

Leadership Skills and Competencies of Students at Universities in India

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Abstract—The purpose of this study was to examine the leadership skills and competencies of students and to find out the differences on the basis of gender and type of course on eight distinct scales. The Student Leadership Outcomes Inventory defined these eight scales. A total of 239 participants participated in the study. Sampling method used was convenience sampling type. Participants were reported to have moderate levels of leadership skills on all eight scales. However, differences by gender were found on the Cognitive Development/Critical Analysis scale of the instrument while differences by type of course were found on the Technology scale of the instrument. The findings show that the students possess various well-developed leadership skills and competencies.

Keywords: Leadership, skills, competencies, students, universities.

1. INTRODUCTION

Students have an opportunity to develop diverse leadership abilities during their schooling and college years. Preparing future leaders is a basic priority in higher education, but doubts have been raised about whether this goal is being achieved or not [1]. Colleges and universities are mostly focusing on graduating students who will succeed in their careers[2,3,4]. Colleges and universities have perceived that most jobs which are high-paying in nature require a college degree and they have adjusted their curricula to reflect the skills and competencies needed to earn these jobs [5]. To some degree the skills and experiences employers seek vary greatly from study to study. Employers report that they look for candidates who possess transversal abilities in several disciplines such as reading, writing, creative thought, personal organization, easy integration in working groups, organizational efficiency and leadership capacities[6,7,8].

In general, employers look for students who have completed a bachelor's degree and possess a broad skill set [8]. Many employers specifically seek leadership skills among the graduates they hire [9,10,6,11,12]. Usually, employers are more interested in students who are leaders[13]. A study was conducted at Florida State University, as per the results of the study employers feel that it is important for graduates to have leadership experience[14]. Employers nowadays are urging colleges and universities to ensure that students graduate with leadership skills[15].

The literature on leadership skills has found out that there is a focus on college students [16, 17, 18, 19, 20, 21, 22, 23, 24].

This has been due to the belief that the development of leadership skills is a responsibility of higher education. Students themselves believe several skills should be developed during their college careers. Time management skills, reading skills, and public-speaking skills were among those identified by students as key to success in college[25]. With students being more savvy consumers, institutions are becoming even more conscious of providing what their consumers want, whether that consumer is the student or the employer.

As a result, colleges and universities have introduced courses and programs for students designed

to promote those leadership skills. These skills have been categorized into Technical skills that

reflect the specialized knowledge, tools and techniques that leaders either possess or employ. Conceptual skills includes intelligence, judgment, ability to see the big picture, and to envision change. Finally, human skills encompass the

ability to work with and through others [11].

It has been noted that participation in leadership activities had more impact on student development than affective measurements of the students' commitment to their personal and social development in college[20]. Involvement in leadership activities, and therefore leadership development, has been associated with gains in practical and interpersonal competence [26], intellectual development [27], development of altruism [28], and commitment to common social

purposes [29]. Additionally, leadership development programs have become a

major part of the holistic student-development goals of student affairs divisions [30,31].

Programmes to promote leadership development have taken both curricular [32,33,34] and co-curricular [33,35] forms. Other work has been done to combine these two areas into a comprehensive leadership development program [36].

Early leadership experiences provide individuals with the tools they need to succeed academically, in the workforce, and in other social arenas [37]

2. PURPOSE OF THE STUDY

The purpose of this study was to examine the leadership skills and competencies of students. This study was aimed at determining the skills in eight distinct subgroups related to leadership: self-management, interpersonal, problem-solving/decision-making, cognitive development/critical analysis, organization and planning, self-confidence, diversity awareness, and technology.

This study was designed to answer the following research questions:

- (1) What are the leadership skills and competencies of the university students?
- (2) Are there differences in leadership skills and competencies of university students on the basis of gender?
- (3) Are there differences in leadership skills and competencies of university students on the basis of the type of course that they are pursuing?

3. METHODOLOGY

Population and sample

The sample has been drawn from two universities- Aligarh Muslim University (Central University) and Bundelkh and University (State University). A total of 239 students participated in the study. Sampling method used was convenience sampling type. The result sample included 124 males and 115 females. Students were told that the participation was voluntary, and were assured that their responses were anonymous.

