

Research Paper

Demographic Predictors of Academic Buoyancy: Exploring the Role of Gender, Stream and Language

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ABSTRACT

Demographics play a significant role in understanding and enhancing academic buoyancy which refers to students' ability to cope with everyday academic challenges. This study examined how demographic factors such as gender, stream and medium of language influences academic buoyancy levels among secondary and senior secondary school students. 400 students (200 Boys and 200 Girls) were selected as sample for study from different schools of Patna. Academic Buoyancy scale developed by Aqil, Khan and Panjwani and personal data blank developed by researcher were used for data collection. Results showed that there was significant difference between male and female school students on the level of academic buoyancy and its six dimensions academic clarity, composure, academic climate, academic confidence, academic commitment, and self- control, but not significant difference were found on the level of academic co-ordination. As well as result indicated that students of science stream shows higher self-control as compare to students of arts stream that is only one dimension of academic buoyancy and results also revealed that the significant differences were found on Academic Co-ordination, Academic Clarity, Academic Confidence, Academic Commitment and Academic Buoyancy among English and Hindi medium students but not any differences were found on other dimensions such as Composure, Academic Climate, and Self- Control. The study concludes that demographic variables play a significant role in shaping students' academic coping skills, and tailored interventions are needed to support those from disadvantaged backgrounds.

Keywords: *Academic buoyancy, gender, stream, medium of language, secondary and senior secondary school students*

Unlike academic resilience, which pertains to overcoming major adversities, academic buoyancy addresses the minor but recurring academic setbacks. This study explores the relationship between academic buoyancy and key demographic variables, including gender, stream (science and arts), medium of language, to better understand how these factors influence students' ability to cope with routine academic stress. In educational psychology, academic buoyancy has emerged as a significant construct linked to academic performance, motivation, and well-being. Academic buoyancy refers to students' capacity to successfully deal with everyday academic challenges such as exam pressure, assignment

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deadlines, and poor grades (Martin & Marsh, 2006). It includes students' ability to overcome challenges that negatively impact their educational progress. Generally, "it reflects more of an everyday academic resilience and it is distinct from the more traditional academic resilience construct" (Martin & Marsh, 2008a). Academic resilience is mainly concerned with the relevance of resilience in educational settings (Cassidy, 2016). Martin and Marsh (2008), who coined the term, emphasized that while resilience is about bouncing back from significant challenges, buoyancy concerns students' everyday academic life. Academic buoyancy is considered more appropriate in describing students' capacity through their toughness in facing everyday obstacles and challenges in school. The significance of academic buoyancy in academic success is noteworthy, as it plays a crucial role in a student's ability to effectively cope with the challenges inherent in academic life. Academic buoyancy entails the capacity to rebound from setbacks, adapt to difficulties, and maintain a positive outlook.

Gender is an important demographic factor in academic buoyancy because it can influence how students experience, interpret and respond to academic challenges. The academic stream or field of study (science and arts) is another key demographic factor that influences academic buoyancy because different streams come with unique challenges, expectations and learning environment. As well as medium of language (Hindi and English) used for instruction is a significant demographic factor affecting academic buoyancy, especially in multilingual and diverse education systems. Understanding how demographic variables impact academic buoyancy can inform interventions aimed at promoting adaptive coping mechanisms in diverse student populations.

LITERATURE REVIEW

Many studies conducted to explore the relationship of academic buoyancy and gender but there is lack of study in context of stream and medium of language and academic buoyancy. This study will try to explore how these factors influence academic buoyancy. Martin and Marsh (2006, 2008) found no major gender differences in overall academic buoyancy, but girls tended to be more organized and committed, while boys scored higher on confidence and composure. Implies gender may influence specific dimensions of buoyancy differently.

Putwain, Connors, and Symes (2010) Showed that academic buoyancy mitigates the impact of anxiety, and gender moderated these effects. Girls often reported higher anxiety, but academically buoyant girls managed pressure better than non-buoyant peers. Shastri, and Ghosh (2018) Found significant differences across academic streams: science students showed higher buoyancy, possibly due to more competitive environments. Medium of instruction (English vs. vernacular) also influenced buoyancy levels, with English-medium students showing higher buoyancy, attributed to greater access to resources and self-confidence.

