

GENDER DIFFERENCES IN LEADERSHIP COMPETENCY AND LOCUS OF CONTROL AMONG EDUCATIONAL ADMINISTRATORS

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ABSTRACT

Education administrators can be an important element in the quest for institutional effectiveness in the context of effective leadership and informed decision-making. Leadership skill and locus of control are one of the important psychological and managerial constructs among the other factors that affect administrative performance. Though there have been many studies on these variables in isolation, little empirical research has investigated the interaction of gender and leadership competency and locus of control by the educational administrators – especially in the context of Indian education. The purpose of the present study is to compare leadership competencies and Locus of Control (LOC) of male and female educational administrators. The design of the study was quantitative, descriptive survey research with secondary and higher secondary (SHS) school administrators as the respondents. Stratified random sampling was used to achieve a representative sample of educational administrators. Chi square analysis, independent samples t-test and effect size were suggested to those who investigated gender difference between the study variables. Findings should provide empirical data on whether there are any major gender differences in competence in leadership and locus of control for educational administrators. The results of this study will help advance the research and theory of educational leadership, and will be useful to educational policy makers, school management authorities, and school professional development providers in the development of gender-responsive learning and leadership training and capacity building programmes to improve school leadership effectiveness..

KEYWORDS: Leadership Competency; Locus of Control; Educational Administrators; Gender; Comparative Study.

1. INTRODUCTION

1.1 Background

Education today is situated in a rapidly changing and complex environment which is driven by rapid technological developments, changing education policies, differing kinds of learners and increased demands for accountability of education institutions. Educational administrators are crucial for making sure that schools run efficiently and fulfill their objectives. Heads of school, vice-principals, principals, and other administrators play a vital role in the school's administration and in its strategic leadership, shaping the school culture, and tracking teachers' progress, as well as students' achievement. Thus leadership qualities and psychological characteristics of the administrators of educational institutions are closely related with effectiveness of educational institutions.

Educational leadership is no longer restricted to managing staff and ensuring alignment to state standards, but rather is an all-encompassing style of leadership based on instructional leadership, transformational leadership, collaborative decision-making, innovation, and organizational development. Effective educational leaders create a climate that brings out the best in teachers, develop positive working relationships with stakeholders, provide for ongoing improvement, and act in an innovative and proactive way to meet new educational challenges. The impact of their effective leadership is on teacher motivation, their commitment to the school, school climate and student achievement.

Changes in education, both in government expecting more from schools, and in schools requiring more from teachers, have created a stronger demand for an understanding of the personal and professional qualities that are required for success in education leadership. Of these, two attributes - "Leadership Competency" and "Locus of Control" – have gained importance in determining the effectiveness of administrators. A study of these factors gives useful information on the nature and execution of leadership functions and on the nature of leadership in varying educational settings.

1.2 Leadership Competency

Leadership competency is the knowledge, skills, abilities, attitude and behaviour an individual needs to successfully fulfill their leadership role and meet the organization's goals. Leadership competency in education includes strategic planning, communication, decision-making, conflict management, team building, instructional supervision, problem solving, emotional intelligence, ethics and change management. Educational leaders are competent and they can inspire confidence in people, have a shared vision, motivate staff and establish an environment conducive to teaching and learning.

Expectations of educational leaders continue to increase as the school administration and management system becomes more complicated. Today's administrators are required to handle financial resources, government policies, educational technologies, maintain relationships with various stakeholders, ensure inclusion, guarantee quality assurance, and deal with students' and teachers' diversities. But the diverse roles demand administrators to have a wide array of leadership abilities that goes beyond the traditional role of administration.

Several studies have correlated teacher satisfaction, organizational effectiveness, instructional quality, innovation, and student achievement in a positive manner with leadership competency. Displaying excellent leadership skills is more likely to create collaborative learning schools, make efficient utilization of school resources and to achieve effective school reform. Thus, the importance of competency assessment of education leaders for increasing the leadership effectiveness and sustainable development of Educational Institutions becomes evident.

