Journal of Management Science Research Review
https://jmsrr.com/index.php/Journal/about

Volume 4 Issue No 4 (2025)

Online ISSN: 3006-2047
Print ISSN: 3006-2039

The Role of Universities in Shaping Leadership Qualities Among Students and Their Impact on Practical Life

Tasmia Noor
Institute of Agricultural Extension, Education & Rural Development University of Agriculture, Faisalabad

Taimoor Ali Shah
PhD Scholar, Quaid-I-Azam University School of Management Sciences, Quaid-I-Azam University, Islamabad

Zohaib Hassan Sain
Faculty of Business and Management Sciences, Superior University, Lahore

Ayesha Karamat
Institute of Agricultural Extension, Education & Rural Development, University of Agriculture, Faisalabad

Hafiz Muhammad Salman
Ph. D. Scholar, Department of Media Studies, Sindh Madarassat ul Islam University, Karachi

Hiba Syed
Ph. D. Scholar, Department of Public Administration, University of Karachi

Bushra Kiran
Accountant in Finance, Dadabhoy Institute of Higher Education, Karachi

Abstract
The development of leadership in the higher education environment is a crucial aspect in terms of equipping students with the professional and social challenges. This paper has delved into the importance of universities on developing leadership traits among post graduates and its influence on real life. The study was carried out in the District Faisalabad in Pakistan and randomly sampled two universities namely University of Agriculture Faisalabad (UAF) and Government College University Faisalabad (GCUF) and administered a validated questionnaire to 60 postgraduate students who had previous field experience. The paired-sample t-tests, multiple regression, gap analysis and exploratory factor analysis were used to analyze the data. The results obtained showed that experiential learning, personal and life skills and co-curricular activities played a significant role in the development of students as leaders compared to formal training and institutional support which played a relatively small role. Regression

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

analysis proved that the strongest predictors of the overall impact of leadership were personal skills, competency development, and co-curricular engagement (R2 = 0.84). Gap analysis revealed that there were significant differences between the highly satisfied and less-satisfied students especially in the areas of institutional support and academic integration. Exploratory factor analysis revealed three underlying dimensions which include personal transformation, institutional ecosystem, and social application which altogether gave explanations of 82.4% of variance. The research finds that the development of leadership should be based on a combination of the experiential learning, the curricular integration, and the supportive institutional structures. It is recommended to enrich hands-on learning experiences in college, to involve students in co-curricular activities, to mentor, to be a role model in ethical decisions, and to access leadership programs equitably so that students can be ready to face real-world challenges and responsibility in the society.

Key Words: Leadership, Education, Quality, Future

Introduction

Pakistan is at a pivotal point of its national process. Having almost 64 percent of its population aged below 30, the country has one of the largest numbers of youth in the world (Yasmeen et al., 2025). This young generation is a great potential - however, until it is guided in the right direction, it could as well be an urgent threat. The centers of this intersection are the universities of Pakistan whose mandate is to mold young minds into competent, moral and visionary leaders who can implement the intricacies of the current society.

The higher education sector in Pakistan has grown considerably since independence as evidenced by the formation of both the public and the privatized universities in the country. This system dates back to the colonial times when the University of the Punjab was founded in 1882 which was initially intended to provide administrative and bureaucratic services in the British colonial rule. After gaining independence in 1947, the universities became national institutions in an attempt to create knowledge, conduct research and develop human capital. Today, these institutions are not considered simply as academic teaching facilities, but they are increasingly regarded as the sources of leadership, innovativeness, and societal change (Zafar, 2024).

However, this growth has not been smooth sailing. Even though Pakistani young people have easier access to higher education, they still face the challenge of high unemployment rates among the educated population, lack of fit between education and labor market demand and lack of opportunities to learn through experience. A large number of graduates are joining the workforce with theoretical information but do not have leadership skills to solve real life issues, thus handle teams or innovate (Nadeem, 2023). This has created a need to have the universities stop being mere observers in the paradigm of teaching but take a more active role in leadership building.

