



Social Capital as the Determinant of Self efficacy and Academic Performance among University Students

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Abstract

The study aimed to investigate the impact of social capital on self-efficacy and academic performance among university students. The sample size was 130 students from an institute of Southern Punjab, Multan, selected through a simple random sampling technique. The participant was administered social capital questionnaire, self-efficacy formative questionnaire, and academic performance questionnaire to measure their social capital, self-efficacy, and academic performance. The score variations among gender, area of residency, and level of education were measured. Pearson product momentum, linear regression, t-test, and analysis of variance were used to assess the statistical significance of data. It was found there was a significant positive relationship between social capital, self-efficacy, and academic performance. The impact of social capital on self-efficacy and academic performance was also statistically significant (p -value <0.05). Moreover, a significant difference was found between gender (male and female students) and area of residency (rural and urban students), which shows female students and urban students have a high score on social capital, self-efficacy, and academic performance as compared to male and rural students. Analysis of variance shows a significant variation on social capital and academic performance, while self-efficacy show insignificant variation concerning different educational level.

Keywords: *Social Capital, self-efficacy, academic performance, university students*

1 Introduction

Scholars have traditionally emphasized student learning, particularly when addressing how to improve student learning efficiency and participation (Peng et al., 2021). When compared to previous educational settings, the university atmosphere provides a distinct environment for learning, social activities, and diversity. The diverse system of social connections, which a student creates in academic and non-academic fields is a distinguishing feature of this context.

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This network structure has the capacity to tip the balance in favor of students' achievement. Academic accomplishment offers different openings for students' prospective jobs and life aspirations in this context. Even though Western theories stressing inherent motivating elements have been demonstrated to be important, Eastern culture is different. For example, in Asia students are more prone to deal with the expectations their parents have for them alongside others close to them like close family and friends. Which forces them to perform following their families' standards (Li et al., 2020).

Self-efficacy is described as the conviction in one's capacity to plan and carry out actions as well as complete an assignment properly (Bandura, 1997). When faced with obstacles or failures, those with strong rates of self-efficacy set higher objectives and maintain greater commitment and drive. Self-efficacy is a distinct collection of consciousness associated to distinctive territories of behavior, such as self-esteem as well as academic success, according to Bandura (2018). self-efficacy in educational context is therefore a set of personal beliefs about one's educational approach, perseverance, and drive. It expresses a person's belief in his or her capacity to execute academic assignments to the appropriate standard (Pajares & Schunk, 2001). self-efficacy in an academic environment, according to Bandura (2018), can indicate students' involvement in the learning process, as well as their commitment and preservation of concentration. As a result, it's not astonishing since self-efficacy is frequently cited as a strong determinant of student success (Komarraju & Nadler, 2013). Self-efficacy is defined as an individual's conviction in his or her capacity to succeed at a certain level despite educational hurdles (Honicke & Broadbent, 2016), and it is linked to self-perceived educational social connectivity.

Individual factors such as self-efficacy, outcomes expectation, and enthusiasm in learning may all improve an individual's engagement in a particular subject, with self-efficacy arguably the most important one (Liu et al., 2020). Individualized efficacy impacts not just how people think, feel, inspire, and then behave, it is furthermore the main factor influencing how people pick behaviors, what amount of work they are inclined to dedicate into implementation, as well as how much passion and stress they would withstand. Self-efficacy is a person's capacity to evaluate how to execute a certain job or activity because it is among the most fundamental self-supervisory systems influencing human behavior. Self-efficacy is one of the most studied variables concerning academic success, as it represents one of the strongest predictors of academic achievement (Alhadabi & Karpinski, 2020).

Self-efficacy is a qualitative assessment of a person's capacity to prepare ahead of time to attain a specific objective (Chan, 2020). A person with greater self-efficacy know their aims and have greater determination, motivation and are confident in their responsibilities, are far less afraid of making mistakes, and can deal the challenges and diversity in a better way; yet on the other side, when peoples' self-efficacy is small, they are hesitant to tale actions and try to avoid the challenging situations (Erdem and Demirel,2007).).

