

# Exploring Determinants Of Self-Efficacy In University Students: A Critical Analysis

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# ARTICLE INFO ABSTRACT

Self-efficacy is a person's belief in their ability to accomplish tasks and achieve goals effectively. Self-efficacy in higher education relates to students' belief in their capacity to complete academic activities and attain desired objectives. It refers to their confidence in their talents, knowledge, and ability to overcome obstacles in their academic career. In this present study cross-sectional survey research design and general self-efficacy scale implemented on 211 higher education students belongs to various universities of West Bengal. The main aim of this study was to know the preseant status of self-efficacy of higher education students of West Bengal. Results of this research shown that gender and habitat not play a significant role and the other side family type, caste and stream of study plays significant role in the self-efficacy of higher education students in West Bengal.

**Keywords:** Self-efficacy, University Students, Critical Analysis, Social Persuasion, West Bengal

# **Introduction :**

Individuals' perceptions of their own effectiveness can be shaped by four primary influences: experiences of mastery, vicarious experiences modeled by social models, social persuasion, and somatic and emotional states. Experiences of mastery foster a strong sense of self-efficacy, whereas failures erode it, particularly if they transpire before establishing said sense of self-efficacy. A sense of resolute effectiveness necessitates prior experience surmounting challenges through persistent endeavor; setbacks and hardships impart the understanding that achievement typically demands ongoing dedication. Pajares et. 1 (2007) highlight that mastery experience, social persuasions, and anxiety significantly influence students' self-efficacy beliefs, with mastery experience accounting for the majority of the variance.

Schunk (1989) asserts that social models and social comparative information aid students in comprehending and executing achievement-related behaviors, thereby enhancing their self-efficacy. Social models also play a role in strengthening self-beliefs of efficacy. Individuals actively pursue accomplished role models who exhibit the skills and knowledge they wish to acquire, impart effective methods and approaches for handling environmental pressures. Developing one's abilities increases one's perceived self-efficacy.

Social persuasion serves as an additional method to reinforce individuals' convictions in their ability to achieve success. Social persuasion influences perceived self-efficacy, motivation, and learning. According to Schunk (2003), individuals who are confident in their abilities are more likely to exert effort and maintain it when faced with challenges. Enhancing one's perception of self-efficacy through persuasive means motivates individuals to exert sufficient effort in order to achieve success, hence fostering the acquisition of skills and a strong belief in one's own abilities.

But it is harder to bring down someone's high sense of self-efficacy through social influence alone than it is to raise it. When your efforts don't yield the results you were hoping for, you quickly realise that your boost in effectiveness wasn't real. Effective efficacy builders do more than just give people good feedback; they also set up situations in a way that helps people succeed and avoid putting them in situations where they are likely to fail a lot too soon.Lucas et al. (2006) found that individuals with high self-efficacy tend to be more independent of social influence in high problem-difficulty situations.

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Self-efficacy is a critical component of a person's ability to deal with stress and achieve desired results. It is impacted by bodily and emotional states, with pleasant moods increasing self-efficacy and negative moods decreasing it. Individuals can lessen stress reactions, change unfavorable emotional tendencies, and misunderstand physical states to shift their efficacy beliefs. Physiological efficacy markers are important in both health and sports performance. Perceived general self-efficacy is linked to happiness, self-control, and self-esteem, and it is linked to sadness and anxiety in a bad way. '(Luszczynska, A., Gutiérrez-Doña, B., & Schwarzer, R.2005)'. In Albert Bandura's multidimensional concept of self-efficacy, the domain of demands determines the level of assessment. Low self-efficacy can lead to sadness, anxiety, and helplessness, whereas high self-efficacy helps people achieve challenging tasks. High self-efficacy improves well-being, stress management, self-esteem, physical health, sickness adaptation, and recovery. Negative self-efficacy increases anxiety, depression, and subjective well-being.