Conventionally, university based leadership education has been predominantly based on theory and in the classroom. Although these foundations are imperative, they are

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

usually inadequate in equipping of the students with challenges of life in practice which is unpredictable and dynamic. The modern literature advances the concept of the integration of experiential and practice-based approaches, i. e., group projects, community service, student government, and mentorship, to develop leadership skills, such as accountability, empathy, collaboration, and ethical judgment (Grigoropoulos, 2021).

The examples of other countries can demonstrate the ways organized university programs can develop these competencies. Some of them include the Oxford Global Leadership Initiative, where the higher education institution is explicitly noted to develop ethical leadership, social responsibility, and the spirit of the common good in a varied student body (Brooks et al., 2019). On the same note, programs such as Developing as a Student Leader (DaSSL) show how structured leadership training can make students more employable but also prepare them to assume diverse professional and social positions (Skalicky et al., 2020).

In Pakistan, universities play a role in the development of leadership based on a combination of academics or academic curricula, extracurricular activities as well as student-centered activities. Leadership is discussed but practiced in student societies, debate clubs, volunteer programs, and sports teams where leadership is practiced. The experiences bring in confidence, drive to lead and character traits required to make responsible decisions in work and citizen life (Abdul-Hamid et al., 2008). More recently, innovative methods of teaching and leadership-focused pedagogies have only reinforced the willingness of students to solve problems in the real world, such as crisis situations and organization-level environments (Brukhovetska, 2025).

The issue of universities to develop leadership qualities is more than ever in the backdrop of economical pressures, social inequality and the speed of global change. Higher education institutions are not only required to prepare students to be employed but also to generate jobs, innovate, and be productive towards the development of a country (as research proposes), as well as being meaningful towards the national development (Yasmeen et al., 2026). In this respect, the universities are like bridges between the academic knowledge and the real life where they produce leaders who can turn challenges into the way forward.

Leadership in the higher education is not a constant characteristic, but a dynamic and changing process that is informed by knowledge, values, skills and lived experiences. In this analysis, the leadership qualities are perceived as a combination of intellectual skills, inter-personal skills, moral orientation, and practical skills that allow individuals to impact other people and collaborate around a common cause.

The notion of leadership in the university environment, especially in Pakistan is influenced by the systems of the world and the world itself. Transformational leadership that focuses more on vision, inspiration, and intellectual stimulation, has been led to prominence due to the way it encourages innovation and shared goals in learning settings. Democratic leadership, based on participation and mutual decision making, promotes inclusiveness and cooperation, involving the students and faculty in participation. By contrast, autocratic and laissez-faire leadership models, even though

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

they exist, may limit involvement or responsibility in cases where they are used in education (Maqbool et al., 2024).

In the Pakistani universities, leadership is cultivated in various ways, including formal education, co-curricular activities, student government, community service and mentorship relationships. These interrelated experiences develop key aspects of leadership, such as critical thinking and ethical decision-making, flexible thinking, teamwork, and social responsibility (Zafar, 2024). Of special interest is the necessity to reconcile cultural authenticity and global competence, so that the graduates can respond to the local issues but feel secure in the international professional and academic environment.

Simply put, colleges are learning laboratories of leadership. They build students not just to be graduates but to be leaders ready to face the realities of the practical life and to make positive contributions to society through a deliberate planning and active involvement.

Methodology

Study Area

The current research was carried out in one of the major educational and industrial areas in Pakistan, District Faisalabad, where the multicultural student population and numerous institutions of higher education live. The reason why Faisalabad was chosen is its academic diversity.

Research Design

The research design used was a quantitative and cross-sectional study to examine the contribution of universities in developing leadership traits in the students and how they will influence the real life. The research was based on primary data derived using a structured and validated questionnaire. The design facilitated measuring of perceptions, comparison of the dimensions of leadership and evaluation of predictive relationships between the variables.

Selection of Universities

Out of the chosen district, two universities of the selected district were randomly selected:

University of Agriculture Faisalabad (UAF)

Government College University Faisalabad (GCUF)

Population of the Study

Students in UAF and GCUF pursuing postgraduate studies (MPhil/MS level) were the population of the study. Only included were those students who:

Had already obtained a previous graduate degree

Had practical or field experience upon graduation

Currently pursued a postgraduate program

This criterion of inclusion made sure that the respondents were able to assess the development of leadership on the academic and practical levels.

