



General Self-Efficacy and Specific Self-Efficacy of Postgraduate Students in the COVID-19 Pandemic: A Study

Dr. Subir Sen^{a#}, Anushri Mandi^b, Barnali Dhard^b, Firoz Ansary^b, Manisha Mandi^b, Muluk Baran Murmu^b, Prasanta Gayen^c

^aAssociate Professor, Department of Education, Sidho-Kanho-Birsha University, Purulia, 723104, W.B. India

^bStudent, Department of Education, Sidho-Kanho-Birsha University, Purulia, 723104, W.B. India

^cResearch Student, Department of Education, Sidho-Kanho-Birsha University, Purulia, 723104, W.B. India

Corresponding Author

ABSTRACT

For the last couple of years, whole world is going through a critical phase as COVID-19 has unfolded its umbrella over every human being. This critical situation has greatly affected the general and Specific Self-efficacy of the students a lot. Self-efficacy is belief system of a person over his/her own capabilities to organize and execute a particular task. But the learners are gradually losing this. This present study focuses on the differences in the levels of General and Specific Self-efficacy among the postgraduate students of Sidho-Kanho-Birsha University of Purulia, West Bengal, India. It is a descriptive survey research. The researchers have chosen 135 postgraduate students from different departments of Sidho-Kanho-Birsha University of Purulia, West Bengal, India using simple random sampling technique. The data has been analyzed using appropriate descriptive and inferential statistics. The result shows significant difference in the General Self-efficacy between male and female students whereas department of study and semester of study indicate no significant difference. And in terms of Specific Self-efficacy gender, department and semester of students don't show any significant difference.

Keywords: Self-efficacy, General Self-efficacy, Specific Self-efficacy, Postgraduate Students, COVID-19 Pandemic.

1. Introduction

A new day always brings new possibilities and everyone should devour it for the development of their own self and for their nation. And everyone should always remain positive in their attitude if they want to flourish in their life. But in the last couple of years, the word positive has become the most negative word for the whole world as COVID-19 has grabbed the whole world into its clutches. COVID-19 has not only affected the physical health of the people but also the mental health and wellbeing was greatly disturbed and misbalanced. The young adult creative minds who are the future of the nations are one of the most affected persons. They are in a state of mental instability and mental trauma. They are continuously losing their self efficacy, the self belief of a person to do something. According to Bandura, "Self efficacy is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Cherry, 2020). There are basically two types of Self-efficacy- General Self-efficacy and Specific Self-efficacy. "General Self-efficacy is an individual's perception of his or her ability to perform across a variety of situations. Task-Specific Self-efficacy examines an

* Corresponding author.

E-mail address: subirsenmath@gmail.com

individual's perception of his or her ability to perform the actions specific to a situation" (Dullard, 2014). The present study focuses mainly on the levels of General and Specific Self-efficacy of postgraduate students in the COVID-19 situation.

Literature Review

Ritchie et al. (2021) conducted a study on "Goals and Self-Efficacy Beliefs during the Initial COVID-19 Lockdown: A Mixed Methods Analysis" to study how covid-19 has greatly affected goals as well as self-efficacy beliefs of the people during the covid-19 pandemic. The result shows that most of the people lost their belief that they could achieve what they wanted to achieve in their life because of this critical situation though they were more serious about their goals in life. Alemany-Arrebola et al. (2020) performed a study on "Influence of COVID-19 on the Perception of Academic Self-Efficacy, State Anxiety, and Trait Anxiety in College Students" to find out the relationship between self-efficacy and the level of trait anxiety and state anxiety during the pandemic. The study was conducted on 427 students of the University of Granada (Spain). The result shows significant relationship between self-efficacy and anxiety. Male students showed positively high self efficacy while female students stands high in trait anxiety and state anxiety. Mumtaz et al. (2021) made a study on "COVID-19 and Mental Health: A Study of Stress, Resilience, and Depression among the Older Population in Pakistan" to study the effects of depression, fear and exposure in relation to COVID-19 pandemic by using resilience theory. The study was conducted on elderly people aged 50 and above of Rawalpindi, Pakistan. The study revealed positive impact of fear related to COVID-19 while self-efficacy showed negative effect on depression. Hou et al. (2020) studied on "Self-efficacy and fatigue among non-frontline health care workers during COVID-19 outbreak: A moderated mediation model of posttraumatic stress disorder symptoms and negative coping" to find out the prevalence of fatigue among non-frontline health care workers and to study the effect of posttraumatic stress disorder symptoms and negative coping between self-efficacy and fatigue. The study was administered on 527 non-frontline health care workers of Anhui province, China. The study revealed that more than half non-frontline health care workers suffered from fatigue during this pandemic.