Self-efficacy is a good determinant of actual outcomes in a variety of topics in previous research. "Self-efficacy can determine students' academic achievement in a variety of disciplines and grades," according to one study (Lent et al., 2008). "There is a substantial body of data supporting the direct influence of self-efficacy attitudes on school performance" (Doménech-Betoret et al., 2017). According to Lee and Mendlinger (2011), self-efficacy is a predictor of learning satisfaction and has a favorable influence. Higher learning achievement enhances individuals' educational understanding and, their self-efficacy increases as a result. Schneider

and Preckel (2017) published a notable research study that created a list of 100 factors that potentially impact academic success based on their statistical power. These authors stress the importance of self-efficacy in academic performance. They found that subjective self-efficacy in completing particular instructional activities is the second biggest important predictor of academic success. Self-efficacy in an academic environment, which is described as a public belief of one's skill in educational pursuits, was also placed 21st. Additional findings indicate that self-efficacy in an academic environment acts like the main element of pupils' results in contrast to many components historically included to clarify the accomplishment of academic tasks, like nervousness, preceding performance, end result presumption, as well as optimistic consciousness (Yusuf, 2011)

A person's system of social relationships and involvement in social organizations generates a perception of community, which is referred to as social capital (SC). SC is closely tied to a person's engagement in social organizations and is interconnected with practically all research fields. This term is important since this emphasizes the significance of personal engagement in societal groupings. It should be noted that, while this was the term adopted for this research, there is no widely agreed term of social capital (Magson et al. 2014).

People engage in connections when they anticipate a beneficial payoff, according to social capital theory, which holds that channels of connections help people's attempts to attain diverse objectives. Assets may be gained through interactions with relatives (family capital), schoolmates and other students (peer capital), even faculty members (faculty capital) in the university setting, encompassing exchanged data as well as economic, logistical, and psychological aid (Stack-Cutler, Parrila, Jokisaari, & Nurmi, 2015). Based on the educational situation and the proficiency of the learner, the value of social capital for increasing educational objectives fluctuates throughout time. The majority of research undertaken in academic situations concentrates on families as a valuable resource. Parent-child and parent-teacher relationships, parents' education, and parent-school participation all have a favorable impact on student performance (Cemalcilar and Gökşen, 2014). This situation moves as students reached the university, particularly if students relocate out of their families' homes and are no longer involved in their ordinary routine, the interactions with classmates and teachers become more important. Throughout this change, parental involvement may assist students in dealing with loneliness or how to adjust to new circumstances, but acquaintances and other university students eventually prove increasingly dynamic and important in this transaction (Li et al., 2020).

The key problem that emerges, considering the favorable influence of social capital on improving individuals' educational outcomes, is how students' academic achievement increases from the social capital. According to the research, the quantity of information shared between individuals was found to affect their achievement. Effective communication, which is a technique for exchanging, integrating, interpreting, and applying knowledge, may also aid to improve the processes and in achieving other benefits like adjustment, easy communication, and making more friends. Social connection has a unique influence on achievement, according to (Poldin & Yudkevich, 2013).

Students with higher social capital were benefited more and their self-efficacy was also high compared to students with low social capital. Students having high peer relations engage more with their classmates for educational achievement but low social capital students struggle to contact their peers for help (Brouwer et al., 2016). Students near to fail reported to have a

poor connection with their family, friends, and teacher (social capital) (Whannell & Whannell, 2014) and expressing a lack of confidence in asking for assistance (Cleland, Arnold, & Chesser, 2005). Positive attitudes, such as optimism and self-efficacy, increased by having exposure to social capital. As a result, social capital should have an effect on self-efficacy and as a result, self-efficacy can impact academic achievement (Brouwer et al., 2016).

Gašević and colleagues (2013), researched to examine the students' relationship with their classmates and their academic performance. The hypothesis preceding s to investigate overall academic performance and influences between classmates reported to have significant positive results. This hypothesis proved to be true as the results showed a positive relationship between the academic result and the peer-peer connections. But there is a drawback hence it was only based on observation without survey or interview.

Celant (2013) examines the influence of relationships on the academic achievement of an individual. Three types of connections, ones in a group, the ones outside the group, and the ones who were a part of a group but have left were considered. The results showed that the academic results were significantly better for those who were in a group. The ones that have left the groups or the ones who were not a part of the group shower much lower academic results. Although social capital was not used explicitly in this research, this study proves to be quite relevant to the main topic as it encompasses the peer to peer relations and their effects on the overall academic performance of an individual.

