem solving and critical thinking skills (Garmezy , 1984, 1991; Rutter , 1979, 1985; in de las Olas Palma-García & Hombrados-Mendieta, 2014). Research conducted byShi et al. (2015) mentioned that personality trait *Openness , Conscientiousness , Extraversion , and Agreeableness* relate negative with anxiety in students medicine in China, meanwhile associated *neuroticism* positive with level worry . Study it also states that resilience serves as a mediator in the relationship between agreeableness/conscientiousness/openness and anxiety symptoms . *The big five personality* is not only directly related to anxiety, but also indirectly related through resilience .

Campbell-Sills et al. (2006) investigate personality traits and resilience . Their study showed a personal profile in which resilience had a negative association with neuroticism , a positive association with extraversion and conscientiousness, a small statistically significant positive association with openness, and no association with agreeableness. In addition, several authors determine that *the big five personalities* is a prediction of resilience (Fayombo, 2010; McCrae & Costa, 1986; Waaktaar & Torgersen, 2010). In study de las Olas Palma-García & Hombrados-Mendieta (2014) The results of the regression analysis confirm that personality traits have an influence and predict resilience in students and workers social . Specifically, extraversion , which develops over time, has a positive influence on the development of self-acceptance and acceptance of life (*I am*), personal competence (*I can*), and perceived social support (*I have*). This is the only personality trait that is predictive of all three components of resilience , whereas *conscientiousness* and *openness* are predictive of the first two (*I am* and *I can*). The results of this study contribute to the understanding of the relationship between personality and resilience

Study has Lots imply that resilience related with personality traits. Resilience has been repeatedly linked to the Big Five personality factors, all studies show evidence that a tall tough personality is characterized by his or her height scores on all factors personality (emotional stability, extraversion, openness, sociability and awareness) (Hjemdal et al., 2006). Defining individual which is very tough is they with positive social orientation towards others, achievement orientation (Werner, 1992), optimistic and possessive energy positive for life and emotionality the positive(Cohn et al., 2009; Tugade & Fredrickson, 2004) .

Resilience has been described as the human capacity to face, overcome, and survive rise from the experience of misfortune (Garmezy, 1991; Grotberg, 2003). The American Psychological The Association defines resilience as the process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress , such as family and relationship problems. marriage , serious health problems , work problems , and financial stressors (American Psychological Association (APA), 2011). Resilience is seen as an adaptation process positive (Fergus & Zimmerman, 2005) and, therefore, should lead to favorable adjustments (Masten, 2001; Windle, 2011). In an academic context, there are several differences between resilience concepts such as '*buoyancy*' , '*academic resilience*' , and '*grit*' (Duckworth, 2013; Martin, 2013). Resilience considered as characteristics, which contribute to a person's psychological capital (Luthans et al., 2006). Therefore, resilience as the capacity to manage setbacks, challenges and stress effectively. Even for the maintenance and improvement of good mental, and physical health (Martin & Marsh, 2008).

Two protective factors that may be important to consider when examining the relationship between academic stress and mental health symptoms are positive psychological constructs: (*ego resilience*) ego resilience and *mindfulness* (Cole et al., 2015). (Block & Kremen, 1996) characterized ego resilience as a predisposition to resist anxiety and engage the world in a positive way, as demonstrated by a positive temperament and openness to experience. Block, J. (2002)then added that *ego resilience* is the ability to adjust one's level of ego control according to the specified situation. Research finds that because of this adaptive flexibility, individuals with a degree of resilience individuals with higher levels of resilience are more likely to experience positive affect and have higher levels of self-confidence and better psychological adjustment compared to individuals with higher levels of resilience the lower one (Block & Kremen, 1996). Successful adaptation may also be reflected in the capacity to recover more quickly from environmental stress (Carver, 1999; Davidson, Inslicht , & Baum , 2000 in Cole et al., 2015)

