

Impact of Student Leadership on Students' Academic Achievement in Public and Private Universities of Pakistan

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Abstract

This study is conducted to assess the impact of student leadership on academic achievement at university level. The main objectives of this study were to obtain the academic results of students, to assess the effects of student leadership on their academic achievement. Four universities were randomly chosen. All the students and teachers of social sciences departments were the population of the study. So the total population consists of 198 faculty members and 1969 students. One university was selected for pilot study. Stratified Random Sampling Technique is used for sample selection and sample size is selected through proportional allocation. Twelve faculty members of social sciences and 322 students were chosen as sample. One questionnaire was developed for students about their leadership competency, result percentage was used for academic achievement. Data was analysed by using percentage, and regression as test of statistical significance. The study concluded that majority of social science students use leadership skills. The study also found that there was strong association between five student leadership factors and students' high and medium level academic achievement.

Keywords: student leadership; academic achievement; leadership challenge model

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Introduction

Different studies also have shown leadership effects in the business and administration area where business leadership provides business success in the particular field. Theories and models of leadership as well as the organizational climate theories and models presented through the research provided great benefits to the business owners after the adoption of specific leadership techniques. Lately the similar concepts of business are replicated to the educational research so that administration at educational level could gain desired outcomes. So the idea of relating the student leadership to its outcome such as student achievement is rarely evaluated at higher level in public and private sector universities.

Leadership concept in the context of student is seldom discussed in the literature of student leadership. The concept of learner leadership is also used inaudibly by teachers at higher level, but this research could assist the teachers to authenticate the techniques used by the teachers to provide student leadership. Additionally, this research could motivate the teachers those are working in the educational environment where learner's leadership is not appreciated, so that the teachers can use the learners' leadership as a tool to increase the success of the student as well as the practical understanding of the subject matter.

The term student leadership can better be defined as the leadership competency of the student enables him to create sympathetic and shared educational climate through the use of effective leadership skills. While performing student leadership expertise the learner can perform his duties in a group of peers while taking his obligation in a concerning way to achieve the desired learning outcome in an educational environment (Armino *et al.*, 2000).

A random sample of university students is selected as 322 students from all four universities from population of 1969 students with the help of Gay (2000) criteria. Six public sector university teachers and six private sector university teachers are selected to conduct interview. Focused grouped interview could involve six to eight interviewees in each group (Creswell, 2009). Validity and accuracy could be increased through the selection of random sample. Another research on student leadership competencies in classroom management covered the school level (Kouzes & Posner, 2014). Figure 1 illustrates the conceptual model of the study.

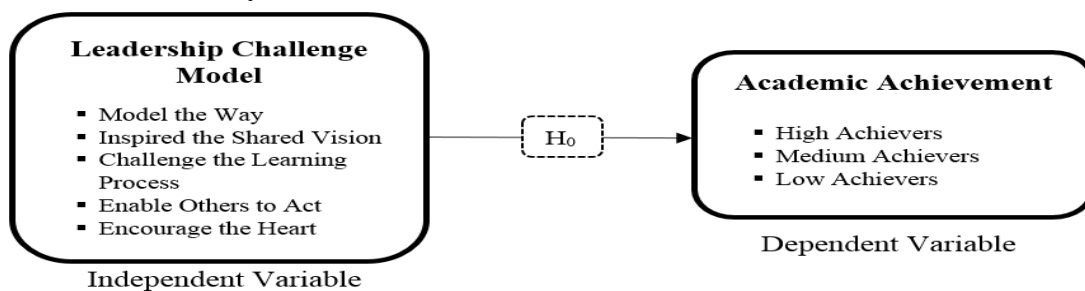


Figure 1: Conceptual Framework of the Study

The Impact of Student Leadership on Students' Academic Achievement in Public and Private Universities of Pakistan

Objectives of the Study

The following objectives were formulated for investigation.

1. To obtain the academic results of students.
2. To assess the effect of student leadership on their academic achievement.

Hypotheses of the study

The following null hypotheses was made for investigation.

H₀ 1: There is no impact of student leadership on their academic achievement.

Review of Literature

Student leadership in higher education is the essential factor to add more productivity within the classroom settings so that the major goal of educational environment could be achieved that is the academic success of the learner. The literature regarding the student leadership at higher level students from diverse and understated populations is extremely light and requires more study.