4. INSTRUMENTATION

The instrument used to collect data was adapted from the modified Student Leadership Outcomes Inventory (SLOI) (Vann 2000, 2004)[38]. The instrument used for the study consisted of 29 items distributed to eight scales.

Each scale asked participants to respond using a Likert-type scale between 1 and 5, 1 being Strongly Disagree, and 5 being Strongly Agree.

The first scale had five items that examined the self-management skills of participants.

The interpersonal skills of participants were the focus of the second scale. This section included six items. The third scale dealt with Problem-solving/decision-making and included three items.

In the fourth scale cognitive development and critical analysis skills were examined. The fifth scale examined organization and planning on the part of participants. There were five items in this section. Each item dealt with an ability related to organization and planning. The sixth scale dealt with the self-confidence of participants. Diversity awareness was the focus of the seventh scale. The eighth scale dealt with the participants' knowledge of technology.

5. METHOD OF ANALYSIS

Descriptive statistics of the responses were generated through SPSS 16.0. First, the data were coded. Tests of differences (independent sample T-test) were deployed to test whether differences existed between males and females as well as the type of course opted by students. .

6. RESULTS

Question one: What are the leadership skills and competencies of students?

In order to address this question, descriptive statistics was calculated for the overall scores in each of the eight scales represented on the questionnaire. The results are summarized in Table 1. The data indicated that the participants scored highest on the Self-confidence scale ($M = 4.33$), and lowest on the Organization and planning scale ($M = 3.83$).

Table 1: Descriptive Statistics - leadership skills and competencies students

	N	Mean	Std. Deviation
Self-management	239	4.1088	.48668
Interpersonal skills	239	3.9965	.49187
Problem solving/decision making	239	3.9791	.64966
Cognitive development/critical analysis	239	3.8695	.57368
Organization and planning	239	3.8393	.68841
Self-confidence	239	4.3326	.74135
Diversity awareness	239	4.1883	.64667
Technology	239	3.8996	1.15152

Question two: Are there differences in leadership skills and competencies of students on the basis of gender?

The second research question presented in the study asked if there were any differences by gender in the leadership skills of participants. A *t*-test was run on each of the eight scales. A summary by gender of each scale is shown in Table 2. A significant difference ($Sig < 0.05$) was found on the Cognitive Development/Critical Analysis scale.

Table 2: Results of t-test on differences in leadership skills and competencies of students on the basis of gender.

	Gender	N	Mean	Std. Deviation	F	Sig.
Self-management	MALE	124	4.1532	.44474	2.352	0.126
	FEMALE	115	4.0609	.52594		
Interpersonal skills	MALE	124	3.9731	.49313	0.47	0.829
	FEMALE	115	4.0217	.49141		
Problem solving/decision making	MALE	124	3.9543	.65895	1.703	0.193
	FEMALE	115	4.0058	.64131		
Cognitive development / critical analysis	MALE	124	3.8742	.53281	4.047	0.045
	FEMALE	115	3.8643	.61704		
Organization and planning	MALE	124	3.9161	.64573	0.953	0.330
	FEMALE	115	3.7565	.72537		
Self-confidence	MALE	124	4.2661	.67906	0.130	0.718
	FEMALE	115	4.4043	.79993		
Diversity awareness	MALE	124	4.1290	.68036	0.738	0.391
	FEMALE	115	4.2522	.60471		
Technology	MALE	124	3.8145	1.16429	1.381	0.241
	FEMALE	115	3.9913	1.13552		

Question three: Are there differences in leadership skills and competencies of university students on the basis of type of course?

The third research question presented in the study asked if there were any differences by type of courser in the leadership skills and competencies of participants. A *t*-test was run on each of the eight scales. A summary by type of course of each scale is shown in Table 3. A significant difference (*Sig*<0.05) was found on the Technology scale.

Table 3: Results of t-test on differences in leadership skills and competencies of university students on the basis of type of course.