Resilience has been approached from three different perspectives, as the result of effective coping with stress, as a process of successful adaptation in spite of adversity, or as the psychological ability to successfully recover from negative emotional experiences. Conceptualized as an outcome, resilience implies effective patterns of behavior in individuals exposed to risk (Olsson et al., 2003). Specifically, resilience has been studied in relation to academic stress as a risk factor. If academic-related demands exceed the individual's adaptive resources, then some health symptoms may appear (Wilks, 2008). For example, Zaleski et al. (1998) found a strong relationship between number of stressful life events and physical symptoms in college students. Ríos-Risquez et al. (2016) in his research report that students who demonstrated higher levels of resilience were less likely to experience *burnout* and show fewer symptoms of *psychological distress*. Resilience, which allows individuals to face adverse situations, can be considered a modifiable personal characteristic studied and developed (García-Izquierdo et al., 2009 dalam Ríos-Risquez et al., 2016).

Study García-Izquierdo et al. (2017) mention that Students who were indicated to have a higher level of resilience also obtained higher scores in *academic efficacy* and lower scores in *academic burnout*. Study It also explores the role of moderation resilience between burnout dimensions in students and psychological well-being. The result is yes show that That resilience acts as a moderator between *burn out* (in this case, emotional exhaustion) and well-being psychology in students. These results support findings from study Cole et al. (2015) which shows that *ego resilience* moderates the relationship between academic stress and anxiety to students. These findings consistent with the transactional model, suggesting that stress is the result of a combination of stressors and their interactions with resources personal. Students have skills that they can activate as means of resisting stressful events (Simon Hunter et al., 2004). Thus, students with a high level of resilience have a better psychological health status than students with lower resilience.

Chen et al. (2022) in the research carried out to 613 students show that resilience significantly mediates the relationship between *psychological distress* and three dimensions of *burnout*, including emotional exhaustion, depersonalization, and low personal achievement. Thus, resilience may help reduce *burnout* in college students and it is feasible to incorporate resilience-based interventions into *burnout prevention programs* for students at high risk of psychological distress and *burnout*. Other research in review systematic this is what it says that resilience can role as a mediator for reduce academic stress student is research conducted by (de la Fuente, González-Torres, et al., 2021), research the state that resilience is a positive mediator in connection between personality traits *Conscientiousness*, *Extraversion*, *Agreeability*, and *Openness*. Resilience was also found own role mediation consistently positive in minimize stress effects of the *Neuroticism* trait so that change resilience become variable moderation in connection between trait neuroticism and academic stress in students.

The *big five personality* is not only directly related to anxiety, but also indirectly related through resilience. Resilience mediates the relationship between *Openness*, *Conscientiousness*, *Extraversion*, *Agreeableness*, *Neuroticism* with symptoms of academic stress student. Higher scores on traits *Openness*, *Conscientiousness*, *Extraversion*, *Agreeableness* among college students associated with the level of resilience higher levels, which correlates with lower levels of academic stress. Meanwhile, higher scores on neuroticism among female students were associated with lower levels of resilience, which correlated with higher levels of academic stress symptoms. The results are suggestive that intervention can done with b er focuses not only on personality traits, but also resilience (resistance).

Develop personality traits (*Openness*, *Conscientiousness*, *Extraversion*, *Agreeableness*) can increasing resilience, while reducing personality traits (*neuroticism*) that have a negative influence on resilience. Develop personality the will help these students to increase resilience and face adverse situations in their professional life (de las Olas Palma-García & Hombrados-Mendieta, 2014). An important implication of this research concerns the possibility of designing interventions aims to help resilient individuals to recover from stressful situations academics to improve performance academic and can contribute to successful adaptation.