Leadership

Leadership is a dense and rich topic that includes a variety of perspectives, theories, and models focusing on different leadership frameworks and contexts. Leadership competency literature regarding the students those are learning at university level is exception. The classifications and conceptualizations of leadership are complex and according to Dugan, Komives & Segar (2008) there are nearly as many definitions of leadership as there have been scholars who have studied it. Early definitions defined leadership in regards to personal traits (Mann, 1959) included their influence, communication skills, foresight, and adaptability. According to Dugan (2006) today, definitions of leadership appear to synthesize together personal traits with contextual circumstances.

Each of these conceptualizations has been referred to through differing terms. For example, the first model was termed as trait-based leadership and was defined by Zaccaro, Kemp & Bader (2004) as “in an organizational environment the regular work place practices with the combination of leadership practices among the group of people working together to achieve the organizational goal” (p. 104). Some examples of traits examined by the leader in this paradigm included personalities, cognitive abilities, skills, and expertise. According to Zaccaro (2007) trait-based leadership could perhaps be traced back to traditional leadership aspects, who stated that “the leadership qualities are usually gifted and are inherited by birth and gained from the predecessor in the family” (p. 6).

Leadership Literature Outcomes

According to Astin (1993) the overall scholarly literature discussing student leadership in higher education can be categorized into three patterns: (a) examining student outcomes, (b) discussing improvements to leadership programming and implications, and (c) describing the student experience.

Examining Student Outcomes

There are multiple research studies exist those provide the significant increase in the success of the students which indicates the effectiveness of the courses and programs assigned to students to develop the leadership competency. Dugan & Komives (2007) provided the importance of the student leadership through presenting a model which can be used to inculcate the leadership competency in social life of students. This study collected data from over 63,000 students who were enrolled in 52 college campuses throughout the United States. In addition, to assess longitudinal changes in leadership development, this multi-year study collected data from the same group of students at two points during their first year in college and during their senior study year.

Improvements to Leadership Programming and Implications

Many studies focused on examining current leadership programming and discussed implications for ways to improve leadership development programs. Taylor (2008) wrote a brief article describing the functions and procedure of starting a student organization. This article included goal setting, program development, and implementation of initiatives.

Other sources discussed more critical methods of improving leadership programming including considerations. Kezar (2000) offered the idea of pluralistic leadership, a model which focused on three primary strategies: (a) produce the ability of authority, individuality, consciousness of uniqueness; (b) acknowledging multiple perspectives and leadership; and (c) mediation.

Student Experience in Leadership Development

Despite the vast wealth of scholarly literature regarding student leadership, very few studies have explored the holistic student experience in leadership development. In fact, Armino *et al.* (2000), Logue *et al.* (2005) and Yamasaki (1995) each study used a phenomenological approach to better understand the “personal structure of leadership experiences from the perspectives of the student leaders”. According to Armino *et al.* (2000) the use of phenomenology was “the ways used by human being to be familiar with the environment that exists around them while undergoing the life processes and the expression of the world towards them and their discernment about the existing world” (p. 4).

Student Leadership

According to Dempster & Lizzio (2007) the term student leader is defined as an individual enrolled in an institution of learning that is in a formal position in which they are responsible for overseeing a purposeful, collaborative, values-based process that results in positive instructional change. Learners’ leadership qualities can enhance the understanding of learner and can increase the motivational level of student while engaging with learning climate. Stogdill (1974) employed the concept that learners’ leadership allows directing their own

The Impact of Student Leadership on Students' Academic Achievement in Public and Private Universities of Pakistan

academic activities towards the learning goals while leading and assisting their peers in academic activities in academic climate. Leadership tasks of students vary according to the tasks provided by the teachers such as assisting or guiding fellows for the assignment, leading the group members for assignment or a project.

Significance of Student Leadership in Higher Education

Adams & Keim (2000) suggested that in the modern era student leadership is the emerging concept in educational research in all contexts and economic sectors, student leadership development among college students has been an ongoing area of interest for stakeholders and researchers in higher education. In fact, most colleges and universities include student leadership as a component within their mission statements. According to Adams & Keim (2000), “the question of what makes a person a leader has been raised by academicians, politicians, and business people all over the world”. Astin (1999) have suggested that “the amount of participation of the learner in the leadership activities at higher education can result in greater academic achievement, individual progress as well as the increase in learning process, so the leadership competency in the students is the upcoming area of research” (p. 349). The interest in student leadership is also important for prospective employers.

Popular Leadership Models in Higher Education

The following sections will provide a brief overview of the remaining models. These models provide integrated approaches for the student leadership competencies those are required inside the classroom to enhance the academic achievement.