The important thing to be noted is the presenting study focuses only network of social capital in and outside the academic setting. Social capital is considered as a whole not merely one or two factors as parental involvement, professor-student relation, or peer to peer relation, it comprises extracurricular involvement, local community participation, work, family, friends and neighborhood connections, diversity tolerance, trust, and safety feelings. This choice is important and intentional because university settings are not only about academic accomplishment. The combined relationship of all these variables has the potential to change the learning environment. Professors and educators could utilize social capital to enhance self-efficacy and academic performance among university students. Outside the educational settings, it acts as a precedent for university students to emphasized generating a network of relationships (social capital) as a road to enhance their self-efficacy and academic performance.

2 Material and Method

2.1 Research Design and Participants

This quantitative research was carried out through a correlational research design. With the help of a simple random sampling technique, 130 students were selected as a sample of study from the Institute of Southern Punjab Multan Pakistan by G Power. The demographic information of the respondents was comprised of the following characteristics; sex, level of education, and residential area of respondents.

2.2 Procedure

The permission was taken initially from the administration of the Institute of Southern Punjab for data collection. Informed consent was taken from the participants to collect data. The researcher ensured the participants that information will be kept confidential and only will be used for answering the research question.

2.3 Statistical Analysis

After completing this process, the data were analyzed through descriptive and as well as inferential statistics. To measure the relationship between the variables, Pearson Product-Moment Correlation was used and Linear Regression was used to measure the effect of social capital on self-efficacy and academic performance among university students. Gender and residency-based differences were analyzed through an independent sample t-test. Education level differences on social capital, self-efficacy, and academic performance were analyzed by Analysis of Variance (ANOVA).

3 Instrument

3.1 Social capital questionnaire

A social capital questionnaire was developed by Paul Bullen and Jenny Onyx on March 1, 2000. This scale is used to measure a set of shared values that allows individuals to work together in a group to effectively achieve a common purpose. The idea is generally used to describe how members can band together in society to live harmoniously. It consists of 36 items on the 4-point Likert scale (very low, low, high, and very high). The correlation coefficient was reported as 0.25- 0.87. The reliability coefficient is 0.84.

3.2 Self-efficacy Formative Questionnaire

The Self-Efficacy Formative Questionnaire was developed in 2015 by Research Collaboration. An extensive review of related research resulted in identifying the two components essential for developing self-efficacy. Positive self-efficacy increases when students both believe that ability can grow with effort, as well as believe in their abilities to meet specific goals. Belief in personal ability and belief that ability grows with effort.

3.3 Academic Performance Questionnaire

The academic performance of the students was measured through the Academic Performance Questionnaire, which was developed after discussing with a panel of experts. It was responded on a five-point Likert scale ranging from 1=Strongly Agree to 5= Strongly Disagree. There are 7 items, 5, 9, 10, 20, 26, 29, and 31 marked negatively.

4. Results, Findings and Discussion

Table 1

Correlations between social capital, self-efficacy in an academic environment and academic performance(N=130)

Scales	Social Capital	Self-efficacy in an academic environment	Academic Performance
Social Capital	1	.485**	.584**
Self-efficacy in an academic environment		1	.033
Academic Performance		.	1
Mean	84.99	45.43	132.78
SD	11.57	9.91	12.20

p<.001

Table 1 shows significant positive correlation between social capital, self efficacy and academic performance .

Table 2

Standard Regression Model showing impact of social capital on self-efficacy among university students (N=130)

Predictor	B	Std.Error	Beta	t-test	P-value
(Constant)	10.106	5.678		1.780	.000
Social capital	.416	.066	.485	6.278	.000

R²=.235, Adjusted R² =.229, (p<0.05)

Table 2 shows significant impact of social capital on self efficacy among university students.