4. Conclusion and Implications

Based on review of 24 journals international that has been done, can concluded that personality you have student in accordance with the Five Factor Model (FFM), namely *Openness*, *Conscientiousness*, *Extraversion*, *Agreeableness*, and *Neuroticism* influential to how student dealing with environmental stressors academics & the level of academic stress you have. Based on findings, the trait *neuroticism* is inclined personality correlated in a way positive with academic stress, that is student with tendency towards the trait *neuroticism* tall more risky experience pressure academic or high academic stress. On the contrary, to the other four traits (*Openness*, *Conscientiousness*, *Extraversion*, *Agreeableness*) will help student more adaptive to moderate stress experienced. Besides influential personality in a way direct against academic stress, resilience was also found as Mediator & moderator variables also play a role in connection Personality and academic stress. Student with level high resilience makes it possible For can face and own flexibility in face pressure academic as well as can rise return from stressful event ever experienced.

Review results this contributes to our understanding of the relationship between personality and academic stress as well as How role resilience as a mediator between connection both of them. Overview This can help in designing programs to develop personality traits and resilience in students. There are several ways to build a foundation of good personality and resilience. This includes developing students' self-confidence by individualizing assignments when possible, promoting self-determination through planning and persistence, and encouraging feedback that places less emphasis on comparisons with peers (Putwain & Daly, 2013). The appeal of such an approach can be entered in routine teaching and learning activities with instructional and support without the need for specialist intervention.

While traveling level college tall student face many difficult situations that continually demand a high level of problem solving skills. Thus, the development of personal traits and resilience must improve their ability to respond to adverse situations. Analysis of the elements that make a student

tougher and more possessive positive personality will ultimately lead to improvements in quality academic they . Training students to develop these abilities should be considered an important aspect of educational programs level college tall in Century Future Future studies could investigate which components of undergraduate education enhance the personality traits most associated with resilience.