Leadership Challenge Model

According to Kouzes & Posner (2014) student leadership practices included: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. Model the Way was described similarly to identifying leaders' values and aligning their actions to their values. As the name implies, it was also described as being a role model for peers and subordinates. Inspire a Shared Vision described the act of setting goals and envisioning outcomes, as well as “encouraging other to perform better by following the rules, principles and philosophies of organization”. Challenge the Process was described as identifying and seizing opportunities to improve, as well as to take calculated risks that would generate small wins. Kouzes and Posner described Enable Others to Act as the means of “fostering collaboration,” creating and maintaining meaningful relationships, and “strengthening others by increasing self-determination” (p. 16). Finally, Encourage the Heart was described as the process of celebrating victories and creating community, as well as identifying assistances and “appreciating the individual performance” (p. 16).

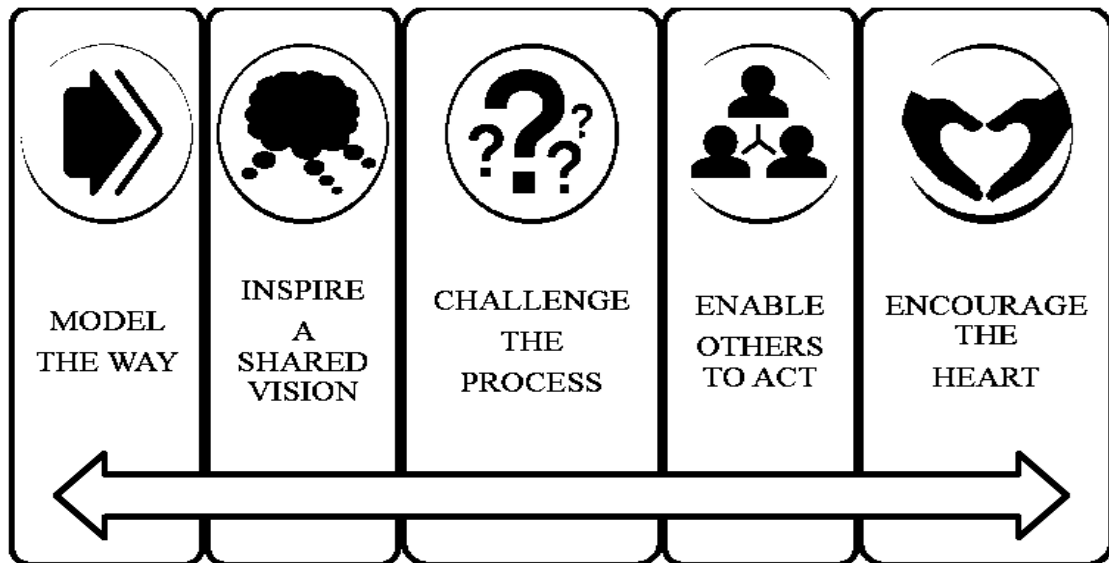


Figure 2: Student Leadership Challenge Model (Kouzes & Posner, 2014, p. 16).

Relational Leadership Model

Komives, Lucas & McMahon (2009) proposed the relational leadership model with five key components that build “assurance of the optimistic behaviour provide wide range of diverse nature people with different point of views and opinions, provide sufficient ways to detect all these factors in the process of leadership association and linkage” (p. 121). This model described leadership as a process “knowing, being, and doing” through various leadership components including: Inclusive, Empowering, Purposeful, Ethical, and Process- Oriented. According to Uhl-Bien (2006) this model did not “use old fashioned techniques of administration and old styles procedures and strategies”.

Leadership Identity Development Theory

Komives *et al.* (2005) provided the Leadership Identity Development (LID) theory was a framework that attempted to describe the “shifting leadership identity as moving from a hierarchical, leader centric view to one that embraced leadership as a collaborative, relational process”. This theory, which was developed using a qualitative study of undergraduate students, framed student leadership development as a linear process through six stages, which included: (a) awareness, (b) exploration and engagement, (c) leader identified, (d) leadership differentiated, (e) generativity, and (f) integration and synthesis. According to Komives *et al.*(2005) throughout each stage, the student would not only gain a more complex understanding of leadership, but would also be engaged in more complex leadership experiences as confidence and leadership self-efficacy increased.