Choudhary and Yadav (2020) Science students had the highest academic buoyancy, followed by commerce and arts. Girls were more committed, whereas boys showed higher confidence and emotional control, mirroring Martin & Marsh's findings. Ganie and Bhat (2021) English-medium students scored significantly higher in buoyancy across all dimensions. Gender differences were present but less pronounced when controlling for language and school type. Sharma and Mehta (2022) Urban students (often English-medium) showed higher buoyancy, possibly due to better infrastructure and academic

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support. Girls from urban settings outperformed boys in overall buoyancy, but this pattern reversed in rural areas.

Objectives

- To find out gender difference in academic buoyancy and its dimensions among school students.
- To find out difference between students of different stream (science and arts) on academic buoyancy and its dimensions among school students.
- To examine the effect of medium of language (Hindi and English) on academic buoyancy and its dimensions among school students.

Hypotheses

- **H1:** There would be significant differences between boys and girls school students in academic buoyancy and its dimensions.
- **H2:** There would be significant differences between students of science and arts stream in academic buoyancy and its dimensions.
- **H3:** There would be significant differences between students of Hindi medium and English medium in academic buoyancy and its dimensions.

METHODOLOGY

A comparative study was conducted with a sample of 400 secondary and senior secondary school students (ages 14–18) from different schools of Patna. Academic Buoyancy scale was developed by Aqil, Khan and Panjwani (2020). It is used to measure learners' to face challenges and difficulties that are regular in nature under educational settings and environment. It consists of 27 items in which twelve items are reversed scores. It is a self report measure and includes total seven dimensions of Academic Buoyancy that is - A. Academic Co-ordination B. Academic Clarity C. Composure D. Academic Climate E. Academic Confidence F. Academic Commitment G. Self-Control. The Academic Buoyancy scale has shown good internal consistency ($\alpha=0.80$). Demographic data were collected through personal data Blank. Statistical analysis including t-tests was used to comparison among demographic factors on the level of academic buoyancy and its dimensions.

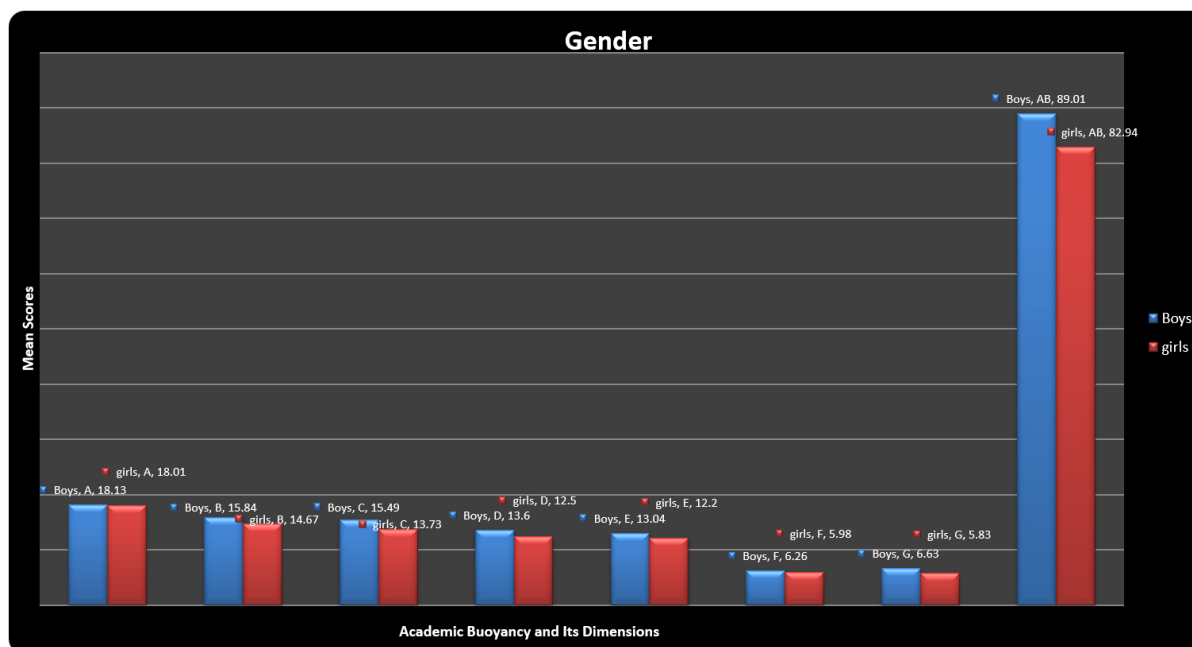
RESULTS

Table – 1 Significance of difference between the mean scores of boys and girls in academic buoyancy and its dimensions