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (Fourth edition). Author.
- American Psychological Association (APA). (2011). *The road to resilience*. Retrieved from http://www.nus.edu.sg/uhc/cps/CARE/eCare/vol4_Jan10/Theroadtoresilience, doi:10.1017/S0959259810000420 .
- Artuch-Garde, R., González-Torres, M. del C., de la Fuente, J., Mariano Vera, M., Fernández-Cabezas, M., & López-García, M. (2017). Relationship between resilience and self-regulation: A study of Spanish youth at risk of social exclusion. *Frontiers in Psychology*, 8, 1–11. <https://doi.org/10.3389/fpsyg.2017.00612>
- Ayala, J. C., & Manzano, G. (2018). Academic performance of first-year university students: the influence of resilience and engagement. *Higher Education Research and Development*, 37(7), 1321–1335. <https://doi.org/10.1080/07294360.2018.1502258>
- Backmann, J., Weiss, M., Schippers, M. C., & Hoegl, M. (2019). Personality factors, student resiliency, and the moderating role of achievement values in study progress. *Learning and Individual Differences*, 72, 39–48. <https://doi.org/10.1016/j.lindif.2019.04.004>
- Banyard, V. L., & Cantor, E. N. (2004). Adjustment to college among trauma survivors: An exploratory study of resilience. *Journal of College Student Development*, 45(2), 207–221. <https://doi.org/10.1353/csd.2004.0017>
- Block, J. (n.d.). *Block, J. (2002). Personality as an affect-processing system: Toward an integrative theory*. Mahwah, NJ: Erlbaum.
- Block, J., & Kremen, A. M. (1996). IQ and Ego-Resiliency: Conceptual and Empirical Connections and Separateness. *Journal of Personality and Social Psychology*, 70(2), 349–361. <https://doi.org/https://doi.org/10.1037/0022-3514.70.2.349>
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44(4), 585–599. <https://doi.org/10.1016/j.brat.2005.05.001>
- Carver, C. S., & S. M. F. (1999). *Stress, coping, and self-regulatory processes*. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality* (2nd ed., pp. 553–575). Guilford Press. <https://psycnet.apa.org/record/1999-04371-022>
- Cazan, A.-M., & Truța, C. (2015). Stress, Resilience and Life Satisfaction in College Students context View project. *Revista de Cercetare [i Interven]Ie Social*, 48, 95–108. www.rcis.ro
- Chen, H. L., Wang, H. Y., Lai, S. F., & Ye, Z. J. (2022). The Associations Between Psychological Distress and Academic Burnout: A Mediation and Moderation Analysis. *Psychology Research and Behavior Management*, 15, 1271–1282. <https://doi.org/10.2147/PRBM.S360363>
- Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness Unpacked: Positive Emotions Increase Life Satisfaction by Building Resilience. *Emotion*, 9(3), 361–368. <https://doi.org/10.1037/a0015952>
- Cole, N. N., Nonterah, C. W., Utsey, S. O., Hook, J. N., Hubbard, R. R., Opare-Henaku, A., & Fischer, N. L. (2015). Predictor and Moderator Effects of Ego Resilience and Mindfulness on the Relationship Between Academic Stress and Psychological Well-Being in a Sample of Ghanaian College Students. *Journal of Black Psychology*, 41(4), 340–357. <https://doi.org/10.1177/0095798414537939>
- Connor-Smith, J. K., & Flachsbart, C. (2007). Relations Between Personality and Coping: A Meta-Analysis. *Journal of Personality and Social Psychology*, 93(6), 1080–1107. <https://doi.org/10.1037/0022-3514.93.6.1080.supp>
- Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, 13(6), 653–665. [https://doi.org/10.1016/0191-8869\(92\)90236-1](https://doi.org/10.1016/0191-8869(92)90236-1)
- de la Fuente, J., González-Torres, M. C., Artuch-Garde, R., Vera-Martínez, M. M., Martínez-Vicente, J. M., & Peralta-Sánchez, F. J. (2021). Resilience as a Buffering Variable Between the Big Five Components and Factors and Symptoms of Academic Stress at University. *Frontiers in Psychiatry*, 12, 1–19. <https://doi.org/10.3389/fpsyg.2021.600240>
- de la Fuente, J., Santos, F. H., Garzón-Umerenkova, A., Fadda, S., Solinas, G., & Pignata, S. (2021). Cross-Sectional Study of Resilience, Positivity and Coping Strategies as Predictors of Engagement-Burnout in Undergraduate Students: Implications for Prevention and Treatment in Mental Well-Being. *Frontiers in Psychiatry*, 12, 1–16. <https://doi.org/10.3389/fpsyg.2021.596453>
- de las Olas Palma-García, M., & Hombrados-Mendieta, I. (2014). Resilience and personality in social work students and social workers. *International Social Work*, 60(1), 19–31. <https://doi.org/10.1177/0020872814537856>
- DeRosierME, F. E. S. V. L. K. (2013). The potential role of resilience education for preventing mental health problems for college students. *Psychiatr Ann*, 43–44. <https://doi.org/https://doi.org/10.3928/00485713-20131206-05>

