



Academic Resilience and Academic Performance Among Postgraduate Students at Dharanidhar University, Keonjhar, India

Priyabrata Sahoo^{1*}, Dr. Parshuram Sahoo²

¹ Research Scholar. Department of Education. Dharanidhar University. Odisha India

² Assistant Professor. Department of Teacher Education. Dharanidhar University, Odisha, India

ARTICLE INFO

Received April 13, 2026

Accepted June 27, 2026

Published June 30, 2026

Keywords:

Academic Resilience;

Academic Performance; Post-Graduate Students;

Dharanidhar University

ABSTRACT

The present study investigates the relationship between academic resilience and academic performance among postgraduate students of Dharanidhar University, Keonjhar. Academic resilience defined as a student's ability to effectively cope with academic challenges and plays a crucial role in determining educational success. Existing studies often overlook contextual factors such as institutional environment and gender. Additionally, there is a lack of empirical data analyzing the relationship between these variables from regional universities like Dharanidhar University, Keonjhar. The study aimed to assess academic resilience, academic performance and determine the correlation among postgraduate students. This quantitative survey research design was adopted with a sample of 100 postgraduate students selected through simple random sampling from Dharanidhar University. Data was gathered through the researcher developed Standardized questionnaire to measure academic resilience. Academic performance was measured using the students Semester Grade Point Average (SGPA) of the last semester. The data were analyzed using appropriate statistical techniques, including percentage analysis and Pearson correlation. The findings revealed that the positive relationship between academic resilience and academic performance confirms that strengthening resilience can directly contribute to better educational outcomes. This study also emphasizes the importance of educational institutions adopting holistic approaches to student development by addressing not only academic growth but also emotional and psychological well-being. Moreover, parents and educational stakeholders should work collaboratively to provide guidance, encouragement, and emotional support to students.

How to cite: Sahoo, P., & Sahoo, P. (2025). Academic Resilience and Academic Performance Among Postgraduate Students at Dharanidhar University, Keonjhar, India. *Edu Spectrum: Journal of Multidimensional Education*, 3(1), 15–26. <https://doi.org/10.70063/eduspectrum.v3i1.187>



This is an open-access article distributed under the Creative Commons 4.0 Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ©2023 by author.

* Corresponding author: priyabratasahoo806@gmail.com

INTRODUCTION

In recent days, academic resilience has become an emerging academic construct that missions to improvement the strength of learners to respond to the local and global context of educational crises. American Psychological Association (2014) stated “Resilience is the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional and behavioral flexibility and adjustment to external and internal demands”. In the contemporary competitive academic landscape, students encounter a wide range of challenges, including intense academic pressure, socio-economic constraints, family related issues and peer influences, all of which can negatively impact both their academic performance and psychological wellbeing.

Academic resilience refers to a student’s capacity to cope effectively with academic stress, setbacks and challenges, and to persist in striving for success despite adverse circumstances (Martin & Marsh, 2006). To promote a healthy academic culture in the education system, capitalizing on learners’ academic resilience plays a pivotal role (Agasisti et al., 2018). Academic resilience and academic commitment have a positive correlation and that highly committed academically (Viljoen, 2015). “Typically, Resiliency has been described as the capacity for positive or successful adaptation” (Glwnnie, 2010). Academic resilience is the student’s ability to deal effectively with academic setbacks, stress and study pressure (Catterall et al., 1998).

Academic performance refers to the extent to which students achieve educational goals, demonstrate mastery of course content, and meet institutional expectations. It is usually measured through grades, internal assessments, semester results, assignments, classroom participation and overall CGPA. A study suggested that academic performance has a correlation with academic resilience (Martin & Marsh, 2006). Academic performance among higher education students is a multidimensional concept influenced by both internal and external factors. It reflects not only students’ academic abilities but also their motivation, learning strategies, and adaptability to academic challenges. Scholars all around the world have given this phenomenon several names ranging from academic achievement to academic success to academic performance (Olanrewaju & Oyadeyi, 2014).

The present study emphasises on students of Dharanidhar University to examining the correlation between academic resilience and academic performance. The study seeks to understand how resilience contributes to students’ academic achievement to reduce educational difficulties. According to current research, students’ mental health outcomes are influenced by a variety of factors, including time management abilities, resilience and academic performance. Postgraduate students encounter unique academic and psychological challenges that may influence both their resilience and performance. The study highlights the idea that academic success is not determined solely by intelligence or content knowledge, but also learners’ ability to adopt, persist and respond positively to academic difficulties.