1.3 Locus of Control

Locus of control is a psychological term coined by Julian B. Rotter in Social Learning Theory. It is a generalized sense about the extent to which life events and outcomes are caused by personal actions and external factors like chance, fate, luck or powerful others. Those with an internal locus of control acquire the conviction that things depend primarily on their personal exertions, competencies, choices and capabilities, while those with an external locus of control acquire the conviction that things depend primarily on outside circumstances that are beyond their control.

In the field of education administration, Locus of Control is important in determining the leadership style, decision making process, problem solving technique and reactions to challenges in the education institution. Administrators with a high internal Locus of Control tend to be more proactive, confident, accountable and resilient in addressing more intricate educational issues. They are more likely to take the initiative in bringing about changes, take ownership of institutional performance, provide incentives to staff and keep on trying for organizational goals and objectives even in the face of challenges.

In contrast, an external Locus of Control administrator might tend to credit external forces for having a greater effect on the organization's success or problems – government policy, lack of resources, socio-economic issues, etc. Factors outside the educational system will affect educational systems of course, but relying on them too much will lead to a decrease in initiative, responsibility and adaptable leadership actions.

Prior research has shown that LOC is associated with leadership effectiveness, job satisfaction, stress management, organizational commitment, innovation, and professional performance. An understanding of administrators' locus of control is thus important for determining psychological characteristics that relate to good educational leadership and organizational success.

1.4 Educational policy and leadership - Gender

Gender is acknowledged as a key variable in educational leadership studies. Typically, anyone holding a leadership role in an educational institution was a male. But, over the years more women have become involved with educational administration and this has led to more interest among scholars to explore the gendered differences in leadership attributes and practices.

According to the available literature, the leadership styles, and communicative, interpersonal, and decision-making attributes of male and female administrators are likely to be different. Qualitative studies have often linked the women leaders with collaborative and participative, transformational and relationship-oriented leadership behaviors while the men leaders are traditionally known to behave in directive, transactional and task oriented manner. However, there is growing evidence in modern research that leadership effectiveness is far more related to professional skill and ability, organisation culture and personal qualities rather than gender.

In the same manner, gender differences in psychological variables, like locus of control, have yielded mixed results across studies. There is a lot of sayings about the differences in gender about attributes such as personal control and personal accountability, some researchers claimed that there were significant differences and others reported that there were not statistically significant differences or very few. Such inconsistencies indicate that organisational culture, professional experiences and educational backgrounds, rather than gender alone, might potentially have a stronger effect on leadership behavioral dispositions and psychological orientations.

As there is a significant rise in the number of women and men holding leadership roles in schools, it is important to investigate gender differences in leadership competency and sense of control to better understand and improve leadership effectiveness, and to ensure and strengthen equitable professional development opportunities. These investigations also help support evidence-informed leadership and professional development plans that will enhance the capacity of administrative structures in schools.

1.5 Research Gap

Much study has been done on leadership competency and locus of control as stand-alone predictors of organizational effectiveness and leadership performance. Research studies have shown that the competency of a leader is crucial in improving school performance, teacher motivation, organisation commitment and educational quality. In the same way, the work on locus of control has determined the effect it has on the leadership style, decision making, responsibility and job performance in several organizational settings.

However, few empirical studies examined concurrently leadership competency and locus of control in the same group of educational administrators. Moreover, there is inconsistent literature reporting gender differences on these constructs especially in high and post-high schools. While previous investigations have shown attention to either of the two variables,

limited attention has been paid to how these two variables are different between male and female educational administrators as integrated in a single analytical framework.

Furthermore, evidence from the Indian educational situation is still rather scarce despite the numerous education reform measures, and an emphasis on leadership quality in schools. This helps to demonstrate the need for extensive empirical study of gender differences in leadership competency and Locus of control amongst the education administrators. This research will add to the body of knowledge in the field of Education Leadership and give evidence to support leadership development programmes and initiate policy formation and training for administrators in the future.