# Rationale of the Study -

Student self-efficacy, a crucial aspect of educational psychology, directly impacts academic performance, motivation, and well-being among university students. Bandura's social cognitive theory suggests that personal beliefs shape behavior and performance. High self-efficacy individuals approach challenging tasks with confidence and perseverance, while those with low self-efficacy may experience self-doubt and avoidant behaviors. In university education, academic experiences, peer support, mentoring relationships, familial expectations, institutional support structures, and individual differences interact with contextual factors to shape self-efficacy. This critical analysis aims to address gaps in existing research by synthesizing empirical evidence, highlighting methodological limitations, and proposing future research avenues. The ability to undertake tailored interventions to improve the academic achievement and well-being of students is made possible by educators and policymakers who have a thorough understanding of these issues.

## **Knowledge Gap:**

The study of student self-efficacy in university contexts is a critical area of research in educational psychology and pedagogy. However, there are significant knowledge gaps in assessing self-efficacy levels among university students across diverse socioeconomic and demographic variables. Existing literature acknowledges the influence of factors like gender, habitat, family type, social category, and academic stream on self-efficacy. However, comprehensive research is needed to examine the variability of these variables and their interplay with self-efficacy. Addressing this knowledge gap is crucial for developing evidence-based interventions and policies promoting student success and well-being in higher education.

# **Objectives**

1. To assess self-efficacy levels among university students.

2. To understand the variability of several socioeconomic and demographic variables, including gender, Habitant, family type, social category, and stream

#### Hypothesis of the study

Ho1: University students do not differ significantly by gender.

Ho2: University students do not differ a lot relative to their habitat.

Ho3: University students do not differ significantly based on their family type.

Ho4: University students do not differ significantly based on their social category.

Ho5: University students do not vary significantly by stream.

# **Methods and Materials**

The study used a cross-sectional method and simple sampling to analyze 211 university students from West Bengal. The assessment of self-efficacy was carried out utilizing the 'General Self-Efficacy Scale' an instrument created by 'Schwarzer, R., & Jerusalem' M. (1995). The following scale consists of ten items designed to evaluate an individual's self-perception regarding their effectiveness in different areas, such as achieving job success, improving skills, managing interpersonal interactions with students, parents, and colleagues, and coping with job-related stressors. Moreover, this measure was utilized to provide self-efficacy assessments. A Likert scale with four points was used to evaluate the participants' responses. The scale ranged from one, which indicated that the statement was not true, to four, which indicated that the statement was absolutely true. The scale utilized a continuum from 1 to 4. Item number 1 (signifying complete falsehood) Item number 4 (signifying absolute accuracy).

# **Results**

Table 1.1: Mean and standard deviation of self-efficacy of university-level students

	I.V	Mean	Std	Std error
	Male(109)	25.62	4.378	.419
Gender	Female(102)	24.38	4.205	.416
Habitat	Rural(73)	25.56	4.580	.536
	Urban (138)	24.74	4.181	.356
Family Type	Joint(93)	26.44	4.295	.445
	Nuclear(118)	23.91	4.036	.372
	Gen( 74)	24.53	3.970	.461
	SC(49)	23.31	4.519	.646
Social category	ST(10)	24.70	1.889	.597
	OBC(78)	26.62	4.283	.485
	Huminites(81)	24.30	3.995	.444
	Science(83)	23.70	3.805	.418
	Commerce(47)	28.62	3.837	.560
Stream				



Table 1.1 Shows distributions of mean scores of self-efficacy among university-level Students' based on various independent variables viz Gender, Habitant, family type, social category, and Stream. Gander's mean for males (25.62) appears slightly higher than for females (24.38). Habitat, individuals from rural areas exhibit a slightly higher mean I.V. (25.56) compared to their urban counterparts (24.74). Regarding family type, those from joint families have a higher mean I.V. (26.44) compared to nuclear families (23.91). In social categories, individuals categorized under OBC exhibit the highest mean (26.62), General (24.53), ST (24.70), and SC (23.31).In academic streams, Commerce students demonstrate the highest mean I.V. (28.62), followed by Humanities (24.30) and Science (23.70).