Literature review constitutes a significant component of any research study, as it provides a comprehensive understanding of the concepts, theories, and empirical findings relevant to the research problem. It helps in establishing a strong theoretical foundation for the study, identifying gaps in existing knowledge, and justifying the need for the present investigation. Resilience is an essential psychological trait that empowers individuals to adapt

and thrive in the face of challenges. Resilience is a progressive method and effective approach that one employs in reaction to stressors (Jensen et al., 2008).

Resilience is characterized by positive adaptation or development despite the existence of conditions that threaten to disrupt one's well-being (Mastern, 2014). Academic resilient students exhibit remarkable abilities to overcome significant challenges during their schooling, often achieving excellent academic outcomes despite adversity (Romano et al., 2021). Resilience is the process of coping with disruptive, stressful, or challenging life events in a way that gives the person extra protective and coping skills than prior to the disruption that results from the event (Richardson et al., 1990).

The relationship between academic resilience, teacher support, and academic performance. However, most previous research studies have only discussed the direct relationship between academic resilience, teacher support and academic performance (Ayala and Manzano, 2018; Mercer et al., 2011). Both academic and non-academic support services significantly enhance student engagement, which in turn positively affects academic performance; however, student engagement partially mediates the relationship between academic support services and performance, while it fully mediates the relationship between non-academic support services and performance (Yang, M. 2025).

Academic performance in higher education focus on a single institution and specific topic area, the article contributes valuable insights into the interconnected nature of cognitive skills and environmental factors in modern education (Almulla, M. A. 2023). Research indicates a positive relationship between well-being and academic achievement (Khodabakhsh et al., 2019). Psychological well-being predicts academic performance (Coborrendon et al., 2020). Existing research has provided a good foundation for verifying the relationship between academic resilience, teacher support and academic performance.

The reviewed studies collectively highlighted that academic resilience is a crucial determinant of students' academic success and overall development. Academic resilience has a significant positive correlation with academic performance, enabling students to effectively cope with stress, challenges, and adverse academic situations. The theory suggests that resilient student can adapt effectively to academic difficulties and maintain satisfactory academic performance even under stressful conditions. Analyzing the relationship between academic resilience and academic performance can offer important insights into how environmental and psychological elements support student success. "Resilience" comes from the Latin word "resiliens," which meant "pliable or elastic" at first (Joseph, 1994).

Academic performance is also the central point at different levels of schooling, including universities (Cranny et al., 1992). Academic resilience and students' engagement enhance academic performance (Sun & Liu, 2023). In the academic context, it is defined as the ability to maintain high levels of achievement, motivation, and performance despite facing challenging educational conditions (Grace, 2018). The study is also supported by Social Cognitive Theory, particularly the concept of self-efficacy. Students who believe in their ability to succeed (high self-efficacy) are more likely to develop resilience and perform well academically, they are better at setting goals, managing stress, and maintaining persistence.

Additionally, the Constructivist Learning Theory suggests that learners actively construct knowledge through experience. Resilient students are more adaptive learners who can adjust their strategies, reflect on failures, and improve performance over time. The theoretical framework suggests that academic resilience plays a crucial role in determining academic performance among postgraduate students. In the realm of distance and online

education, researchers have established the pivotal role of learning support services in enhancing student performance and retention rates (Ludwig-Hardman & Dunlap, 2003).

The definition of academic resilience is based entirely on achieving exceptional academic success despite facing challenges or hardships. Academic resilience has been identified as a significant characteristic of all students who face serve adversities during their academic careers (Ayala and Manzano, 2018). Academically resilient students reported higher academic performance and more engagement in studying than their counterparts (Allen et al., 2014). Social cognitive theory is a valuable theory for investigating academic performance among university students (Honicke et al., 2023; Ye et al., 2024).

Objectives of the Study are: (1) To assess the level of academic resilience among postgraduate students; (2) To examine the level of academic performance among post graduate students; and (3) To find out the correlation between academic resilience and academic performance.