Leadership Development of Higher Education Students

Lor& Yang (2012) proposed a leadership framework meant to serve as a resource and reference for those who found themselves in a leadership position in

The Impact of Student Leadership on Students' Academic Achievement in Public and Private Universities of Pakistan

the community. This framework consisted of three primary components: (a) knowledge of the leadership continuum, (b) the infusion of a culturally embedded leadership structure into one's leadership style, and (c) an embracing of the key attributes of leadership. The authors described the first component, leadership continuum, as having a critical understanding of the cultural values and traditions, as well as having knowledge of key historical leaders. This included understanding the clan leadership structure and its evolution and implications throughout Southeast Asia and the United States. The second component here, the infusion of a culturally embedded leadership structure into one's leadership style, was described by the authors as being able to navigate through leadership using strategies that were characteristic of leadership ideologies that consider traditional, as well as progressive leadership styles.

Another study discussing adult student leaders examined women leaders. Using a narrative study methodology with a group of nine young female professionals, Moua & Riggs (2012) inspected the indicators of leadership those involve in the individual contribution towards the leadership approaches and strategies keeping the leadership consistent and avoid the hindrances those are faced by the leader. Through this study, the researchers found that the participants' experience in impoverished families motivated them to seek out educational opportunities to escape their socioeconomic status.

Academic Achievement

According to Smythe & Hess (2005) academic Achievement, student success, and student grades are commonly used indicators in educational research. Pascarella & Terenzini (2005) presented latest research stream consists several studies on academic achievement at higher level of education. In modern era, higher education is vital for every individual to achieve prominent position in society and success in life. Hence, the attitude and performance of a learner in higher education can meaningfully affect learners' life ahead. There are numerous explanations behind the significance graduating in a degree from university. Some of these causes are being the part of civilized society, being financially stable and being emotionally stable.

Academic Achievement in Higher Education

Pascarella & Terenzini, (2005) identified better achievement in higher education could led to the brighter future of the individual. There is significant relation between the higher education achievement and better occupation. Prevatt *et al.* (2011) specified the fact that civilian with high school certificate earns about half as compared to the person graduated from university. According to Eunhee, Newton, Downey & Benton (2010) the average income of the university graduate is higher than the average income of the high school certificate holder, this difference remains unceasing, because of the fact that university graduate is more educated. Furthermore, the university graduates are more

satisfied and have more job-related benefits as compared to the diploma holder or the higher secondary school certificate holder. Schnittker (2004) suggested that higher education of an individual have its effects on economic level as well as the physical wellbeing. More definitely, the person who attain graduate degree from university exhibit healthier physique and improved fitness. Mirowsky & Ross (2008) conducted research in the area of higher education has revealed that education could help in reducing the disease aggregates around the world. Individual's actual behaviors and approaches regarding the health practices could be improved through accomplished level in education. This is the hypothesis used by several researchers as educational advantage. The proper attention towards the health related issues and problems could only be brought through attaining the higher level of education which could result in improved carefulness about health.

Models of Academic Achievement

Input-Environment-Outcomes Model (IEO)

Swing (2001) presented the traditional cause and effect model is used as the base model for the IEO model. Previously proved through various research studies that academic achievement is also influences by the cause and effect model. As the name of the model suggests, the model is the integration of three prominent variables of academic achievement. The input strictly related to the learner's past understandings and familiarities with the knowledge. These inputs are characterized as inspirational level of the learner, intellectual ability as well as the influence of past success. The climate of the higher educational institution the student studying in is referred as environment.

Student Integration Model (SIM)

Thomas (2000) supported the concept of SIM model which focuses on the gradual increase of the learners' knowledge in higher education and desirable addition to the learner's knowledge parallel with the outcome or achievement in terms of the result. The major focus of this model is to increase the withholding and addition of new knowledge experiences and decrease the ignorance of knowledge at higher education level. This model suggests that the effort of the student to gain and sustain more knowledge at higher education could led the learner to more ways of achieving the prominent achievement in higher education.

Kuh's Student Engagement Model

According to Kuh (2001) higher education institutions those possess worthy reputation provide proper educational engagements for the students and attain more rates of educational success. Educational engagement of the learner include several indicators such as lively participation in learning activities, acceptance of the dynamics of learning, collaboration with peers, greater beliefs and learning feedback opportunities. Several research studies in the academic achievement supported these factors of student engagement for academic achievement. The survey study conducted by Kuh (2009) used the survey tool to

The Impact of Student Leadership on Students' Academic Achievement in Public and Private Universities of Pakistan

assess the students' requirements and their engagement level at higher educational institutions and measure several indicators of academic learning such as task, cooperation and active participation in learning activities.