| Criterion variable | Boys (N=200) | | Girls (N=200) | | t | p |
|------------------------|--------------|-------|---------------|-------|------|------|
| | M | SD | M | SD | | |
| Academic Co-ordination | 18.13 | 3.24 | 18.01 | 2.88 | .37 | NS |
| Academic Clarity | 15.84 | 3.63 | 14.67 | 2.93 | 3.53 | <.01 |
| Composure | 15.49 | 3.54 | 13.73 | 2.81 | 5.52 | <.01 |
| Academic Climate | 13.60 | 3.57 | 12.50 | 3.47 | 3.10 | <.01 |
| Academic Confidence | 13.04 | 2.19 | 12.20 | 2.10 | 3.90 | <.01 |
| Academic Commitment | 6.26 | 1.12 | 5.98 | .76 | 2.96 | <.01 |
| Self-Control | 6.63 | 1.33 | 5.83 | 1.29 | 6.12 | <.01 |
| Academic Buoyancy | 89.01 | 15.96 | 82.94 | 13.83 | 4.06 | <.01 |

**p<.01

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Note: A- Academic Co-ordination, B – Academic Clarity, C- Composure, D – Academic Climate, E – Academic Confidence, F- Academic Commitment, G- Self- Control, AB- Academic Buoyancy

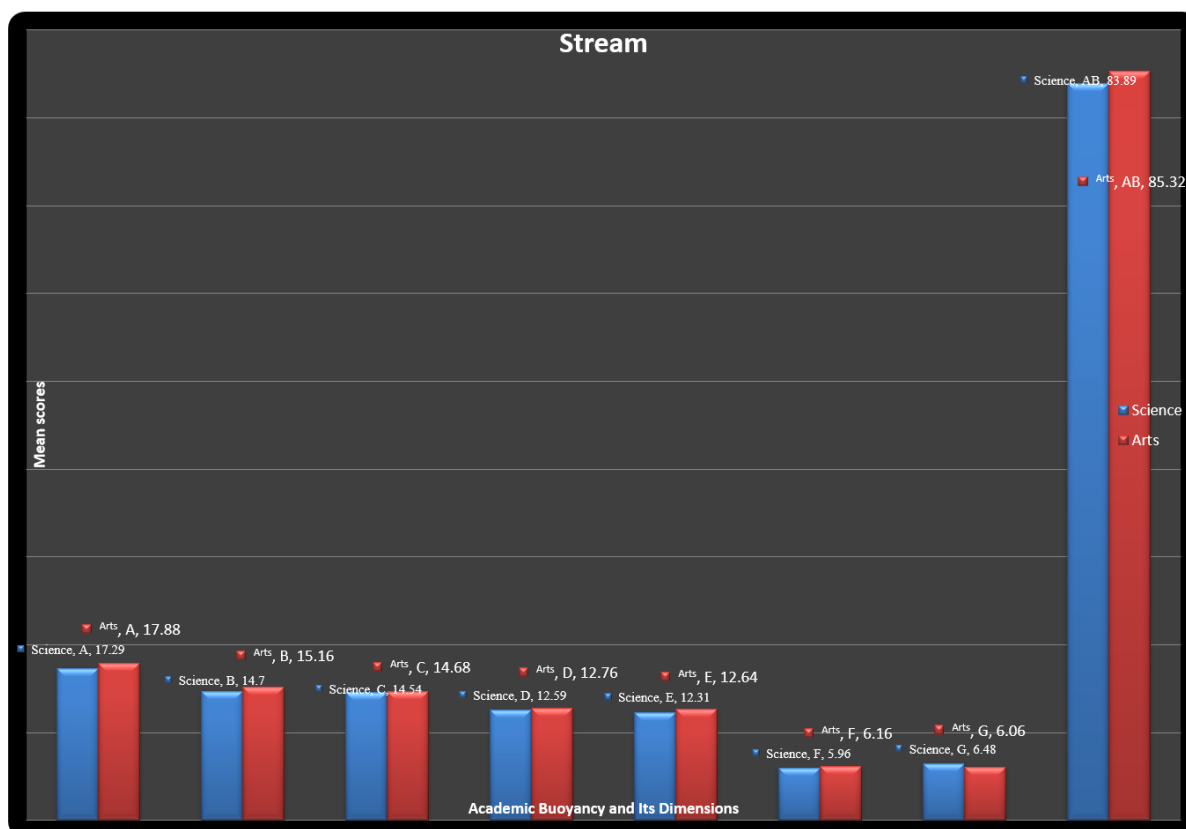
The t-ratio was computed to observe the significance of differences of the mean score of boys and girls in academic buoyancy and its seven dimensions (academic co-ordination, academic clarity, composure, academic climate, academic confidence, academic commitment, and self-control) in table 1. The results are presented in table 1 suggest that the mean scores of boys ($m=89.01$) and girls ($m=82.94$) significantly differ on academic buoyancy ($t= 4.06$, $P<.01$). Similarly mean scores of boys and girls showed significant differences in six dimensions of academic buoyancy like academic clarity ($t= 3.53$, $P<.01$), composure ($t= 5.52$, $P<.01$), academic climate ($t= 3.10$, $P<.01$), academic confidence ($t= 3.90$, $P<.01$), academic commitment ($t= 2.96$, $P<.01$), and self-control ($t= 6.12$, $P<.01$). But in case of academic co-ordination, significant differences were not found between boys and girls. In other words, higher mean scores in case of boys indicated that they have more academic buoyancy than girl students.