- Duckworth, A. (2013). The Significance of grit. *Article in Educational Leadership: Journal of the Department of Supervision and Curriculum Development*, 1–9. <https://www.researchgate.net/publication/272078893>
- Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic Review of Depression, Anxiety, and Other Indicators of Psychological Distress Among U.S. and Canadian Medical Students. *Acad Med*, 81(4), 354–373. <https://doi.org/10.1097/00001888-200604000-00009>
- Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology*, 62(10), 1231–1244. <https://doi.org/10.1002/jclp.20295>
- Ebstrup, J. F., Eplov, L. F., Pisinger, C., & Jørgensen, T. (2011). Association between the five factor personality traits and perceived stress: Is the effect mediated by general self-efficacy? *Anxiety, Stress and Coping*, 24(4), 407–419. <https://doi.org/10.1080/10615806.2010.540012>
- Ercan, H. (2017). The Relationship between Resilience and the Big Five Personality Traits in Emerging Adulthood. *Egitim Arastirmalari - Eurasian Journal of Educational Research*, 70, 83–103. <https://doi.org/10.14689/ejer.2017.70.5>
- Fayombo, G. A. (2010). The Relationship between Personality Traits and Psychological Resilience among the Caribbean Adolescents. *International Journal of Psychological Studies*, 2(2), 105–116. <https://doi.org/10.5539/ijps.v2n2p105>
- Felsten, G. (2002). Minor stressors and depressed mood: Reactivity is more strongly correlated than total stress. *Stress and Health*, 18(2), 75–81. <https://doi.org/10.1002/smi.925>
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. In *Annual Review of Public Health* (Vol. 26, pp. 399–419). <https://doi.org/10.1146/annurev.publhealth.26.021304.144357>
- Findyartini, A., Greviana, N., Putera, A. M., Sutanto, R. L., Saki, V. Y., & Felaza, E. (2021). The relationships between resilience and student personal factors in an undergraduate medical program. *BMC Medical Education*, 21(1), 2–10. <https://doi.org/10.1186/s12909-021-02547-5>
- Fruth, M. M. (2022). *The experience of resilience and stress as related to personality types in college students* [Disertation, Alliant International University]. <https://www.proquest.com/openview/584f53245d684a88547062c1ebbb5516/1.pdf?pq-origsite=gscholar&cbl=18750&diss=y>
- Fullerton, D. J., Zhang, L. M., & Kleitman, S. (2021). An integrative process model of resilience in an academic context: Resilience resources, coping strategies, and positive adaptation. *PLoS ONE*, 16(2), 1–22. <https://doi.org/10.1371/journal.pone.0246000>
- Galindo-Domínguez, H., & Bezanilla, M. J. (2021). The importance of personality and self-efficacy for stress management in higher education. *International Journal of Educational Psychology*, 10(3), 247–270. <https://doi.org/10.17583/ijep.7870>
- García-Izquierdo, A. L., Ramos-Villagrasa, P. J., & García-Izquierdo, M. (2009). Big five factors and resiliency moderator effect on emotional exhaustion. *Revista de Psicología Del Trabajo de Las Organizaciones*, 25(2), 135–147. <https://doi.org/https://doi.org/10.4321/S1576-59622009000200004>
- García-Izquierdo, M., Ríos-Risquez, M. I., Carrillo-García, C., & Sabuco-Tebar, E. de los Á. (2017). The moderating role of resilience in the relationship between academic burnout and the perception of psychological health in nursing students. *Educational Psychology*, 38(8), 1068–1079. <https://doi.org/10.1080/01443410.2017.1383073>
- Garnezy, N. (1991). Resilience in children's adaptation to negative life events and stressed environments. *Pediatric Annals*, 20(9), 459–466. <https://doi.org/10.3928/0090-4481-19910901-05>
- George Jacob, F., Thomas George, E., Jacob, D. V, Jacob, T., Rajan, A., & Author, C. (2022). Influence of big-five personality traits on perceived academic stress and coping styles among emerging adults. *EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal*, 8(3), 250–254. <https://doi.org/10.36713/epra2013>
- Gloria, C. T., & Steinhardt, M. A. (2016). Relationships among Positive Emotions, Coping, Resilience and Mental Health. *Stress and Health*, 32(2), 145–156. <https://doi.org/10.1002/smi.2589>
- Goldberg, L. R. (1993). The Structure of Phenotypic Personality Traits. *American Psychologist*, 48(1), 26–34.
- Gong, Z., Wang, H., Zhong, M., & Shao, Y. (2023). College students' learning stress, psychological resilience and learning burnout: status quo and coping strategies. *BMC Psychiatry*, 23(1), 2–7. <https://doi.org/10.1186/s12888-023-04783-z>
- Grotberg, E. H. (1996). The international resilience project findings from the research and the effectiveness on interventions. *The International Resilience Project: Findings from the Research and the Effectiveness of Interventions*, *Psychology and Education in the 21st Century: Proceedings of the 54th Annual Convention of the International Council of Psychologists*, 118–128. <https://catalogue.nla.gov.au/catalog/5617541>
- Grotberg, E. H. (2003). *Resilience for today: Gaining strength from adversity*. Westport: Greenwood Publishing Group. <https://psycnet.apa.org/record/2003-88387-000>
- Hartley, M. T. (2011). Examining the relationships between resilience, mental health, and academic persistence in undergraduate college students. *Journal of American College Health*, 59(7), 596–604. <https://doi.org/10.1080/07448481.2010.515632>