Table 3

Standard Regression Model showing impact of social capital on academic performance among university students (N=130)

Predictor	B	Std.Error	Beta	t-test	P-value
(Constant)	66.08	8.271		7.99	.000
Social capital	.785	.096	.584	8.14	.000

R²=.341, Adjusted R² =.336 (p<0.05)

Table 3 shows significant impact of social capital on academic performance among university students

Table 4

Mean, Standard Deviation, t-value and scores of social capital, self-efficacy in an academic environment, and academic between male and female students (N=130)

Variable	Male N=17		Female N=113		t	p	95% Interval	
	M	SD	M	SD			LL	UL
Social capital	74.24	4.04	86.61	11.47	-4.394	.000	-17.95	-6.80
self-efficacy	37.88	5.46	46.57	9.95	-3.513	.001	-13.58	-3.79

Academic performance	120.24	17.72	134.66	14.36	-3.743	.000	-22.06	-6.80
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Table 4 shows significant gender difference on social capital, self efficacy and academic performance among university students.

Table 5
Mean, Standard Deviation, t-value and scores of social capital, self-efficacy in an academic environment, and academic concerning residency area of students (N=130).

Variable	Rural N=24		Urban N=106		t	p	95% Interval	
	M	SD	M	SD			LL	UL
Social capital	75.38	4.44	87.17	11.59	-4.894	0.000	-16.56	-7.03
self-efficacy	39.00	5.28	46.89	10.15	-3.688	0.000	-12.12	-3.66
Academic performance	118.71	15.76	135.96	13.68	-5.422	0.000	-23.55	-10.96

Table 5 shows significant residential areas difference on social capital, self efficacy and academic performance among university students.

Table 6
Analysis of variance on social capital, self-efficacy in an academic environment, and academic performance concerning different educational levels (N=130)

Variables	Source of Variation	Sum of Squares	DF	Mean Square	F	P-value
Social	Between Groups	5647.608	2	2823.804	30.859	.000

Capital	Within Groups	11621.384	127	91.507		
	Total	17268.992	129			
	Between Groups	524.929	2	262.465	2.745	.068
Self-efficacy	Within Groups	12144.948	127	95.630		
	Total	12669.877	129			
	Between Groups	7507.336	2	3753.668	20.131	.000
Academic Performance	Within Groups	23681.195	127	186.466		
	Total	31188.531	129			

Table 6 shows significant educational differences on social capital , self efficacy and academic performance among university students.

4.1 Discussion

As the statistical conclusion, the correlation was significant among study variables. Social capital is positively correlated with self-efficacy and Academic performance among university students. It means with the increase of one variable the other variable also increases. Standard regression model showing significant the impact of social capital on self-efficacy among university students similar results were observed on regression analysis, the impact of social capital on academic performance among students (p-value<0.05). Students' self-efficacy and academic performance were predicted by social capital up to 23.3 % and 43.1% respectively. Describing the differences concerning demographic variables (gender), The difference was significant between males and females regarding the study variables. Results revealed that perception of social capital is high among female students due to the high level of social capital. From the result, we conclude that the levels of social capital, self-efficacy in an academic environment, and academic performance are significantly higher in female students than that of

male students. Describing the difference concerning demographic variable (residential area) on social capital, self-efficacy in an academic environment, and academic performance results highlights, urban resident students report a higher level of social capital, self-efficacy in an academic environment, and academic performance as compared to rural resident students. Thus, the difference was significant between rural and urban students regarding the study variables. One-way ANOVA shows the results, due to the different levels of education on social capital, self-efficacy in an academic environment, and academic performance among university students. From the result, we conclude that the levels of social capital and academic performance have significantly differed among different education levels ($p\text{-value}<0.05$), whereas no significant difference was found in the level of self-efficacy in an academic environment due to different educational levels.

5 Conclusion

The study was designed to examine the impact of social capital on self-efficacy and academic performance among university students. Pearson Correlations demonstrate a positive relationship among social capital, self-efficacy in an academic environment, and academic performance among university students. The significant impact of social capital on students' self-efficacy in an academic environment and academic performance is reported based on results (table 2 and table 3). According to results, female students reported higher social capital, self-efficacy in an academic environment, and academic performance scores as compared to male students. Urban students reported a higher level of social capital, self-efficacy in an academic environment, and academic performance perception as compared to rural students. The variance due to different levels of education is significant on university students' social capital, , and academic performance, but the difference is insignificant concerning self-efficacy among university students.

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