2. Objectives of the Study

- a) To study the difference in the level of general self-efficacy among the postgraduate students during COVID-19 pandemic in relation to gender.
- b) To study the difference in the level of general self-efficacy among the postgraduate students during COVID-19 pandemic in relation to department of study.
- c) To study the difference in the level of general self-efficacy among the postgraduate students during COVID-19 pandemic in relation to semester of study.
- d) To study the difference in the level of specific self-efficacy among the postgraduate students during COVID-19 pandemic in relation to gender.
- e) To study the difference in the level of specific self-efficacy among the postgraduate students during COVID-19 pandemic in relation to department of study.
- f) To study the difference in the level of specific self-efficacy among the postgraduate students during COVID-19 pandemic in relation to semester of study.

3. Hypothesis of the Study

- H₀₁** There is no significant difference in the level of general self-efficacy between male and female postgraduate students during COVID-19 pandemic.
- H₀₂** There is no significant difference in the level of general self-efficacy between the postgraduate students of Education department and other departments during COVID-19 pandemic.
- H₀₃** There is no significant difference in the level of general self-efficacy between the postgraduate students of 2nd semester and 4th semester during COVID-19 pandemic.
- H₀₄** There is no significant difference in the level of specific self-efficacy between male and female postgraduate students during COVID-19 pandemic.
- H₀₅** There is no significant difference in the level of specific self-efficacy between the postgraduate students of Education department and other departments during COVID-19 pandemic.
- H₀₆** There is no significant difference in the level of specific self-efficacy between the postgraduate students of 2nd semester and 4th semester during COVID-19 pandemic.

4. Methodology

- a) **Method:** For the present study, a descriptive survey type research has been used by the researchers.
- b) **Population:** For the present study, all the students of Sidho-Kanho-Birsha University, Purulia, West Bengal, India, have been considered as

the population by the researchers.

- c) **Sample & Sampling Technique:** Random sampling technique has been used for the data collection by the researchers. For this present study, the researchers have chosen 135 postgraduate students from different departments of Sidho-Kanho-Birsha University as the sample.
- d) **Scale Used:** Researchers have used “The Self-Efficacy Scale” by Sherer et al. (1982) for the collection of data.
- e) **Statistics Used:** For the present study, the researchers have used appropriate descriptive and inferential statistics.

5. Result & Discussion

The collected data for the study is analyzed using appropriate descriptive and inferential statistics and then it is discussed according to the objectives of the study. The statistics provides a comprehensive and clear picture of differences in the level of General Self-efficacy and Specific Self-efficacy in relation to gender, department and semester.

Descriptive Statistics

		N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Male Students	GSE	66	97	233	144.38	30.561	.931	.295	.036	.582
	SSE	66	29	75	45.59	9.719	.756	.295	.294	.582
	Valid N (listwise)	66								
Female Students	GSE	69	94	265	164.00	44.287	.641	.289	-.592	.570
	SSE	69	18	75	45.93	13.516	.162	.289	-.588	.570
	Valid N (listwise)	69								
Education Department	GSE	82	94	251	155.02	39.623	.855	.266	-.088	.526
	SSE	82	19	75	45.94	11.851	.332	.266	-.383	.526
	Valid N (listwise)	82								
Other Departments	GSE	53	107	265	153.45	39.179	1.047	.327	.476	.644
	SSE	53	18	75	45.49	11.753	.362	.327	.265	.644
	Valid N (listwise)	53								
2 nd Semester	GSE	44	94	242	150.80	38.595	.849	.357	-.033	.702
	SSE	44	29	73	47.30	10.743	.602	.357	-.001	.702
	Valid N (listwise)	44								
4 th Semester	GSE	91	100	265	156.15	39.744	.960	.253	.130	.500
	SSE	91	18	75	45.02	12.225	.308	.253	-.261	.500
	Valid N (listwise)	91								

Table 1: Descriptive Statistics of General Self-efficacy and Specific Self-efficacy of the Students in Relation to Gender, Department of Study and Semester of Study

As we all know that Descriptive Statistics is the presentation of a data set that summarizes the whole data. Table 1 represents the Descriptive Statistics of General Self-efficacy and Specific Self-efficacy of the students that shows the Mean, Standard Deviation, Skewness, Kurtosis of the data in relation to gender, department of study and semester of study.

Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Male Students	GSE	.166	66	.000	.905	66	.000
	SSE	.120	66	.020	.953	66	.015
Female Students	GSE	.136	69	.003	.931	69	.001
	SSE	.078	69	.200*	.982	69	.409
Education Department	GSE	.163	82	.000	.913	82	.000
	SSE	.113	82	.012	.979	82	.212
Other Departments	GSE	.144	53	.008	.892	53	.000
	SSE	.147	53	.006	.967	53	.142
2 nd Semester	GSE	.118	44	.145	.923	44	.006
	SSE	.098	44	.200*	.963	44	.173
4 th Semester	GSE	.176	91	.000	.899	91	.000
	SSE	.106	91	.013	.975	91	.082

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

a. Lilliefors Significance Correction

Table 2: Tests of Normality of General Self-efficacy and Specific Self-efficacy of the Students in Relation to Gender, Department of Study and Semester of Study

Table 2 represents the Tests of Normality of the collected data and from this it is noted that the data is not normally distributed. That's why parametric test is not possible for the analysis of data. So, as a Non-parametric test, Mann-Whitney U Test is used for the analysis of the data.

No	Null Hypothesis	Test	Sig.	Decision
1.	The distribution of General Self-efficacy is the same across categories of gender.	Independent Samples Mann-Whitney U Test	.009	Reject the null hypothesis
2.	The distribution of General Self-efficacy is the same across categories of department.	Independent Samples Mann-Whitney U Test	.744	Retain the null hypothesis
3.	The distribution of General Self-efficacy is the same across categories of semester.	Independent Samples Mann-Whitney U Test	.398	Retain the null hypothesis
4.	The distribution of Specific Self-efficacy is the same across categories of gender.	Independent Samples Mann-Whitney U Test	.961	Retain the null hypothesis
5.	The distribution of Specific Self-efficacy is the same across categories of department.	Independent Samples Mann-Whitney U Test	.917	Retain the null hypothesis
6.	The distribution of Specific Self-efficacy is the same across categories of semester.	Independent Samples Mann-Whitney U Test	.269	Retain the null hypothesis

Table 3: Result of Mann-Whitney Test

Table 3 represents the results of the Mann-Whitney U Test of the independent samples. The result shows that the distribution of General Self-efficacy and Specific Self-efficacy indicates significant difference in terms of gender only whereas department of study and semester of study don't show any significant difference among the two.

6. Testing of Hypotheses

Testing of H_01 :

The Mean of General Self-efficacy among the postgraduate students during COVID-19 pandemic shows that the mean value 144.38 is obtained from male students and mean value 164.00 is obtained from female students. From the 0.05 level of significance calculated p value is 0.009 which is statistically significant at 0.05 level of significance. Therefore, the null hypothesis stands rejected. The result reflected that there is significant difference between male and female postgraduate students in the level of General Self-efficacy during COVID-19 pandemic.

Testing of H_02 :

The Mean of General Self-efficacy among the postgraduate students during COVID-19 pandemic shows that the mean value 155.02 is obtained from students of Education department and mean value 153.45 is obtained from students of other departments. From the 0.05 level of significance calculated p value is 0.744 which is statistically insignificant at 0.05 level of significance. Therefore, the null hypothesis stands accepted. The result reflected that there is no significant difference between the postgraduate students of education department and other department in the level of General Self-efficacy during COVID-19 pandemic.

Testing of H_03 :

The Mean of General Self-efficacy among the postgraduate students during COVID-19 pandemic shows that the mean value 150.80 is obtained from students of semester 2 and mean value 156.15 is obtained from students students of semester 4. From the 0.05 level of significance calculated p value is 0.398 which is statistically insignificant at 0.05 level of significance. Therefore, the null hypothesis stands accepted. The result reflected that there is no significant difference between the postgraduate students of 2nd semester and 4th semester in the level of General Self-efficacy during COVID-19 pandemic.