- Hjemdal, O., Friborg, O., Stiles, T. C., Rosenvinge, J. H., & Martinussen, M. (2006). Resilience predicting psychiatric symptoms: A prospective study of protective factors and their role in adjustment to stressful life events. *Clinical Psychology and Psychotherapy*, 13(3), 194–201. <https://doi.org/10.1002/cpp.488>
- Hussain, I., & Thakur, N. (2019). Association between resilience, mindfulness and academic stress among university students. *International Journal of Research and Analytical Reviews*, 6(1), 316–319. <http://ijrar.com/>
- Jacob, F. G., Thomas George, E., Jacob, D. V., Jacob, T., & Rajan, A. (2022). Influence of Big Five Personality Traits on Perceived Academic Stress and Coping Styles among Emerging Adults. *EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal*, 8(3), 250–254. <https://doi.org/10.36713/epra2013>
- Janatolmakan, M., Torabi, Y., Rezaeian, S., Andayeshgar, B., Dabiry, A., & Khatony, A. (2021). The Relationship between Resilience and Academic Burnout among Nursing and Midwifery Students in Kermanshah, Iran. *Education Research International*, 1–7. <https://doi.org/10.1155/2021/6647012>
- Lee, S. J., Choi, Y. J., & Chae, H. (2017). The effects of personality traits on academic burnout in Korean medical students. *Integrative Medicine Research*, 6(2), 207–213. <https://doi.org/10.1016/j.imr.2017.03.005>
- Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the Psychological Capital of Resiliency. *Human Resource Development Review*, 5(1), 25–44. <https://doi.org/10.1177/1534484305285335>
- Martin, A. J. (2013). Academic buoyancy and academic resilience: Exploring “everyday” and “classic” resilience in the face of academic adversity. *School Psychology International*, 34(5), 488–500. <https://doi.org/10.1177/0143034312472759>
- Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of students’ everyday academic resilience. *Journal of School Psychology*, 46(1), 53–83. <https://doi.org/10.1016/j.jsp.2007.01.002>
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227–238. <https://doi.org/10.1037/0003-066X.56.3.227>
- Mathur Professor, R., & Sharma, R. (2015). Academic Stress in relation with Optimism and ResilienceRoopa Mathur. *International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS) A Peer-Reviewed Monthly Research Journal*, 1(7), 129–134. <https://oaji.net/articles/2015/1707-1442037738.pdf>
- Mayer, J. D. (2007). Asserting the Definition of Personality. *The Online Newsletter for Personality Science. Issue 1, Spring 2007.*, 1–4. <https://www.personality-arp.org/html/newsletter01/jdm.pdf>
- McCrae, R. R., & Costa, P. T. (1986). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*, 54(2), 385–404. <https://doi.org/10.1111/j.1467-6494.1986.tb00401.x>
- Olsson, C. A., Bond, L., Burns, J. M., Vella-Brodrick, D. A., & Sawyer, S. M. (2003). Adolescent resilience: a concept analysis. *Journal of Adolescence*, 26, 1–11. www.elsevier.com/locate/jado
- Paunonen, S. V. (2003). Big Five Factors of Personality and Replicated Predictions of Behavior. *Journal of Personality and Social Psychology*, 84(2), 411–424. <https://doi.org/10.1037/0022-3514.84.2.411>
- Persike, M., & Seiffge-Krenke, I. (2012). Competence in Coping with Stress in Adolescents from Three Regions of the World. *Journal of Youth and Adolescence*, 41(7), 863–879. <https://doi.org/10.1007/s10964-011-9719-6>
- Pervin, L. A., C. D., & J. O. P. (2005). *Personality: Theory and Research*. https://books.google.co.id/books/about/Personality.html?id=yIRAQAIAAJ&redir_esc=y
- Prince-Embury S, S. D. K. K. (2017). *Three-factor model of personal resiliency*. In: Kumar U, editor. *Routledge International Handbooks. The Routledge International Handbook of Psychosocial Resilience*. Routledge; Taylor and Francis Group. https://doi.org/10.1007/978-1-4939-0542-3_3
- Putwain, D. W., & Daly, A. L. (2013). Do clusters of test anxiety and academic buoyancy differentially predict academic performance? *Learning and Individual Differences*, 27, 157–162. <https://doi.org/10.1016/j.lindif.2013.07.010>
- Rachmawati, I., Multisari, W., Triyono, T., Simon, I. M., & da Costa, A. (2021). Prevalence of academic resilience of social science students in facing the industry 5.0 era. *International Journal of Evaluation and Research in Education*, 10(2), 676–683. <https://doi.org/10.11591/ijere.v10i2.21175>
- Rahat, E., & İlhan, T. (2016). Coping styles, social support, relational self- construal, and resilience in predicting students’ adjustment to university life. *Kuram ve Uygulamada Eğitim Bilimleri*, 16(1), 187–208. <https://doi.org/10.12738/estp.2016.1.0058>
- Ramirez-Asis, E. H., Jaheer Mukhtar, K. P., Yslado-Mendez, R. M., Castillo, N. F. C., Guerra-Muñoz, M. E., & Pelaez-Diaz, G. N. (2023). Academic Burnout Predisposition in Latin American Public University Students Based on Personality Type. *Redefining Virtual Teaching Learning Pedagogy*, 1–16. <https://doi.org/10.1002/9781119867647.ch1>