This study was conducted to achieve the following objectives:

The general objective of this study is to analyse and contrast the leadership competency and locus of control of male and female educational managers in secondary and higher secondary school. It aims to find out if there really are statistically significant gender differences in leadership competency and locus of control and to obtain statistical data that can help give insight into the genders in educational leadership. The results should inform policy decisions for education, school management authorities, and leadership development practitioners to develop evidence-based approaches that enhance the effectiveness of leaders and advocate for equitable leadership opportunities in educational settings.

2. Research Objectives

The present study aims to examine gender-based differences in two important dimensions of educational leadership, namely leadership competency and locus of control, among educational administrators. Specifically, the study is guided by the following research objectives:

To study the leadership competency among male and female educational administrators.

To compare the locus of control among male and female educational administrators.

3. Research Hypotheses

Based on the research objectives and the review of the relevant literature, the following null hypotheses were formulated to examine gender-based differences in leadership competency and locus of control among educational administrators:

H₀₁: There is no significant difference in leadership competency between male and female administrators.

H₀₂: There is no significant difference in locus of control between male and female administrators.

4. LITERATURE REVIEW

4.1 Leadership Competency

Definition of Leadership Competency

Leadership competency is often noted as being one of the most important elements impacting the effectiveness of any organization, including that of educational institutions. It is the coordinated mix of knowledge, skills, abilities, values and behavioural attributes which enable leaders to successfully achieve organizational objectives in the context of the shifting environmental requirements. The dimensions of leadership competency in the education environment are not only administrative leadership, but also instructional leadership, strategic leadership, communication leadership, conflict leadership, decision-making leadership, ethical leadership, emotional intelligence, team building leadership, and change management.

An educational administrator is responsible for making sure the school or institution operates effectively from both academic and administrative standpoints as well as for providing an environment for on-going development of teaching and learning. Administrators can set the shared vision goals, drive teacher talent and motivate them, and enhance the school's performance through effective leadership competency. Leadership competency therefore has become a central indicator in judging the effectiveness of school leaders globally. Recent research also highlights the need for a new range of skills for educational leaders to facilitate learner-centred education, innovation, digital transformation and organisational adaptability.

Leadership Competency Models

There are several theories that explain competency in leadership in various settings. According to Katz's three-skill Approach, there are three crucial skills an effective leader must possess, which are technical, human, and conceptual skill. Technical skills involve subject matter and executing skills, human skills involve interpersonal and communication skills, and conceptual skills involve thinking and problem solving.

Another framework that is influential is Boyatzis's Competency Theory, in which leadership is carried out through a cluster of competencies, including cognitive ability, emotional intelligence and social skills. Similarly, Spencer and Spencer's Competency Iceberg Model differentiates between observable (knowledge and skills) and non-observable (motives, self-concept and personality traits) competencies.

In the context of educational leadership, two types of leadership, namely instructional leadership and transformational leadership have been the focus of attention. Instructional leadership focuses on curriculum development, teacher supervision, and the learning results of students and the attainment of academic excellence. Transformational leadership is about motivating staff, nurturing creativity, supporting staff growth, and having a positive culture in the organization. Many of the current methods of educational leadership merge these, for it is now understood that to tackle the complexity of modern schooling, capable leaders play an increasingly important role in management as well as in transforming education.

To date, several studies have examined leadership competency in relation to various outcomes.

There is ample evidence that leadership competency has a positive impact on school effectiveness, teacher motivation, organizational commitment and student achievement. Research time after time has shown that good teachers in management capacities have a positive impact on school effectiveness because they can communicate, make decisions together, and manage effectively.

Evidence from the meta analysis indicates that overall gender gaps in education leadership are rather small although there is evidence for gender gap. Eagly, Karau and Johnson examined 50 studies, and concluded that female principals were more likely to use participative and democratic leadership styles than male principals; only minor differences emerged in terms of interpersonal styles of leadership.

In a similar vein, Hallinger, Li and Wang did a meta-synthesis of instructional leadership and showed that female principals tended to receive slightly higher scores about instructional leadership operations than male principals and that the overall effect size was moderate. The results indicate that the effectiveness of a leader is a result of the leadership practices performed as well as a result of gender only.