METHOD

The present study adopts a quantitative survey research design. This design is appropriate as the study aims to examine the relationship between academic resilience and academic performance among postgraduate students through numerical data and statistical analysis. The population of the present study included both 2024 & 2025 admission batches, covering both 1st and 2nd year postgraduate students of Dharanidhar University, Keonjhar. It involves students from different disciplines, departments, and academic streams pursuing M.A courses during the period of the study. The researcher used the random sampling technique to provide equal opportunity for all students to participate and minimizing bias enhances the generalizability of the findings. The academic resilience scale, developed by the researchers was standardized before being used in the main study. This scale comprises 40 statements and the Cronbach's alpha coefficient value is 0.86. The instrument follows a Likert-type format, where respondents indicate their level of agreement with each statement on a scale ranging from strongly agree to strongly disagree. Each responses carries a score 5, 4, 3, 2, 1, respectively. The total score obtained from the scale reflects the level of academic resilience, with higher scores indicating greater resilience. Resilient students are better equipped to manage academic challenges, maintain focus, and recover from failures, which ultimately contributes to improved learning outcomes. Academic performance was measured through the SGPA obtained by the students in the last semester. Both descriptive and inferential statistics were used for data analysis. Percentage analysis and Pearson product-moment correlation coefficient (r) was used to testing the hypotheses and achieving the objectives of the study.

RESULT AND DISCUSSION

The present study examined the relationship between academic resilience and academic performance among postgraduate students of Dharanidhar University, Keonjhar. The data were collected from 100 postgraduate students of the 2024 & 2025 admission batch through standardized questionnaires. The data were analyzed using percentage analysis and Pearson's product moment correlation coefficient with the help of IBM SPSS Statistics.

1. Demographic Information

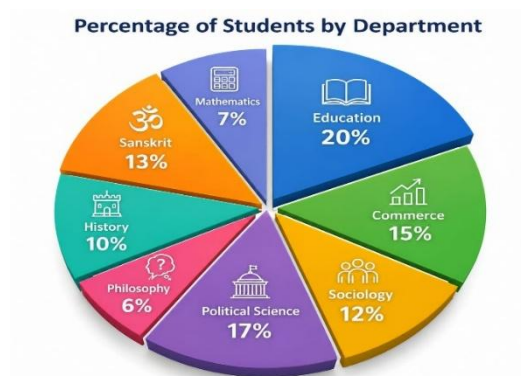


Fig. 1. Pie-chart showing the percentage of students in the different department of PG students

The participants included from 8 different academic departments: education, commerce, sociology, political science, philosophy, history, Sanskrit, and mathematics.

2. Academic Resilience among Postgraduate Students

Table 1. Level of Academic Resilience among Postgraduate Students Male Students

Male Students	Range of Raw Score	Level of Academic Resilience
5 (10%)	181 above	Extremely High
12 (24%)	161-180	High
27 (54%)	141-160	Average/ Moderate
6 (12%)	121-140	Low
0	120 and below	Extremely Low
Total=50		

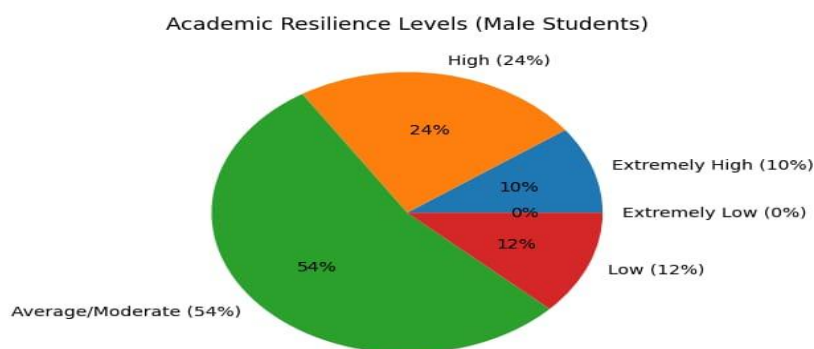


Fig. 2. Academic resilience level (male students)

The data presented in Table 1 shows the level of academic resilience among male postgraduate students. Out of a total of 50 male students, 5 students (10%) fall under the category of extremely high academic resilience, indicating a very strong ability to cope with academic challenges. A total of 12 students (24%) is in the high resilience category, showing good adaptability and persistence in their studies. The majority of the male students, 27 (54%), belong to the average or moderate level, suggesting that most students possess a fair level of resilience but may require further support to enhance their coping skills. Additionally, 6 students (12%) are categorized under low academic resilience, indicating difficulty in

handling academic stress and challenges. Notably, none of the male students fall into the extremely low category.