Materials and Methods

Population for this study included 5 universities which comprised **1969 students** of social science discipline. Furthermore 1 university was reserved for pilot testing. Two public and two Private Sector Universities were selected to participate in the study through stratified random sampling technique. The research was delimited to four universities. Selection of participants from four universities is supported by the standards provided by Krejcie and Morgan (1970) out of 1969 students 322 students were selected. One questionnaire used for students. Questionnaire is more convenient and easy to follow-up. Questionnaire is based on Likert scale. Questionnaire supports Student Leadership Challenge Model (Kouzes and Posner, 2014).

Results

The purpose of this chapter is to illustrate the results of the data analysis for the study. For this purpose quantitative and qualitative analysis has been made through the relevant instrument.

Demographic Characteristics of Students

Table 1

Analysis of Demographic Variables of Respondents

Demography	Demographic Variable	Frequency	Percentage
<i>Gender</i>	Male	179	55.59%
	Female	143	44.41%
<i>University</i>	International Islamic University Islamabad.	114	35.40%
	PMAS Arid Agriculture University Rawalpindi.	92	28.57%
	University of Wah, Wah Cantt	64	19.88%
	Foundation University, Islamabad	52	16.15%
Total		322	100%

Table 1 shows Demographic Variables of Respondents Majority of the respondents about 55.59% of the respondents were female respondents while 44.41% respondents were male respondents. Majority of the students 35.40% were sampled form International Islamic university Islamabad, secondly 28.57% students were sampled from Pir Mehr Ali Shah Arid Agriculture University Rawalpindi. Thirdly 19.88% students were from University of Wah. At last 16.15% students were from Foundation University.

Table 2
Academic marks of students

<i>Results in CGPA</i>	<i>Frequency</i>	<i>Percentage</i>
3.50-4.00	81	25%
3.00-3.49	122	38%
2.50-2.99	72	22%
Below 2.50	47	15%
Total	322	100%

Table 2 shows that about 25% of the students were in CGPA range of 3.50-4.00, for range 3.00-3.49 students were 38%, for range 2.50-2.99 students were 22% whereas 15% students were having CGPA below 2.50.