- Reis, S. M., Colbert, R. D., & Hébert, T. P. (2004). Understanding resilience in diverse, talented students in an urban high school. *Roeper Review*, 27(2), 110–120. <https://doi.org/10.1080/02783190509554299>
- Ríos-Risquez, M. I., García-Izquierdo, M., Sabuco-Tebar, E. de los A., Carrillo-García, C., & Martínez-Roche, M. E. (2016). An exploratory study of the relationship between resilience, academic burnout and psychological health in nursing students. *Contemporary Nurse*, 52(4), 430–439. <https://doi.org/10.1080/10376178.2016.1213648>
- Ryan, J., Jones, S., Hayes, P., & Turner, M. (2019). Building student resilience for graduate work readiness. In Diver A, editor. *Employability via Higher Education: Sustainability as Scholarship*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-26342-3>
- Sahi, M., & Raghavi, M. (2016). A Study of Personality in Relation to Resilience and Stress. *International Educative Research Foundation and Publisher*, 10–18. www.ijer.net
- Salami, S. O. (2011). Psychosocial Predictors of Adjustment Among First Year College of Education Students. *US-China Education Review*, 8(2), 239–248. <https://eric.ed.gov/?id=ED519567>
- Sharma, S. (2018). Perceived Academic Stress among Students. *RESEARCH REVIEW International Journal of Multidisciplinary*, 3(8), 421–425. https://www.researchgate.net/publication/352120980_Perceived_Academic_Stress_among_Students
- Shi, M., Liu, L., Wang, Z. Y., & Wang, L. (2015). The mediating role of resilience in the relationship between big five personality and anxiety among chinese medical students: A cross-sectional study. *PLoS ONE*, 10(3), 1–12. <https://doi.org/10.1371/journal.pone.0119916>
- Simon Hunter, P. C., Mora Merchan, J., & Ortega, R. (2004). Scientific Information System The Long-Term Effects of Coping Strategy Use in Victims of Bullying. *The Spanish Journal of Psychology*, 7, 3–12. <https://www.redalyc.org/pdf/172/17270101.pdf>
- Simsek, H. (2013). University Students' Tendencies Toward and Reasons Behind Dropout. *Journal of Theoretical Educational Science*, 6(2), 242–271. <http://www.keg.aku.edu.tr>
- Sing Chai, M. (2015). Personality, Coping and Stress Among University Students. *American Journal of Applied Psychology*, 4(3), 33. <https://doi.org/10.11648/j.ajap.s.2015040301.16>
- Son, H. J., Lee, K. E., & Kim, N. S. (2015). Affecting Factors on Academic Resilience of Nursing Students. *International Journal of U- and e-Service, Science and Technology*, 8(11), 231–240. <https://doi.org/10.14257/ijunesst.2015.8.11.23>
- Stoeber, J., & Rambow, A. (2007). Perfectionism in adolescent school students: Relations with motivation, achievement, and well-being. *Personality and Individual Differences*, 42(7), 1379–1389. <https://doi.org/10.1016/j.paid.2006.10.015>