Table 2. Level of Academic Resilience among Postgraduate Students Female Students

Female Students	Range of Raw Score	Level of Academic Resilience
8 (16%)	181 above	Extremely High
15 (30%)	161-180	High
21 (42%)	141-160	Average/ Moderate
4 (8%)	121-140	Low
2 (4%)	120 and below	Extremely Low
Total=50		

Academic Resilience Levels (Female Students)

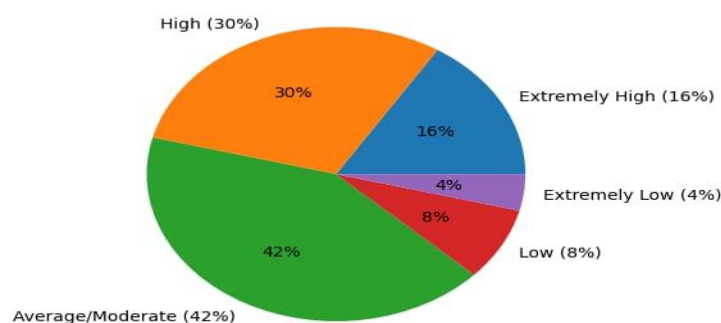


Fig. 3. Academic resilience levels (female students)

The data presented in Table 2 the distribution of academic resilience among female postgraduate students. A majority of the female students (42%) fall under the average/moderate level, indicating a moderate ability to cope with academic challenges. About 30% of the students exhibit a high level of academic resilience, while 16% demonstrate an extremely high level, reflecting strong coping skills and adaptability. On the lower side, 8% of the students are categorized under low resilience, and only 4% fall under the extremely low category, suggesting that very few female students struggle significantly with academic stress.

Generally, the data indicates that most female students possess moderate to high levels of academic resilience, which is a positive sign for their academic adjustment and performance.

3. Academic Performance among Postgraduate Students

Table 3. Level of Academic Performance among Postgraduate Male Students

No of Students	Percentage (%)	Marks Range (%)	Group Level
16	32 %	75-100	High Performers
24	48%	50-74	Average Performers
10	20%	Below 50	Low Performers
Total=50	100%		

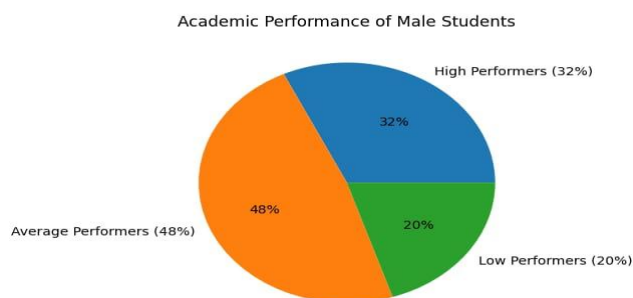


Fig. 4. Academic performance of male students

The above table 3 presents the distribution of academic performance among male postgraduate students. A majority of the male students (48%) fall under the average performance category, indicating that most students have moderate academic achievement. About 32% of the students are classified as high performers, showing a good level of academic success. However, 20% of the students fall under the low performance category, suggesting that a considerable proportion of male students are struggling academically.

Table 4. Level of Academic Performance among Postgraduate Female Students

No of Students	Percentage (%)	Marks Range (%)	Group Level
18	36 %	75-100	High Performers
20	40%	50-74	Average Performers
12	24%	Below 50	Low Performers
Total=50	100%		