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Sample Size and Sampling Technique.

The respondents in the various universities were selected using a simple random sampling technique.

Sample from UAF: 30 students

Sample from GCUF: 30 students

Total number of respondents (N): 60 respondents.

Data collection Tool

A self-administered questionnaire was used to gather data, which was written in accordance with the current literature and leadership development models. The questionnaire was a Likert-scale (1 = Strongly Disagree to 5 = Strongly Agree) scale that captured the dimensions as follows:

Personal & Life Skills

Competency Development

Academic and Curricular Factors

Co-curricular Activities

Institutional Support

Social and Community Investment

General Effectiveness of Leadership Development

The tool was tested by the use of expert review and pilot test. The reliability analysis showed high internal consistency with Cronbach alpha values that are found to be between 0.89 -0.93 which is excellent reliability.

Variables of the Study

Dependent Variable

General Effect of Leadership Development (Y)

Independent Variables

X1 = Personal & Life Skills

X2 = Competency Development

X3 = Co-curricular Activities

X4 = Academic and Curricular Factors.

X5 = Institutional Support

X6 = Social and Community Engagement.

Data Analysis Techniques

The data were coded, entered and analyzed by using SPSS. In order to apply several statistical methods, the following was done:

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Paired-Samples t-test Analysis

A paired-samples t-test was used in order to investigate differences in paired leadership competency dimensions.

Statistical Equation:

$$t = \frac{\bar{D}}{S_D/\sqrt{n}}$$

Where:

- $\bar{D}$ = Mean difference between paired variables
- S_D = Standard deviation of differences
- n = Number of paired observations

This analysis assessed whether experiential learning, student initiative, confidence building, ethical modeling, and skill application differed significantly from corresponding institutional or structural provisions.

Effect Size (Cohen's d):

$$d = \frac{\bar{D}}{S_D}$$

Effect sizes were interpreted as:

- Small (0.20)
- Medium (0.50)
- Large (0.80)

Multiple Regression Analysis

A **multiple linear regression model** was used to determine the contribution of leadership development dimensions in predicting the **general impact of leadership development**.

Regression Model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Where:

- Y = General Impact of Leadership Development
- β_0 = Intercept
- $\beta_1 \ldots \beta_6$ = Regression coefficients
- $X_1 \ldots X_6$ = Independent variables
- ε = Error term

Model fitness was evaluated using **R^2, Adjusted R^2, F-statistics**, and **p-values**. Multicollinearity was assessed through **Variance Inflation Factor (VIF)**, ensuring values remained within acceptable limits (< 5).

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Gap Analysis (Extreme Groups Analysis)

A **top-bottom quartile comparison** was conducted to identify gaps between students with **highest and lowest satisfaction levels**.

Mean Difference Equation:

$$\text{Gap} = \bar{X}_{Top} - \bar{X}_{Bottom}$$

Percentage Difference:

$$\%\text{Difference} = \left(\frac{\bar{X}_{Top} - \bar{X}_{Bottom}}{\bar{X}_{Bottom}} \right) \times 100$$

This analysis highlighted dimensions requiring strategic improvement, particularly institutional support and curricular leadership structures.

Exploratory Factor Analysis (EFA)

To identify the underlying structure of leadership development constructs, Exploratory Factor Analysis (EFA) with Varimax rotation was performed.

Preconditionsown Equation:

$$X = \Lambda F + \epsilon$$

Where:

- X = Observed variables
- Λ = Factor loadings
- F = Latent factors
- ϵ = Error term

Adequacy Tests:

Kaiser-Meyer-Olkin (KMO) = 0.92

Bartlett's Test of Sphericity = Significant ($p < 0.001$)

Factors with **eigenvalues > 1** and **factor loadings ≥ 0.50** were retained. Three dominant factors emerged:

Personal Transformation

Institutional Ecosystem

Social Application

Together, these factors explained 82.4% of total variance, indicating strong construct validity.