- Sukumar, Mr. A., & Kanagarathinam, Dr. M. (2017). Adolescents Academic Stress and Coping Strategies in Relation to Their Personality. *International Journal of Research and Development (IRD)*, 2(1), 30–37. www.eprajournals.com
- Tamannaefar, M., & Shahmirzaei, S. (2019). Prediction of Academic Resilience Based on Coping Styles and Personality Traits. *Practice in Clinical Psychology*, 7(1), 1–10. <https://doi.org/10.32598/jpcp.7.1.1>
- Thurber, C. A., & Walton, E. A. (2012). Homesickness and adjustment in university students. *Journal of American College Health*, 60(5), 415–419. <https://doi.org/10.1080/07448481.2012.673520>
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient Individuals Use Positive Emotions to Bounce Back From Negative Emotional Experiences. In *Journal of Personality and Social Psychology* (Vol. 86, Issue 2, pp. 320–333). <https://doi.org/10.1037/0022-3514.86.2.320>
- Turner, M., Scott-Young, C. M., & Holdsworth, S. (2017). Promoting wellbeing at university: the role of resilience for students of the built environment. *Construction Management and Economics*, 35(11–12), 707–718. <https://doi.org/10.1080/01446193.2017.1353698>
- Waaktaar, T., & Torgersen, S. (2010). How resilient are resilience scales? The Big Five scales outperform resilience scales in predicting adjustment in adolescents. *Scandinavian Journal of Psychology*, 51(2), 157–163. <https://doi.org/10.1111/j.1467-9450.2009.00757.x>
- Werner, E. E., & S. R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Cornell University Press.
- Wilks, S. E. (2008). Resilience amid Academic Stress: The Moderating Impact of Social Support among Social Work Students. *Advances in Social Work*, 9(2), 106–125. <https://doi.org/https://doi.org/10.18060/51>
- Wilson, S. A., Wright, C. J., Miller, M. E., Hargis, L. E., Usher, E. L., Hammer, J. H., & Shannon, H. D. (2022). Identifying common perceived stressors and stress-relief strategies among undergraduate engineering students. *American Society for Engineering Education*. <https://peer.asee.org/identifying-common-perceived-stressors-and-stress-relief-strategies-among-undergraduate-engineering-students.pdf>
- Windle, G. (2011, May). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, 21(2), 152–169. <https://doi.org/10.1017/S0959259810000420>

Xin, Y., Wu, J., Yao, Z., Guan, Q., Aleman, A., & Luo, Y. (2017). The relationship between personality and the response to acute psychological stress. *Scientific Reports*, 7(1), 1–8. <https://doi.org/10.1038/s41598-017-17053-2>

Zaleski, E. H., Levey-Thors, C., & Schiaffino, K. M. (1998). Coping mechanisms, stress, social support, and health problems in college students. *Applied Developmental Science*, 2(3), 127–137. https://doi.org/10.1207/s1532480xads0203_2