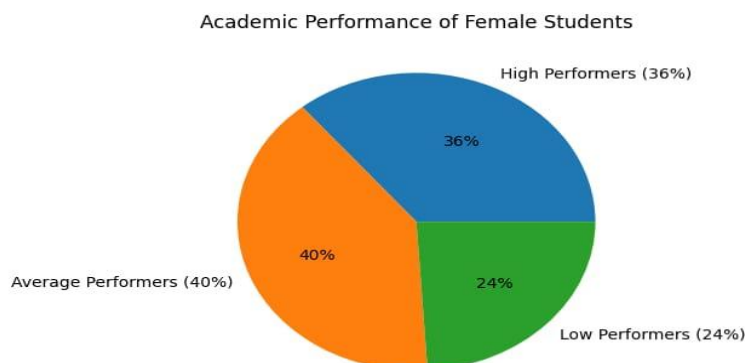


Fig. 5. Academic performance of female students

The above table-4 shows the distribution of academic performance among female postgraduate students. A majority of the students (40%) fall under the average performance category, indicating a moderate level of academic achievement. About 36% of the students are categorized as high performers, reflecting a relatively strong academic standing among a considerable proportion of female students. However, 24% of the students fall under the low performance category, suggesting that nearly one-fourth of the female students face academic difficulties.

4. Correlation between Academic Resilience and Academic Performance of Post-Graduate Students

Table-5 The Correlation Between Academic Resilience and Academic Performance

Variable	N	Pearson's Correlation	df	P-Value	Remarks (0.05 Level)
Academic Resilience	100	0.62	98	0.001	Significant
Academic Performance	100				

Table 5 presents the relationship between academic resilience and academic performance using Pearson's correlation coefficient. The analysis was conducted on a sample of 100 respondents, yielding a correlation coefficient (r) of 0.62 with 98 degrees of freedom. This value indicates a moderately strong positive relationship between academic resilience and academic achievement. Furthermore, the computed p -value of 0.001 is less than the 0.05 level of significance, indicating that the relationship is statistically significant. This result leads to the rejection of the null hypothesis, which states that there is no significant relationship between academic resilience and academic performance.

The analysis and interpretation of data collected to examine academic resilience and academic performance among postgraduate students. The data were analysed using appropriate statistical techniques such as percentage analysis and Pearson's product moment correlation. The analysis revealed that the majority of postgraduate students possess moderate to high levels of academic resilience, indicating their ability to cope effectively with academic challenges. When compared on the basis of gender, both male and female students showed similar patterns of resilience, with most of the students falling in the average and high categories. With regard to academic performance, the findings indicated that a large proportion of both male and female students fall under the average performance category, followed by high performers, while a smaller percentage of students were categorized as low performers.

The comparison between male and female students showed no major difference in their levels of academic resilience and performance. Higher resilience is associated with better academic achievement. There exists a moderate positive and statistically significant relationship ($r = 0.62$) between academic resilience and academic performance. Further, the relationship between academic resilience and academic performance was examined using Pearson's product moment correlation. The results indicated a moderate positive correlation, suggesting that students with higher academic resilience tend to achieve better academic performance. The obtained p -value was less than the 0.05 level of significance, indicating that the relationship is statistically significant.

Therefore, the null hypothesis reporting that there is no significant relationship between academic resilience and academic performance was rejected. Correlation analyses conducted in the current study unveiled significant relation between academic resilience and both academic commitment and academic performance. Future studies should also look into possible moderating and mediating factors like motivation, emotional intelligence, social support, self-efficacy, stress management and learning techniques. This observed pattern concurred with the findings of Ononye et al. (2022) which indicated a positive correlation between academic resilience and academic performance. The congruence in results across these studies supports the notion that academic resilience may play a pivotal role in influencing students' academic outcomes (Yang & Wang, 2021). Students with higher resilience are better able to overcome obstacles and persist through academic challenges,

contributing to improved academic performance (Yaure et al. 2021). The present findings are consistent with Au et al. (2023), who reported that resilience was a significant predictor of psychological well-being among university students and highlighted its important role in supporting positive academic functioning.

The findings of this study provide important implications for educational practice, particularly regarding the development of students' academic resilience as an essential factor in improving academic performance and supporting holistic educational outcomes. The results highlight that educational institutions should not focus solely on students' cognitive development but should also prioritize the cultivation of emotional, psychological, and social competencies that enable students to effectively manage academic challenges and pressures.

In this context, higher education institutions should design learning environments and support programs that actively promote resilience development among students. Students need to be encouraged to strengthen essential resilience-related competencies, including effective time management, problem-solving skills, self-discipline, emotional regulation, adaptability, and positive thinking. These competencies can assist students in managing academic stress, responding constructively to failure, and maintaining motivation throughout their educational journey.