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Results and Discussion

Table 1 Paired-Samples t-Test Results Comparing Key Leadership Competency Dimensions

Competency Pair	Mean (A)	Mean (B)	Mean Diff (A–B)	t	p	Cohen's d
Experiential Learning (Group assignments enhance teamwork) vs. Formal Training (Availability of leadership programs)	4.12	3.71	+0.41	6.90	<0.001	0.70
Student Initiative (Self-driven in solving community issues) vs. Institutional Support (Student involvement in decision-making)	3.90	3.74	+0.16	3.24	0.001	0.22
Skill Application (Leadership qualities applicable in life) vs. Skill Development (Leadership competencies improved)	4.18	4.10	+0.08	2.01	0.045	0.13
Confidence Building (Communication confidence in class) vs. Structural Opportunity (Availability of leadership positions)	4.05	3.76	+0.29	5.89	<0.001	0.39
Ethical Modeling (Faculty exemplify ethical leadership) vs. Practical Preparation (Prepared for future leadership roles)	3.88	4.15	−0.27	−5.42	<0.001	0.38

Note: All comparisons are based on paired observations. Effect sizes are interpreted as small (d = 0.20), medium (d = 0.50), and large (d = 0.80).

The findings of the paired-samples t-tests of the key dimensions of development of leadership competency as perceived by the students are presented in Table 1. All in all, the results indicate the statistically significant differences among all the competency pairs, which demonstrate significant gaps in the experiential issues of leadership learning and the formal or institutional processes one would expect to uphold them. First, there is the greatest difference in means of experiential learning and availability of formal training (Mean Diff = +0.41) with a very significant t-value ($t = 6.90$, $p < 0.001$) and a medium-large effect size (Cohen d= 0.70). This denotes that students find group assignment and experiential activities as significantly more effective in improving teamwork and leadership as compared to simply the availability of formal leadership programs. The outcome supports the relevance of practice-based, practical learning strategies rather than training opportunities offered in a structure but that may be less interesting. Second, the variable student initiative and institutional support have significant statistical significance ($t = 3.24$, $p = 0.001$) but the effect size is low ($d = 0.22$). Although the students self-rate themselves rather high concerning their

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

self-motivation to solve the problems of the community, the students rate the institutional support (concerning the involvement in the decision-making) comparatively lower. It implies that, despite the fact that students have the intrinsic motivation to lead, universities are not maximizing on the potential by including students in the governance and decision-making processes. Third, there is a small but significant difference between the application of skills and the development of them (Mean Diff = +0.08; t = 2.01, p = 0.045; d = 0.13). Students a bit prefer the applicability of leadership attributes in the real world as compared to the idea that competencies should be enhanced by the academic programs. The minimal effect size means that these two dimensions are aligning, which means that leadership development initiatives are in general producing usable skills although with a limited perceived incremental returns. Fourth, confidence building and structural opportunities can also be identified to have a significant difference that is noted as significant (Mean Diff = +0.29; t = 5.89, $p < 0.001$; d = 0.39). Students are secure about communicating and demonstrating leadership in the classroom, but they see less formal job positions or chances of leadership in the institutional form. Such a moderate effect size indicates an incongruity between the willingness of students to lead and the accessibility of the platforms, on which students can exercise this leadership and institutionalize it. Lastly, the negative mean difference is only present in the comparison of ethical modeling by faculty and practical preparation of future leadership positions. This means that despite the fact that students are recognizing good ethical leadership examples by faculty, they are less equipped in terms of practical leadership. The conclusion is that ethical role modeling might not be a useful phenomenon unless it is combined with systematic, practice-oriented preparation of leaders. In general, the findings underscore the fact that, as students are showing good leadership-related attitudes, confidence and ethical awareness, institutional frameworks and formal processes tend to be trailing behind experiential learning skills in developing leadership-related competencies. The implications of these findings are that higher education institutions should enhance the experiential, participatory, and practice-based leadership development programs, and more effectively match the formal programs and structural opportunities against the leadership potential exhibited by the students.