	Course	N	Mean	Std. Deviation	F	Sig.
Self-management	PROFESSIONAL	149	4.1275	.51476	1.928	0.166
	NON – PROFESSIONAL	90	4.0778	.43725		
Interpersonal skills	PROFESSIONAL	149	4.0213	.51417	1.885	0.171
	NON – PROFESSIONAL	90	3.9556	.45235		
Problem solving/decision making	PROFESSIONAL	149	3.9843	.67599	0.310	0.578
	NON – PROFESSIONAL	90	3.9704	.60717		
Cognitive development/ critical analysis	PROFESSIONAL	149	3.8966	.59621	0.454	0.501
	NON - PROFESSIONAL	90	3.8244	.53450		
Organization and planning	PROFESSIONAL	149	3.9007	.71040	0.414	0.520
	NON - PROFESSIONAL	90	3.7378	.64138		
Self-confidence	PROFESSIONAL	149	4.3758	.63911	2.631	0.106
	NON – PROFESSIONAL	90	4.2611	.88441		
Diversity awareness	PROFESSIONAL	149	4.2248	.62719	1.035	0.310
	NON – PROFESSIONAL	90	4.1278	.67691		
Technology	PROFESSIONAL	149	3.7852	1.24425	9.656	0.002
	NON - PROFESSIONAL	90	4.0889	.95570		

7. DISCUSSION AND CONCLUSIONS

The present study results from a research carried out in two Indian universities. The aim of this study was to find out the prevalent leadership skills and competencies among students and determine whether any differences existed on the basis of gender, type of course.

Prominently, eight categories were used to measure the leadership skills and competencies: 1) self-management; 2) interpersonal relations; 3) problem solving/decision making; 4) cognitive development/critical analysis; 5) organization and planning; 6) self-confidence; 7) sensitivity for the diversity; 8) technology.

For each item, students were requested to respond to the extent to which they agree or disagree with the item. Students responded on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree) which led to 3 as the mid-point of the response range. That is, mean scores over 3 suggests that respondents had achieved the skill to some extent, whereas mean scores below 3 suggests that they had not achieved the skill to any great degree.

Among the categories, means ranged from a high score in the area of Self-Confidence ($M = 4.33$) to a low score in the area of Organization and Planning ($M = 2.13$).

[15,39].

In finding out the differences in leadership skills and competencies of students on the basis of gender, a significant difference ($Sig < 0.05$) was found only in one domain i.e. Cognitive Development/Critical Analysis scale. Females were reported to have higher level of skills than males in five categories: 'Interpersonal-skills' ($F=4.02, M=3.97$); 'Problem-solving' ($F=4.00, M=3.95$); 'Self-confidence' ($F=4.40, M=4.26$); 'Diversity-awareness' ($F=4.25, M=4.12$); 'Technology' ($F=3.99, M=3.81$), although these differences are not statistically significant.

There is an extensive body of literature that reports no differences in leadership skills by gender [40,41,42,43]. However, other studies concluded increased leadership skills in females [44]. More specifically, increased levels of interpersonal skills and problem-solving skills have been seen in females [45].

Taking the type of course into account, the findings are quite interesting, as the only scale on which the differences were significant ($Sig < 0.05$) was "Technology" wherein the students of Professional courses ($Mean=3.78$) were reported to have lower level of technology skill than the students of Non Professional courses ($Mean=4.08$). For rest of the seven scales the results are not statistically significant. The students of Professional courses have higher level of skills than the students of Non-Professional courses in remaining seven categories.

8. IMPLICATIONS FOR PRACTICE

The findings have various implications for those who teach leadership in classes, those who conduct leadership workshops and course coordinators at universities.

The present study reported moderate scores on the eight leadership scales measured. This would suggest that students possess these skills to a moderate degree. Leadership course and program coordinators can focus more of their attention on a wider range of leadership skills. This study has found skills related to Cognitive Development/Critical Analysis to be significantly less developed among female students than males students. Therefore, our findings might assist the leadership educators to make an effort by incorporating certain activities which can help the students to develop more of their cognitive development skills. It should also be noted that various intervention programs can be developed by the universities specifically for the students of non-professional courses so that they can develop the leadership skills and competencies in a better way as this will be beneficial to the students in the long run.

If educators better understand what leadership skills a student possess, they can more effectively design curricula that bridge the gap between the beliefs about leadership and its effective practice [1].

Implications for future research

Similar studies can be conducted by drawing sample from other population. More than two universities can be considered for the study. A distinction can also be made on the basis of public and private university and the results could be further compared.

This study measured leadership skills and competencies on eight scales. Future studies could expand these eight scales to include additional leadership skill categories.

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