The first objective of the present research was to find out gender difference in academic buoyancy. It was hypothesized that there would be significant difference between male and female school students in academic buoyancy and its dimensions. The result table 1 revealed that there was significant difference between male and female school students on the level of academic buoyancy and its six dimensions academic clarity, composure, academic climate, academic confidence, academic commitment, and self- control, but not significant difference were found on the level of academic co-ordination. Boys are more academically buoyant than girls, according to the results. Boys may be perceived as having greater academic buoyancy than girls because they are socialized to display confidence, aggressiveness, and perseverance in the face of adversity. Additionally, when presented with academic problems, males and girls may use different coping mechanisms. Compared to girls, boys may be more likely to seek out or be orientated towards social support, which can increase their resilience.

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Table 2 Significance of difference between the mean scores of students of science stream and arts stream in academic buoyancy and its dimensions

| Criterion variable | Science stream (N=200) | | Arts stream (N=200) | | t | p |
|------------------------|------------------------|-------|---------------------|-------|------|------|
| | M | SD | M | SD | | |
| Academic Co-ordination | 17.29 | 3.69 | 17.88 | 2.97 | 1.50 | NS |
| Academic Clarity | 14.70 | 3.39 | 15.16 | 3.40 | 1.14 | NS |
| Composure | 14.54 | 3.40 | 14.68 | 3.65 | .21 | NS |
| Academic Climate | 12.59 | 3.54 | 12.76 | 3.79 | .39 | NS |
| Academic Confidence | 12.31 | 2.19 | 12.64 | 2.34 | 1.22 | NS |
| Academic Commitment | 5.96 | 1.16 | 6.16 | .95 | 1.61 | NS |
| Self-Control | 6.48 | 1.33 | 6.06 | 1.55 | 2.34 | <.05 |
| Academic Buoyancy | 83.89 | 15.47 | 85.32 | 16.37 | .75 | NS |