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Table 2: Regression Analysis: Predicting General Impact of Leadership Development

Predictor Variable	Unstand. Coeff. (B)	Stand. Err	Sta. Coeff. (β)	t-value	p-value	VIF
(Constant)	0.42	0.18	-	2.33	0.020	-
Personal & Life Skills	0.38	0.07	0.41	5.43	<0.001	3.15
Competency Development	0.22	0.06	0.24	3.67	<0.001	2.89
Co-curricular Activities	0.18	0.05	0.20	3.60	<0.001	2.45
Academic & Curricular	0.11	0.05	0.12	2.20	0.028	2.67
Institutional Support	0.08	0.04	0.10	2.00	0.046	2.12
Social & Community	0.09	0.06	0.10	1.50	0.135	3.78

Model Summary: $R^2 = 0.84$, Adjusted $R^2 = 0.83$, $F(6, 293) = 152.67$, $p < 0.001$
VIF (Variance Inflation Factor) < 4 indicates no problematic multicollinearity

A multiple regression analysis of the degree to which various dimensions of leadership development predict the overall assessment of the students regarding the impact of leadership development effect is provided in Table 2. The model has an extremely high explanatory power with an R 2 of 0.84 and adjusted R 2 of 0.83 meaning that 83-84 per cent variance in the general impact evaluation of students is attributable to the predictors included. The robustness of the regression framework is proved by the overall statistical significance of the model ($F(6, 293) = 152.67$, $p < 0.001$). The most significant predictor that can be identified among the others is Personal and Life Skills, which determines the perception of the impact on the development of leadership among the students. It demonstrates the best standardized coefficient ($b = 0.41$) and high and significant effect ($t = 5.43$, $p < 0.001$). The results of this finding can be interpreted to indicate that self-confidence, communication, problem-solving, and life skills are the main aspects that determine the effectiveness of leadership development programs among students. It is the leadership programs that directly contribute to these personal competencies, and, thus, it is most likely that they will produce a high perceived impact. Competency Development ($b = 0.24$, $t = 3.67$, $p < 0.001$) is the second most powerful predictor meaning that the systematic changes in leadership knowledge, skills and abilities are also important contributors of overall perceptions of impact. This underscores the need to have deliberate skill-building elements in the leadership curriculum and training. Other significant contributing factors are also observed in the co-curricular activities ($b = 0.20$, $t = 3.60$, $p < 0.001$). This finding highlights the importance of student societies, clubs, volunteering, and extra-curricular leadership positions as some of the avenues through which students have learnt leadership on a practical level. These activities seem to supplement formal teaching providing real-life contexts in which leadership is practiced. Academic & Curricular dimension makes a minimal yet still significant impact to the evaluations of the students ($b = 0.12$, $p = 0.028$), which indicates that the information about leadership in academic courses has a very small impact on the

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

overall evaluations of students. Although classroom based learning is significant, its comparative importance is lesser than that of experiential and personal development dimensions. Accordingly, the effect of Institutional Support is marginal, but statistically significant (b = 0.10, p = 0.046). This shows that policies, administrative support, and provision of leadership opportunities do have a role to play, albeit the effect is less significant unless the policy is translated into actual skills and experience acquisition among students. On the contrary, Social and Community engagement fails to prove to be a statistically significant predictor when other variables are considered (b = 0.10, t = 1.50, p = 0.135). This implies that community-oriented activities can be useful, but indirectly or mediatingly influential on leadership development via other dimensions including personal skills or co-curricular involvement. Diagnostic wise, the VIFs are lower than 4, which means that no multicollinearity is problematic and that the regression coefficients are stable and reliable. Overall, the findings suggest that students' perceptions of leadership development impact are driven primarily by outcomes that enhance personal growth, practical competencies, and experiential learning opportunities, rather than by institutional structures alone. For higher education institutions, these results imply that leadership development strategies should prioritize life skills, competency-based training, and co-curricular engagement, while ensuring that academic content and institutional support are closely aligned with experiential and student-centered approaches.