Furthermore, the findings emphasize the critical role of educators in fostering academic resilience. Teachers and academic staff should create supportive, inclusive, and learner-centered environments where students feel valued, motivated, and psychologically secure. Through effective mentoring, constructive feedback, and encouragement, educators can help students develop confidence and persistence in overcoming academic difficulties.

The development of academic resilience should therefore be considered an integral component of educational strategies, as it contributes not only to improved academic achievement but also to students' personal growth, self-confidence, adaptability, and long-term success. By integrating resilience-building initiatives into educational practices, institutions can prepare students to become more capable individuals who are able to navigate academic challenges and future professional demands effectively.

CONCLUSION

The present study aimed to examine the relationship between academic resilience and academic performance among postgraduate students, and the findings provide important insights into both variables. The analysis revealed that the majority of students demonstrated a moderate level of academic resilience, indicating that while they possess some ability to cope with academic challenges, there is still considerable scope for strengthening their adaptive skills and emotional stability. At the postgraduate level, students often face increased academic pressure, competition, and future career concerns, which may influence their capacity to remain resilient under stress.

In terms of academic performance, most students were found to be in the average to above-average category, reflecting a generally satisfactory level of achievement. However, the presence of students with lower performance suggests that not all individuals are equally capable of managing academic demands effectively. In conclusion, the present study clearly establishes that academic resilience is an important factor influencing the academic performance of postgraduate students. The results indicate that students who possess higher levels of resilience are better able to manage academic stress, overcome difficulties, and maintain consistent performance in their studies. The moderate level of resilience observed

among students suggests that while they have some ability to cope with challenges, there is still significant scope for improvement. The positive relationship between academic resilience and academic performance confirms that strengthening resilience can directly contribute to better educational outcomes.

This study also emphasizes the importance of educational institutions adopting holistic approaches to student development by addressing not only academic growth but also emotional and psychological well-being. By nurturing academic resilience, students become more confident, adaptable, and self-motivated learners who can overcome challenges effectively. Therefore, it can be concluded that academic resilience is not merely a supportive factor but an essential determinant of academic success in higher education. Enhancing this quality among students can lead to improved academic achievement, lower stress levels, and better preparedness for future academic and professional challenges.

LIMITATIONS AND FUTURE RESEARCH RECOMMENDATIONS

This study has several limitations that should be considered when interpreting the findings. First, the research was conducted within a specific geographical and institutional context, namely public vocational high schools in Mataram City. Therefore, the findings may not fully represent the conditions of vocational education institutions in other regions with different educational policies, organizational cultures, socioeconomic backgrounds, and management practices. Future studies are recommended to expand the research setting by involving vocational schools from various regions to improve the generalizability of the findings.

Second, this study focused primarily on two main factors influencing education quality, namely principals' managerial competence and teacher performance. Although these variables provide important insights into educational quality improvement, other potential determinants, such as school organizational culture, teacher motivation, learning facilities, digital technology adoption, student engagement, and collaboration with industry partners, were not examined comprehensively. Future research may develop a broader analytical model by incorporating additional internal and external factors that contribute to sustainable improvement in vocational education quality.

Third, the study employed data collected from teachers as the primary respondents. Although teachers provide valuable perspectives regarding leadership practices and educational performance, relying on a single group of respondents may limit the diversity of perspectives. Future research could adopt a multi-stakeholder approach by involving school principals, students, parents, industry partners, and education policymakers to obtain a more comprehensive understanding of factors affecting educational quality.

Fourth, the cross-sectional design of this study limits the ability to capture changes in principals' managerial competence, teacher performance, and education quality over time. Future studies are encouraged to employ longitudinal research designs to examine the dynamic development of leadership practices and teacher professionalism and their long-term impact on educational outcomes. Future research should continue exploring integrated models of educational quality improvement by combining leadership, professional development, organizational innovation, and technological transformation perspectives. Such efforts will provide deeper insights into how vocational education institutions can develop adaptive, sustainable, and high-quality learning environments that respond effectively to future educational and labor market challenges.