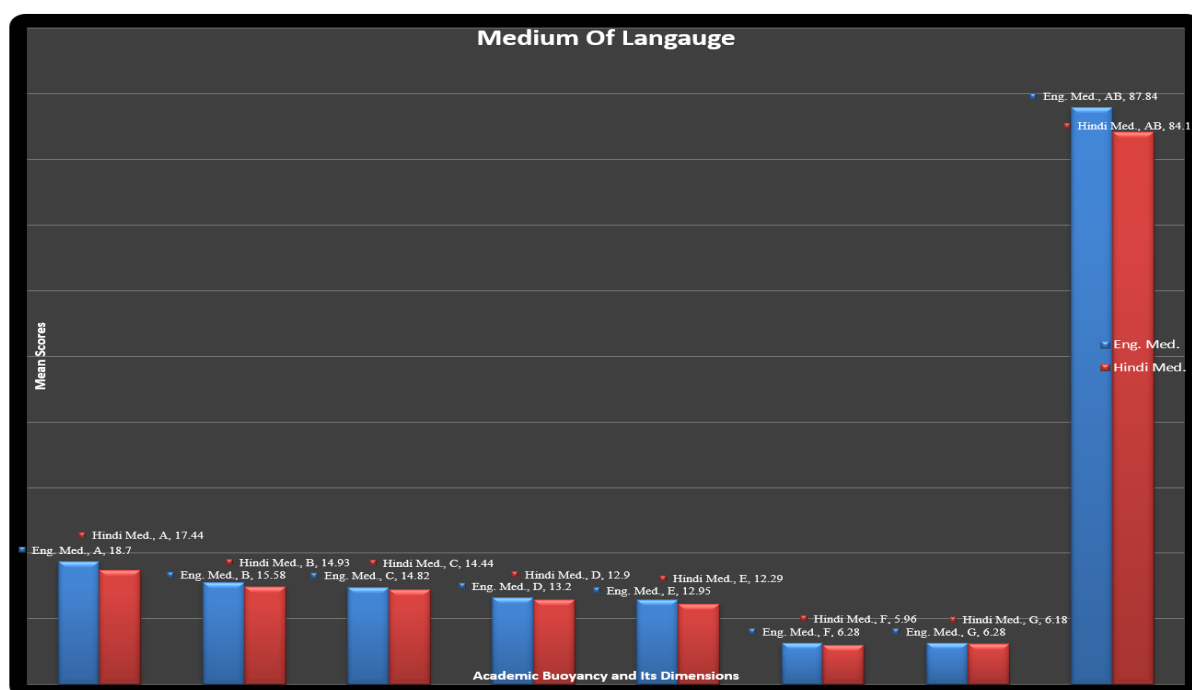
The table 2 records the significance of difference of the mean scores of students of science stream ($m = 6.48$) and arts stream ($m = 6.06$) on only one dimension of academic buoyancy that is self-control ($t = 2.34$, $p < .05$). On the other side, there is no significant difference were found between students of science stream and arts stream on other dimensions like academic co-ordination, academic clarity, composure, academic climate, academic confidence, academic commitment, and academic buoyancy. Results show that students science stream have more self-control than students of arts stream. Table further indicates that except self- control (one of the dimensions of academic buoyancy), there were no significant differences in students of science stream and arts stream on academic co-ordination, academic clarity, composure, academic climate, academic confidence, academic commitment, as well as academic buoyancy overall.

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The second objective of the present research was to find out the differences between students of science and arts stream on the level of academic buoyancy. It was hypothesized that there would be significant differences between students of science and arts stream in academic buoyancy and its dimensions. The result table 2 indicated that students of science stream show higher self-control as compare to students of arts stream that is only one dimension of academic buoyancy. A number of criteria could support the notion that students in the science and arts streams may not differ significantly in terms of academic buoyancy and its dimensions: Students in the arts and sciences can be just as driven and engaged in their chosen subjects. Even though they may pursue different academic goals, people in both streams may be resilient and persistent in the face of adversity. Teachers are essential in helping their kids become more buoyant academically. Teachers of the arts and sciences can use tactics to promote perseverance and resilience, which will help both streams achieve comparable levels of academic buoyancy.

Table -3 Significance of difference between the mean scores of students of Hindi and English medium in academic buoyancy and its dimensions

| Criterion variable | English medium (N=200) | | Hindi medium(N=200) | | t | p |
|------------------------|------------------------|-------|---------------------|-------|------|-------|
| | M | SD | M | SD | | |
| Academic Co-ordination | 18.70 | 2.40 | 17.44 | 3.88 | 4.44 | <.01 |
| Academic Clarity | 15.58 | 3.30 | 14.93 | 3.36 | 1.96 | <.05 |
| Composure | 14.82 | 3.23 | 14.40 | 3.38 | 1.28 | NS |
| Academic Climate | 13.20 | 3.53 | 12.90 | 3.58 | .86 | NS |
| Academic Confidence | 12.95 | 1.81 | 12.29 | 2.46 | 3.04 | <.01 |
| Academic Commitment | 6.28 | .78 | 5.96 | 1.10 | 3.39 | <.001 |
| Self-Control | 6.28 | 1.27 | 6.18 | 1.47 | .69 | NS |
| Academic Buoyancy | 87.84 | 14.58 | 84.11 | 15.64 | 2.47 | <.05 |