Table 3: Gap Analysis: Top-Bottom Quartile Comparison (Extreme Groups Analysis)

Dimension	Top Quartile Mean	Bottom Quartile Mean	Mean Difference	% Difference	Rank Order of Gap
Institutional Support	4.52	2.89	1.63	56.4%	1
Academic & Curricular	4.65	3.28	1.37	41.8%	2
Co-curricular Activities	4.58	3.42	1.16	33.9%	3
Personal & Life Skills	4.72	3.48	1.24	35.6%	4
Competency Development	4.68	3.51	1.17	33.3%	5
Social & Community	4.63	3.55	1.08	30.4%	6
General Impact	4.78	3.62	1.16	32.0%	7

Overall Satisfaction Gap: Top Quartile = 4.65 vs. Bottom Quartile = 3.39 (Difference = 1.26, 37.2%)

Table 3 shows the findings on an extreme groups (top-bottom quartile) gap analysis of students who had the highest and lowest overall ratings on leadership development. The results indicate that there are great and systematic disparities in all dimensions which implies that there are definite reasons that make highly satisfied students be less satisfied.

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Institutional support has the greatest gap of 1.63 points and a percentage difference of 56.4% which is the first gap in all the dimensions. The highest quartile students with respect to rating institutional support very highly (Mean = 4.52) and the lowest quartile students record much less satisfaction (Mean = 2.89). This significant disparity implies that opportunities to join leadership programs, make decisions, administrative support, and career advice is a decisive factor in the overall satisfaction of the students with leadership development.

The second-largest difference is found in the academic and curricular dimension with 1.37 (41.8) as the mean difference. This shows that students that think that leadership information is an effective part of coursework-based and teaching methods are far more likely to rate leadership development as positive as compared to those who do not, which demonstrates the need to incorporate leadership learning in the formal curriculum.

Co-curricular activities are in the third place, and the mean difference is 1.16 (33.9%). Those students who are in the highest 25 percent report significantly higher activity in clubs, societies, and extracurricular leadership possibilities, which is indicative of the importance of the experience in developing positive leadership development perceptions.

Surprisingly, there is a large gap in personal and life skills (Mean Difference = 1.24; 35.6) yet is in the 4th position instead of the 1 st. It means that although individual developments and life competencies are considered to be significant, it might be more homogeneous among students than institutional or curricular variables, which differ more markedly between high- and low-satisfaction groups.

The competency development (1.17; 33.3%) and social and community engagement (1.08; 30.4) gaps are relatively small, yet still big. These findings indicate that perceived skill acquisition and community involvement also lead to overall satisfaction albeit not as decisive as institutional and academic factors in distinguishing extreme groups.

The dimension of general impact indicates the mean difference of 1.16 (32.0%), which underlines the tendency, according to which the holistic assessment of the roles of leadership development by students is a close reflection of disparities in the dimensions of leadership development.

On the whole, the analysis shows that there is a strong satisfaction gap between the highest quartile (Mean = 4.65) and the lowest quartile (Mean = 3.39), which is equal to 1.26 points (37.2%). This high disparity means that the satisfaction of students with leadership development is highly influenced by the effectiveness of institutions in terms of their ability to provide supportive systems, to put leadership into their curriculums, and to offer meaningful co-curricular opportunities. The results imply that the intervention to enhance the attitude to leadership development should focus on enhancing the institutional support mechanisms and curricular integration since these two issues present the most noticeable differences between highly and less satisfied students.