REFERENCES

- Agasisti, T. et al. (2018), "Academic resilience: What schools and countries do to help disadvantaged students succeed in PISA", *OECD Education Working Papers*, No. 167, OECD Publishing, Paris. <http://dx.doi.org/10.1787/e22490ac-en>
- Allan, J and McKenna, J and Dominey, S (2013) Degrees of resilience: profiling psychological resilience and prospective academic achievement in university inductees. *British Journal of Guidance and Counselling*, 42 (1). 9 - 25. ISSN 0306-9885 DOI: <https://doi.org/10.1080/03069885.2013.793784>
- Almulla, M. A. (2023). Constructivism learning theory: A paradigm for students' critical thinking, creativity, and problem solving to affect academic performance in higher education. *Cogent Education*, 10(1), 2172929. <https://doi.org/10.1080/2331186X.2023.2172929>
- Au, A., Caltabiano, N. J., & Vaksman, O. (2023). The impact of sense of belonging, resilience, time management skills and academic performance on psychological well-being among university students. *Cogent Education*, 10(1), 2215594. <https://doi.org/10.1080/2331186X.2023.2215594>
- Ayala, J & Manzano, G (2018): Academic performance of first-year university students: the influence of resilience and engagement, *Higher Education Research & Development*, DOI: <https://doi.org/10.1080/07294360.2018.1502258>
- Catterall, J. S., *American journal of education* 106 (2), 302-333, 1998
- Cobo-Rendon, R., Perez-Villalobos, M. V., Paez-Rovira, D. & Gracia-Leiva, M. (2020). A longitudinal study: Affective wellbeing, psychological wellbeing, self-efficacy and academic performance among first-year undergraduate students. *Scandinavian Journal of Psychology*.
- Cranny, C. J., Smith, P. C., & Stone, E. F. (1992). Job satisfaction.
- Grace, W. M., Lusiani Larasati Simanjuntak, J., Hanafitri, A., & Witriani. (2022). Resilience process in Bidikmisi students: understanding risk, protective and promotive factor, and resilient outcome. *Cogent Education*, 9(1). <https://doi.org/10.1080/2331186X.2022.2143616>
- Honick, T., Broadbent, J., & Fuller-Tyszkiewicz, M. (2023). The self-efficacy and academic performance reciprocal relationship: the influence of task difficulty and baseline achievement on learner trajectory. *Higher Education Research & Development*, 42(8), 1936–1953. <https://doi.org/10.1080/07294360.2023.2197194>
- Martin, A.J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43, 267-282. DOI: <https://doi.org/10.1002/pits.20149>
- Mercer, S. H., Nellis, L. M., Martínez, R. S., Kirk, M. (2011). *Journal of school psychology* 49 (3), 323-338, 2011
- Ononye, U., Ogbeta, M., Ndudi, F., Bereprebofa, D., & Maduemezia, I. (2022). Academic resilience, emotional intelligence, and academic performance among undergraduate students. *Knowledge and Performance Management*, 6(1), 1–10. [https://doi.org/10.21511/kpm.06\(1\).2022.01](https://doi.org/10.21511/kpm.06(1).2022.01)
- Richardson et al., (1990). The Resiliency Model. *Health Education*, 21(6), 33-39.
- Romano, L., Angelini, G., Consiglio, P., & Fiorilli, C. (2021). Academic resilience and engagement in high school students: The mediating role of perceived teacher

- emotional support. *European Journal of Psychology of Education*, 36, 741-758. <https://doi.org/10.1007/s10212-020-00501-9>
- Sun, Y., & Liu, L. (2023). Structural equation modelling of university students' academic resilience academic well-being, personality and educational attainment in online classes with Tencent Meeting application in China: Investigating the role of student engagement. *BMC Psychology*, 11(1), 1–18. <https://doi.org/10.1186/s40359-023-01366-1>
- Viljoen, B. (2015). The relationship between academic commitment and resilience for education students at the University of Pretoria [Master's thesis]. University of Pretoria.
- Yang, S., & Wang, W. (2022). The role of academic resilience, motivational intensity and their relationship in EFL learners' academic achievement. *Frontiers in Psychology*, 12, Article 823537. <https://doi.org/10.3389/fpsyg.2021.823537>
- Yaure, R, G., et al (2021). How grit and resilience predict successful academic performance. *Journal of Access, Retention, and Inclusion in Higher Education*, 3(1). <https://digitalcommons.wcupa.edu/jarihe/vol3/iss1/6>
- Zong, Y., & Yang, L. (2025). How AI-enhanced social–emotional learning framework transforms EFL students' engagement and emotional well-being. *European Journal of Education*, 60, e12925. <https://doi.org/10.1111/ejed.12925>