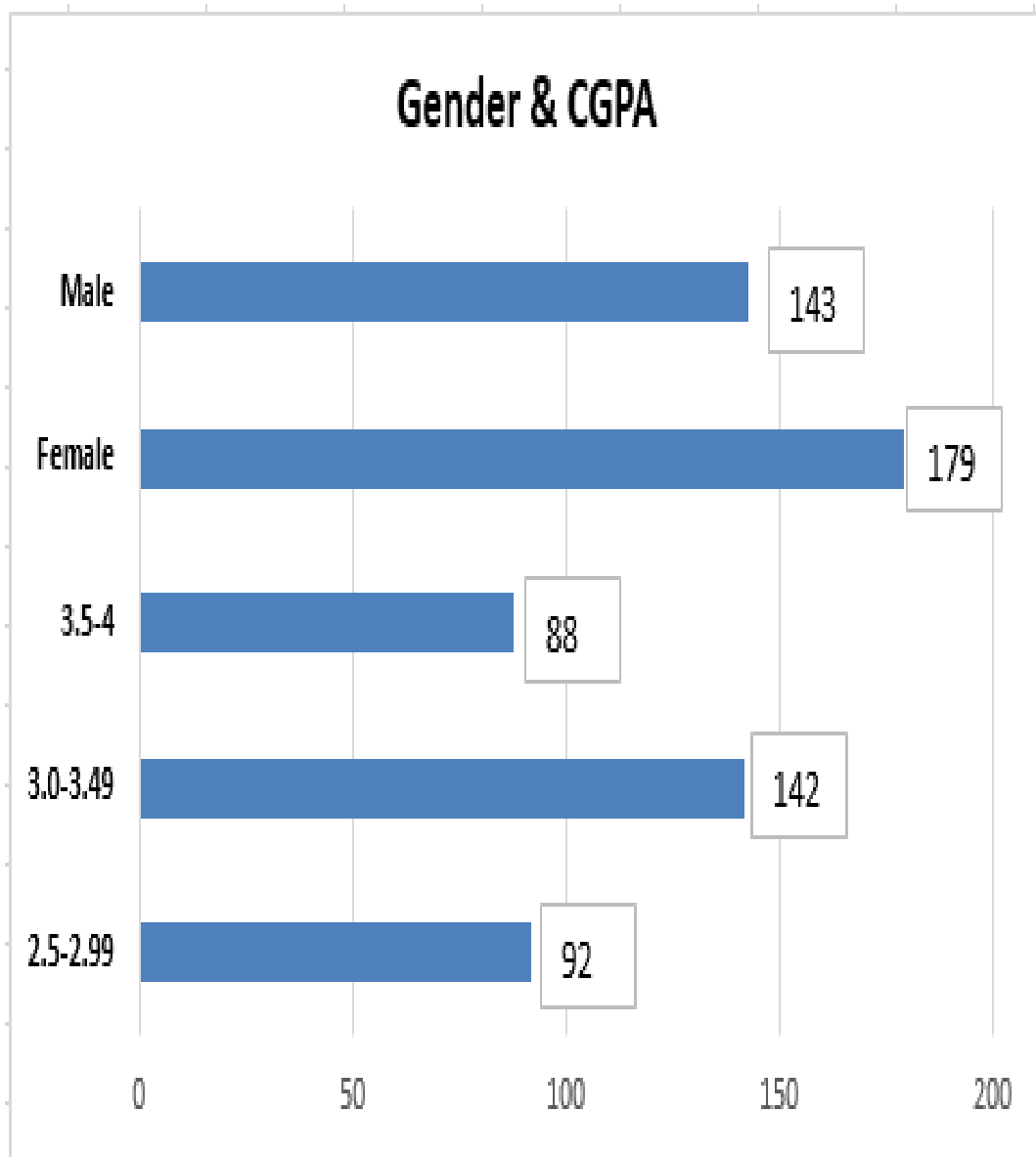


Figure 1: *Academic marks of students*

The Impact of Student Leadership on Students' Academic Achievement in Public and Private Universities of Pakistan

Table 3

Impact of student leadership on students' academic achievement

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.844 ^a	.712	.915	9.33198	.915	2778.166	1	320	.000

a. Predictors: (Constant), student Leadership

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28017.087	1	28017.087	791.703	.000 ^a
	Residual	11330.033	320	35.022		
Total		39348.120	321			

a. Predictors: (Constant), student Leadership

b. Dependent Variable: academic achievement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.687	3.0658		3.348	.001
	Student leadership	.902	.032	.844	28.130	.000

a. Dependent Variable: student Leadership

Table 3 shows that in model summary R^2 (coefficient of determination) is 0.915 which means 91.5% of variation in students' academic achievement is due to student leadership. $F(1,320) = 791.703$. p value is less than 0.05. So, regression equation significant. Hence for every one (1) unit increase in students' leadership (x) the academic achievement of students (y) is predicted to increase by 0.902 Units, by keeping other variables constant.

Discussion

The present study was conducted to explore the relationship and impact of student leadership and students' academic achievement at university level. The present study results indicated a significant relationship between independent and dependent variables. The present study also showed a strong significant effect of student leadership and students' achievement at university level.

The discussion of the study concludes that through effective student leadership skills could lead the educational institutions to achievement of desired academic goals. Statistical data analysis indicated mixed results with most variables showed a positive significant relationship with each other. The study also showed significant effect of student leadership on their achievement

Conclusion

The study concluded that majority of the students were having above average grades. Results from regression analysis show that 71% variation in academic achievement is due to student leadership, results also showed that there was a significant impact of students' leadership on their academic achievement. Hence for every one unit increase in students' leadership the academic achievement of students is also predicted to increase by 0.902 Units, by keeping other variables constant.

Recommendation

1. Student leadership strategies could also be integrated to the existing student leadership models other than leadership challenge model such as relational leadership model and leadership identity development theory.
2. Students' future academic results, performance or learning could also be predicted through this study after integrating the student leadership in classroom.
3. Impact/role/association/effect of student leadership on academic achievement could also be assessed through the use of student leadership models other than leadership challenge model such as relational leadership model and leadership identity development theory.
4. Higher education institutions must allow teachers to deploy student leadership within classroom. Teachers must inculcate student leadership abilities in students by using different academic techniques and by using advanced methods of teachings.
5. Higher education teachers must consider the student leadership abilities those are strictly relevant to the students' learning and students' academic achievement.

*The Impact of Student Leadership on Students' Academic Achievement
in Public and Private Universities of Pakistan*

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The Impact of Student Leadership on Students' Academic Achievement in Public and Private Universities of Pakistan

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