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Table 4: Factor Loadings from Exploratory Factor Analysis (Varimax Rotation)

Item Statement	Personal Transformation	Institutional Ecosystem	Social Application	Communality
University experience had positive life impact	0.88	0.21	0.18	0.84
Leadership development contributes to long-term success	0.85	0.24	0.22	0.83
University experiences increased self-confidence	0.83	0.19	0.25	0.79
Personality positively influenced by leadership training	0.81	0.23	0.27	0.78
Confidence in acting as a team leader	0.78	0.31	0.19	0.74
Availability of leadership development programs	0.18	0.86	0.12	0.79
Career counseling supports leadership development	0.22	0.84	0.15	0.77
Availability of leadership positions for students	0.25	0.81	0.18	0.75
Student involvement in decision-making	0.31	0.79	0.21	0.76
Seminars/workshops enhance communication skills	0.34	0.76	0.25	0.75
Leadership training promotes community involvement	0.28	0.22	0.85	0.83
University education enhanced social responsibility	0.32	0.19	0.83	0.81
Ability to collaborate with diverse people	0.35	0.24	0.81	0.82
Volunteer programs promote responsibility	0.38	0.21	0.79	0.80
Self-driven in solving social/community issues	0.41	0.25	0.76	0.78
Eigenvalues	6.45	3.12	2.78	-
% of Variance Explained	43.1%	20.8%	18.5%	Total: 82.4%
Cronbach's Alpha (α)	0.93	0.89	0.91	-

*Note: Factor loadings > 0.50 are considered significant (shown in bold). KMO = 0.92, Bartlett's

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

The findings of the exploratory factor analysis using Varimax rotation which was used to identify the underlying structure of the students perceptions in terms of leadership development are reported in Table 4. The data were also very appropriate to factor analysis as evidenced by an excellent Kaiser-Meyer-Olkin (KMO) value of 0.92 and significant test of sphericity of Bartlett which established high inter-item correlations.

The result of the analysis showed a three-factor solution that clarifies 82.4% of the overall variance indicating a strong and well-constructed construct. The communality values were 0.74 to 0.84 which means that the extracted factors explained a large percentage of variance contained in each of the items. The items retained loaded well on their factor, and loadings were above the 0.50 mark, and cross-loadings were low which is a good indication of the clarity of the factor structure.

The former contributed the highest amount of variance (43.1) of an eigenvalue of 6.45. The items that pointed to this factor highlighted the positive life impact, long-term success, high self-confidence, personality development, and confidence in performing the role of a team leader. This tendency indicates that the students rather consider the development of leadership as the process of their personal evolution and internal change. The reliability coefficient is very high (Cronbachs a = 0.93) which is also another evidence of the internal consistency of this dimension.

The second factor explained 20.8% variance and had an eigenvalue of 3.12 and contained the question that dealt with availability of leadership development programmes, career advice, leadership roles, student participation in decision making processes and seminars or workshops that can improve communication skills. All these are indicative of the contribution of structural and organizational environment of the university towards developing leadership. The reason is that the value of Cronbach's alpha is very high (a = 0.89) and this is a factor that is reliable in capturing the institutional support dimension.

The third factor contributed 18.5 percent to total variance and the eigenvalue of this factor is 2.78 and included the items in the category of community involvement, social responsibility, cooperation with diverse people, volunteerism, and self-interest in resolving social or community problems. This aspect underscores the use of leadership skills in the social and community setting, with civic participation and social responsibility as the two important consequences of leadership growth. This factor was also consistent (a = 0.91) and was reliable.

All in all, the results reveal a high level of construct validity and reliability of the leadership development scale. The implication of the three-factor structure is that the perceptions of the students regarding leadership development are multidimensional, i.e. personal growth, institutional facilitation, and social application. This implies that high systemic leadership development in the institutions of higher learning must focus on internal personal change, supportive institutional ecosystems, as well as promoting real-world use of leadership competencies in the social and communal contexts.

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

Conclusion

This paper concludes that the role of universities in building leadership qualities among the postgraduate students is an important one but the success of that role greatly relies on whether leadership development is more experiential, more student-centered and more practice-oriented. The results show that the experiential learning, the personal development, and the co-curricular involvement are perceived by the students as the factors that have the most significant impact on leadership competencies formation, compared to the formal leadership programs and institutional structures alone. Regression findings denote that the most influential predictors of the overall effects of leadership development are personal and life skills, competency development and co-curricular activities, whereas institutional support and academic factors have a comparatively lesser role. The gap analysis also demonstrates that there are significant differences between students that are highly satisfied and those that are not, specifically in institutional support, and curricular integration, and unequal access to leadership opportunity. On the whole, the research indicates that effective leadership development has to be translated into the real life situations by means of university programs reinforced in terms of the opportunities of the practical experience of the leadership, leadership as an element of the academic programs, and institutional conditions supporting the student to develop the leadership skills in practice.