Table 1.2 showing t-test and ANOVA based on H01 to H05								
Categorical variable	Independent variable	Test value	Df	p-value	Remarks			
Gender	Male	2.098	209	.037	**NS			
	Female							
Habitat	Rural	1.315	209	.190	**NS			
	Urban							
Family Type	Family Type Nuclear -4.402	209	.000	*S				
	Joint							
Caste	Caste Gen 6.976	6.976	210	.000	*S			
	SC							
	ST							
	OBC							
Stream Humanities 26.333 Science 26.333	26.333	210	.000	*S				
	Science							
	Commerce							

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Table 1.2 shows that Gender and Habitat yielded p-values of 0.037 and 0.190 respectively. Both these p-values are greater than the conventional significance level of 0.05. Therefore, there is insufficient evidence to reject the null hypothesis for both Gender and Habitat. In other words, there are no statistically significant differences observed based on Gender or Habitat. The analysis of Family Type yielded a highly significant p-value of 0.000. This indicates that there are significant differences observed among individuals based on their Family Type (Nuclear or Joint). The negative test value of -4.402 suggests that individuals from Nuclear families may exhibit different characteristics or behaviors compared to those from Joint families. Similarly, the tests conducted on Caste resulted in a highly significant p-value of 0.000. This implies that there are significant differences observed among individuals belonging to different castes (Gen, SC, ST, OBC). The positive test value of 6.976 suggests that individuals from certain caste groups may have distinct characteristics compared to others. The analysis of Stream also yielded a highly significant p-value of 0.000. This indicates that there are significant differences observed among individuals based on their chosen academic streams (Humanities, Science, Commerce). The large test value of 26.333 suggests that individuals from different streams may have substantially different characteristics or preferences.

#### **Conclusion:**

The results suggest that while Gender and Habitat do not significantly influence the observed characteristics or behaviors, Family Type, Caste, and Stream exhibit significant differences among individuals. The same kind of study revealed that, after accounting for writing competence, there are no appreciable gender differences in the writing self-efficacy of elementary school pupils. (Frank Pajares et al., 1999). Also similar kind of result found that ,Self-efficacy, social skills, and emotional intelligence in high school students are not affected by their gender.. (C. Salavera et al. 2017). As with environment, students in communities did better on the posttest, The differences between the students were not statistically significant in cities and those in rural areas when it came to self-efficacy. As with environment, students in communities did better on the post-test, but Students did not differ significantly from one another in any meaningful way in cities and those in rural areas when it came to self-efficacy. (S.K. Naidoo et al.2022)Another author also found that there was no significant group differences in self-efficacy among urban community college students (Keisha V. Thompson et al.2018). Some supportive results also found various Researchers found that nuclear families with less healthy emotional systems have poorer self-efficacy and worse psychological health assessments. (Viktorija Čepukienė et al. 2020). Also some researchers found family type and gender have a significant impact on a college student's selfefficacy and emotional intelligence. A student from a nuclear family has higher self-efficacy, while a student from a joint family has higher emotional intelligence. (Vinayak M. Honmore et al.2017). Some contrary results also found some researchers concerning the educational stream that High academic self-efficacy is strongly linked to better academic success among first-year college students, especially in the science stream(Khageswar Bhati et al., 2022). Another study revealed that students majoring in the arts possessed significantly greater academic self-efficacy than those majoring in scientific technologies. (Zhang Mei et al. 2010) These findings have implications for understanding societal dynamics and could be valuable for policymakers, educators, and social scientists. For instance, understanding the impact of Family Type, Caste, and Stream on various outcomes such as education, employment, and social integration can aid in designing targeted interventions and policies aimed at promoting equality and inclusivity. Further research could delve deeper into the underlying factors contributing to these observed differences and explore potential mechanisms for addressing disparities in society.