Testing of H_04 :

The Mean of Specific Self-efficacy among the postgraduate students during COVID-19 pandemic shows that the mean value 45.59 is obtained from male students and mean value 45.93 is obtained from female students. From the 0.05 level of significance calculated p value is 0.961 which is statistically insignificant at 0.05 level of significance. Therefore, the null hypothesis stands accepted. The result reflected that there is no significant difference between male and female postgraduate students in the level of Specific Self-efficacy during COVID-19 pandemic.

Testing of H_05 :

The Mean of Specific Self-efficacy among the postgraduate students during COVID-19 pandemic shows that the mean value 45.94 is obtained from students of Education department and mean value 45.49 is obtained from students of other departments. From the 0.05 level of significance calculated p value is 0.917 which is statistically not significant at 0.05 level of significance. Therefore, the null hypothesis stands accepted. The result reflected that there is no significant difference between the postgraduate students of education department and other department in the level of Specific Self-efficacy during COVID-19 pandemic.

Testing of H_06 :

The Mean of Specific Self-efficacy among the postgraduate students during COVID-19 pandemic shows that the mean value 47.30 is obtained from students of semester 2 and mean value 45.02 is obtained from students students of semester 4. From the 0.05 level of significance calculated p value is 0.269 which is statistically insignificant at 0.05 level of significance. Therefore, the null hypothesis stands accepted. The result reflected that there is no significant difference between the postgraduate students of 2nd semester and 4th semester in the level of Specific Self-efficacy during COVID-19 pandemic.

7. Conclusion

The study reveals that COVID-19 has greatly affected both general and specific self efficacy of the postgraduate students of Sidho-Kanho-Birsha University, Purulia, West Bengal, India. COVID-19 has proposed nothing good but lots of bad conditions. The young adult minds are gradually wasting

their potentiality. As a result, balance between different types of students like male students and female students differ significantly. This is not at all a good sign for the whole world as its gems like human resources are decaying for this present critical juncture. But we are hoping that the whole world will surely overcome this negative condition and will smile again.

REFERENCES

- Aleman-Arreola, I., Rojas-Ruiz, G., Granda-Vera, J. & Mingorance-Estrada, A. C. (2020). Influence of COVID-19 on the perception of academic self-efficacy, state anxiety, and trait anxiety in college students. *Frontiers in Psychology, 11*:570017. Doi: 10.3389/fpsyg.2020.570017.
- Cherry, K. (2020). Self efficacy and why believing in yourself matters. Retrieved from <https://www.verywellmind.com/what-is-self-efficacy-2795954>
- Dadfar, M. & Sanadgol, S. (2021). Self-efficacy on the coronavirus disease-2019 (COVID-19). <https://doi.org/10.21203/rs.3.rs-143799/v1>.
- Dullard, B. (2014). *A comparison of general and Task-specific measures of self efficacy in adult hearing aid users*. (Unpublished doctoral dissertation). University of Connecticut, US.
- Hou, T., Zhang, R., Song, X., Zhang, F., Cai, W., Liu, Y., Dong, W., & Deng, G. (2020) Self-efficacy and fatigue among non-frontline health care workers during COVID-19 outbreak: A moderated mediation model of posttraumatic stress disorder symptoms and negative coping. *PLoS ONE 15*(12): e0243884. <https://doi.org/10.1371/journal.pone.0243884>
- Mumtaz, A., Manzoor, F., Jiang, S. & AnisurRahaman, M. (2021). COVID-19 and mental health: a study of stress, resilience, and depression among the older population in Pakistan. *Healthcare, 9*, 424. <https://doi.org/10.3390/healthcare9040424>
- Ritchie, L., Cervone, D. & Sharpe, B. T. (2021). Goals and self-efficacy beliefs during the initial covid-19 lockdown: a mixed methods analysis. *Frontiers in Psychology, 11*:559114. Doi: 10.3389/fpsyg.2020.559114.
- Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B. & Rogers, R. W. (1982). The Self-Efficacy Scale: Construction and Validation. *Psychological Reports, 51*, 663–71.