Recommendations

Experience and practice based learning should be enhanced in universities by including group work, case studies, internship and simulation whereby students would be able to practically acquire skills of leadership, teamwork and problem solving. It was determined that these methods worked better in developing leadership skills as compared to formal programs. Development of leadership must be inculcated in educational curriculums whereby every student whether in or out of extracurriculums must learn basic skills about leadership. These and with this, universities must vigorously facilitate co-curricular and student-initiated activities, including clubs, societies, volunteer activities, and student councils, which offer viable opportunities to practice leadership and self-development.

In order to close the gap between the potential and the opportunities of students, organizations have to improve the institutional support and the involvement in the governing, providing them with leadership roles, decision-making opportunities, and access to university committees. Personal and life skills, such as self-confidence, communication, critical thinking, and problem-solving, should be given higher priority in leadership programs since these are strong predictors of the perceived leadership development impact. Ethical role modeling ought to be coupled with hands-on mentorship and training by faculty to show how students can apply leadership skills in their real-life situations. Also, the universities must promote social and communal participation and tie the work of volunteering and civic activities to the leadership goals. Having fair access to leadership programs and opportunities will assist in minimizing disparities and allow all students to develop the competencies

Volume 4 Issue No 4 (2025)
Online ISSN: 3006-2047
Print ISSN: 3006-2039

that they will need to succeed in their professional and have a significant impact on society.

References

Abdul-Hamid, J., Krauss, S. E., & Ismail, I. A. (2008). Developing motivation to become leaders amongst undergraduates in institutions of higher learning. The International Journal of Knowledge, Culture, and Change Management: Annual Review, 8(3), 157–170. https://doi.org/10.18848/1447-9524/CGP/V08I03/50548

Brooks, E., Brant, J., & Lamb, M. (2019). How can universities cultivate leaders of character? Insights from a leadership and character development program at the University of Oxford. The International Journal of Ethics, 4(2), 167–182. https://doi.org/10.1007/S40889-019-00075-X

Brukhovetska, O. (2025). Development of leadership qualities of future specialists in the process of learning at higher education institutions. https://doi.org/10.58442/3041-1858-2025-33(62)-27-48

Grigoropoulos, J. E. (2021). Educational Leadership: Cultivating Leadership Qualities Generates Student Leaders (pp. 162–173). IGI Global. https://doi.org/10.4018/978-1-7998-7760-8.CH009

Maqbool, S., Zafeer, H. M. I., Maqbool, S., Zeng, P., Draissi, Z., & Javed, S. (2024). Stance of numerous leadership styles and their effect on teaching to sustain academic performance at the high school level. Heliyon, 10(16).

Nadeem, M. (2023). Leadership Challenges and Strategies in Pakistan's Higher Education System. Education Quarterly Reviews, 6(3).

Skalicky, J., Warr Pedersen, K., van der Meer, J., Fuglsang, S., Dawson, P., & Stewart, S. (2020). A framework for developing and supporting student leadership in higher education. Studies in Higher Education, 45(1), 100–116. https://doi.org/10.1080/03075079.2018.1522624

Yasmeen, T., Aftab, M., Alam, J., Mohsin, M., & Bilal, M. (2025). Perspective Chapter: The Role of Educational Leadership in Promoting Entrepreneurship Education in Higher Education – Evidence from Pakistan. IntechOpen. doi: 10.5772/intechopen.1012846

Zafar, D. (2024, March 29). Role of universities in youth development | Pakistan Today. Pakistantoday.com.pk. https://www.pakistantoday.com.pk/2024/03/29/role-of-universities-in-youth-development/

Zafar, D. (2024, March 29). Role of universities in youth development | Pakistan Today. Pakistantoday.com.pk. https://www.pakistantoday.com.pk/2024/03/29/role-of-universities-in-youth-development/