#### **References:**

- 1. Adeyemo, D. A. (2007). Moderating influence of emotional intelligence on the link between academic selfefficacy and achievement of university students. Psychology and developing societies, 19(2), 199-213.
- 2. Alt, D. (2015). Assessing the contribution of a constructivist learning environment to academic selfefficacy in higher education. Learning Environments Research, 18, 47-67.
- 3. Bandura, A. (1997, May 13). Self-Efficacy in Changing Societies. Cambridge University Press.http://books.google.ie/books?id=JbJnOAoLMNEC&printsec=frontcover&dq=self+efficacy&hl=&c d=2&source=gbs\_api
- 4. Bartimote-Aufflick, K., Bridgeman, A., Walker, R., Sharma, M., & Smith, L. (2016). The study, evaluation, and improvement of university student self-efficacy. Studies in Higher Education, 41(11), 1918-1942.
- 5. Bhati, K., Baral, R., & Meher, V. (2022). Academic Self-Efficacy and Academic Performance among Undergraduate Students in Relation to Gender and Streams of Education. Indonesian Journal of Contemporary Education. https://doi.org/10.33122/ijoce.v4i2.35.
- 6. Calicchio, S. (2023). Albert Bandura and the self-efficacy factor: A journey into the psychology of human potential through the understanding and development of self-efficacy and self-esteem. Stefano Calicchio.
- Čepukienė, V., & Celiauskaite, S. (2020). The relationship between nuclear family emotional system and adult health: mediating and moderating role of general self-efficacy. Journal of Family Studies, 28, 678 -694. https://doi.org/10.1080/13229400.2020.1750451.