Note: A- Academic Co-ordination, B – Academic Clarity, C- Composure, D – Academic Climate, E – Academic Confidence, F- Academic Commitment, G- Self- Control, AB- Academic Buoyancy

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The t-ratio was computed to observe the significance of differences of the mean score of academic buoyancy and its seven dimensions between students of English medium and Hindi medium in table 3. The results are presented in table 3 suggest that the mean scores of boys ($m= 87.84$) and girls ($m= 84.11$) significantly differ on academic buoyancy ($t=2.47$, $P<.05$). In other words higher mean scores in case of students of English medium indicate that they have more academic buoyancy as compare to students of Hindi medium. In case of other areas i.e. academic co-ordination ($t= 4.44$, $P<.01$), academic clarity ($t= 1.96$, $P<.05$), academic confidence ($t= 3.04$, $P<.01$), academic commitment ($t= 3.39$, $P<.01$). On the other side, the mean scores did not differ significantly between students of English medium and Hindi medium on composure, academic climate and self-control.

The third objective of the present research was to examine the effect of medium of language on academic buoyancy among students of English medium and Hindi medium schools. It was hypothesized that there would be significant differences between students of Hindi medium and English medium in academic buoyancy and its dimensions. The result table 3 revealed that the significant differences were found on Academic Co-ordination, Academic Clarity, Academic Confidence, Academic Commitment and Academic Buoyancy but not any differences were found on other dimensions such as Composure, Academic Climate, and Self- Control. There are a number of reasons to support the claim that English-medium students may be more academically buoyant than Hindi-medium students. English is frequently regarded as the academic and international communication language. A greater variety of educational resources, such as academic literature, online resources, and textbooks, may be available to students who speak English well. English-medium pupils may be more academically buoyant as a result of this improved access to resources.

DISCUSSION

Findings suggest that academic buoyancy is not uniform across all student groups, stream and medium of language. While internal factors like motivation and personality are central to buoyancy, external demographic factors exert a noteworthy influence. For instance, significant difference were found in male and female school students on the level of academic buoyancy and its six dimensions as well as students of science stream shows higher self-control as compare to students of arts stream that is only one dimension of academic buoyancy students. Results shows that English-medium students may be more academically buoyant than Hindi-medium students. Educators should be mindful of these disparities and work to create supportive environments that bolster buoyancy through mentoring, skill-building workshops, and emotional support services.

CONCLUSION

Academic buoyancy is a critical psychological resource that enhances student success and well-being. This study highlights the impact of demographic variables on students' ability to navigate academic setbacks. Tailored interventions that account for gender, stream and medium of language are essential for fostering buoyancy in diverse educational settings.

REFERENCES

- Choudhary, S., & Yadav, R. (2020). Gender and academic stream differences in academic buoyancy among senior secondary students. *Indian Journal of Positive Psychology*, 11(4), 377–381.

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- Ganie, S. A., & Bhat, R. A. (2021). Academic buoyancy among secondary school students in relation to medium of instruction and gender. *The International Journal of Indian Psychology*, 9(1), 971–978. <https://doi.org/10.25215/0901.101>
- 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>
- Putwain, D. W., Connors, L., & Symes, W. (2010). Do cognitive distortions mediate the test anxiety–academic performance relationship? *Educational Psychology*, 30(1), 11–26. <https://doi.org/10.1080/01443410903326055>
- Sharma, N., & Mehta, P. (2022). A comparative study of academic buoyancy in students of urban and rural schools. *Journal of Educational Research and Development*, 13(1), 25–32.
- Shastri, R., & Ghosh, S. (2018). Academic buoyancy and its relation with demographic variables in Indian school students. *International Journal of Education and Psychological Research*, 7(2), 54–59.

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Conflict of Interest

The author(s) declared no conflict of interest.

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