- 8. Çetin, F., & Aşkun, D. (2018). The effect of occupational self-efficacy on work performance through intrinsic work motivation. Management Research Review, 41(2), 186-201.
- 9. Duchatelet, D., & Donche, V. (2019). Fostering self-efficacy and self-regulation in higher education: a matter of autonomy support or academic motivation?. Higher Education Research & Development, 38(4), 733-747.
- 10. Emmers, E., Baeyens, D., & Petry, K. (2020). Attitudes and self-efficacy of teachers towards inclusion in higher education. European Journal of Special Needs Education, 35(2), 139-153.
- 11. Fook, C. Y., Dalim, S. F., Narasuman, S., Sidhu, G. K., Fong, L. L., & Keang, K. M. (2015). Relationship between active learning and self-efficacy among students in higher education. International Academic Research Journal of Social Science, 1(2), 139-149.
- 12. Gist, M. E., & Gist, A. (2013). Self-efficacy. Management. https://doi.org/10.1093/obo/9780199846740-0043
- 13. Honmore, V., & Jadhav, M. (2017). Self-Efficacy and Emotional Intelligence among College Youth with Respect to Family Type and Gender. Indian journal of positive psychology, 8, 587-590. https://doi.org/10.15614/ijpp/2017/v8i4/165881.
- 14. Huang, C. (2013). Gender differences in academic self-efficacy: A meta-analysis. European journal of psychology of education, 28, 1-35.
- 15. Jain, S., & Dowson, M. (2009). Mathematics anxiety as a function of multidimensional self-regulation and self-efficacy. Contemporary Educational Psychology, 34(3), 240-249.
- 16. Lucas, T., Alexander, S., Firestone, I., & Baltes, B. (2006). Self-efficacy and independence from social influence: Discovery of an efficacy-difficulty effect. Social Influence, 1, 58 80. https://doi.org/10.1080/15534510500291662.
- 17. Luszczynska, A., Gutiérrez-Doña, B., & Schwarzer, R. (2005). General self-efficacy in various domains of human functioning: Evidence from five countries. International Journal of Psychology, 40, 80-89. https://doi.org/10.1080/00207590444000041.
- 18. Maddux, J. E. (2013). Self-efficacy, adaptation, and adjustment: Theory, research, and application.
- 19. McClure, A. C., Tanski, S. E., Kingsbury, J., Gerrard, M., & Sargent, J. D. (2010). Characteristics associated with low self-esteem among US adolescents. Academic pediatrics, 10(4), 238-244.
- 20. Mei, Z. (2010). Characteristics of Self-efficacy of Higher Vocational School Students and Its Relationship with Academic Performance. Vocational and Technical Education.
- 21. Nhien, C. (2024, April 25). How Southeast Asian Students Develop Their Science Self-Efficacy During the First Year of College. The Journal of Higher Education, 1–28. https://doi.org/10.1080/00221546.2024.2339173
- 22. Otmane, O., Mohammed, M., & Driss, R. (2020). FACTORS AFFECTING STUDENTS'SELF-EFFICACY BELIEFS IN MOROCCAN HIGHER EDUCATION. Journal of Language and Education, 6(3 (23)), 108-124.
- 23. Pajares, F., Johnson, M., & Usher, E. (2007). Sources of Writing Self-Efficacy Beliefs of Elementary, Middle, and High School Students.. Research in The Teaching of English, 42, 104-120.
- 24. Rodríguez, S., Regueiro, B., Blas, R., Valle, A., Piñeiro, I., & Cerezo, R. (2014). Teacher self-efficacy and its relationship with students' affective and motivational variables in higher education. European journal of education and psychology, 7(2), 107-120.
- 25. Saragih, S. (2015). The effects of job autonomy on work outcomes: Self efficacy as an intervening variable. International Research Journal of Business Studies, 4(3).
- 26. Schunk, D. (1989). Self-efficacy and achievement behaviors. Educational Psychology Review, 1, 173-208. https://doi.org/10.1007/BF01320134.
- 27. Schunk, D. (2003). SELF-EFFICACY FOR READING AND WRITING: INFLUENCE OF MODELING, GOAL SETTING, AND SELF-EVALUATION. Reading & Writing Quarterly, 19, 159 172. https://doi.org/10.1080/10573560308219.
- 28. Unrau, Y. A., & Beck, A. R. (2003). Increasing Research Self-Efficacy Among Students in Professional Academic Programs. Innovative Higher Education, 28(3), 187–204. https://doi.org/10.1023/b:ihie.0000015107.51904.95
- 29. Usher, E., & Pajares, F. (2008). Sources of Self-Efficacy in School: Critical Review of the Literature and Future Directions. Review of Educational Research, 78, 751 796. https://doi.org/10.3102/0034654308321456.
- 30. Van Dinther, M., Dochy, F., & Segers, M. (2011). Factors affecting students' self-efficacy in higher education. Educational research review, 6(2), 95-108.
- 31. Walter, O., Shenaar-Golan, V., & Greenberg, Z. (2015). Effect of short-term intervention program on academic self-efficacy in higher education. Psychology, 6(10), 1199.

# GENERAL SELF-EFFICACY SCALE(GSE) BY SCHWARZER & JERUSALEM

SL	ITEMS	. 1		[+]	
NO		ALJ	LY	ATI JE	TLY
		AT.	EUI KUI	ER	5 E
		TF Z	IAI TF	DD.	TF
		NC	Ŧ	I	E
	I can always manage to solve difficult problems if I try hard enough.				
1					
2	If someone opposes me, I can find the means and ways to get what I want.				
3	It is easy for me to stick to my aims and accomplish my goals.				
4	I am confident that I could deal efficiently with unexpected events				
4	i un confident that i could dear chickently with anexpected events.				
5	Thanks to my resourcefulness, I know how to handle unforeseen				
	situations.				
6	I can solve most problems if I invest the necessary effort.				
7	I can remain calm when facing difficulties because I can rely on my coping abilities.				
8	When I am confronted with a problem. I can usually find several solutions.				
-					
9	If I am in trouble, I can usually think of a solution.				
10	I can usually handle whatever comes my way.				