Recent findings, too, suggest that gender impacts on authentic leadership behaviours among school administrators is insignificant. A meta-analysis of over 6000 teachers and school leaders found that the overall effect of gender on the perceptions of authentic leadership is almost negligible, which supports the view that leadership competency should be assessed based on professional skill or ability, rather than gender.

Overall, past studies reveal that leadership competency continues to be one of the best predictors of schools' effectiveness in learning. However, inconsistencies with regard to gender-based differences require further empirical studies in various educational contexts.

4.2 Locus of Control

Rotter's Theory Locus of Control

Locus of control is a term coined by Julian B. Rotter, in the context of Social Learning Theory. Rotter suggested that people have some general expectations about the cause of life events and outcomes. Those with an internal locus of control feel that the destiny largely depends on individual activities, skills and choices. On the other hand, people with an external LOC tend to believe that what happens will be due to chance, luck, fate or those who have power over him/her.

Individuals with an internal LOC are more likely to be proactive; achievement oriented, persistent, and to take responsibility for actions according to Rotter's theory. People with external locus of control, on the other hand, may not believe that they have much influence over what happens and may feel less motivated to try and become more reliant on the circumstances.

It is one of the most commonly used psychological theories in the fields of organizational behaviour, leadership studies, educational psychology and management research; one of the reasons for this is that it can account for the differences between people with regard to their attitudes and behaviour, including their motivation, performance and decision making.

Locus of Control Educational Applications.

Locus of control is considered as significant psychological disposition which helps explaining leadership behaviour and effectiveness in the field of educational administration. Supervisors of instruction, program managers, budgetary authorities and others involved with education have a need for regularly making complex decisions related to curriculum implementation, teacher supervision, resource allocation, conflict management, and institutional development. The attitudes they have toward their ability to make such choices greatly influence the effectiveness of their leadership.

Employees who are administrator with an Internal Locus of Control are more likely to be confident, accept responsibility, be proactive, and persevere. They are more likely to find solutions to problems, are generally more enthusiastic about working to achieve institutional goals, and are more likely to find problems in the organization. Such administrators are also more likely than others to invite teacher involvement, make changes in education, and to create an educational climate that is positive.

In contrast, administrators who have a more external Locus of Control generally feel that organizational success/failure is due to government policies, lack of resources, socio-economic status or other environmental issues. While it is certainly rendered to the fact that external factors shape the educational institutions; overemphasizing on it may affect the proactive leadership behaviors in organizations and dull the adaptive behaviors in it.

Studies in various educational contexts have shown that an internal focus of control is correlated with increased satisfaction with employment, better leadership, greater organizational commitment, and better work performance. These data indicate a strong possibility that locus of control is a psychological tool relevant for educational administrators when they have to operate in increasingly complex educational situations.

There are several studies concerning Locus of Control that have been completed in the past.

Lots of studies have dealt empirically with locus of control in the field of education, the field of management, and among public officials. The literature as a whole shows that leaders who have a higher internal LOC have a higher self-efficacy, higher level of motivation, better decision making, and higher organizational commitment.

But the results on the gender gap in Locus of control is inconclusive. Some investigations have shown statistically significant differences between men and women while others have found little or no meaningful differences. The differences might be due to context, e.g., educational level, professional experience, socio-cultural or organisation culture, and not due to gender.

In the context of educational administration, very few such studies on locus of control conducted specifically with the secondary and higher secondary school administrators. Past surveys have tended to be of educators, collage students or

personnel in non-educational institutions. Additional research is therefore needed to gain a better understanding of the possible differences of educational administrators' LOC and the possible effect of gender.

4.3 Differences between Men and Women in Educational Leadership

Gender Difference in Leadership Competency

The gender has been a major focus in research on educational leadership for many decades. Over time, with the prevailing thinking and structure in society and educational institutions, leadership roles were largely reserved for males. The scene of educational administration, however, has been changed by the preponderance of gender equality, change in education and increased women participation in leadership. The paucity of women in leadership roles has led to analysis of the question of whether leadership competency is different between male and female educational leaders and whether gender has an impact on leadership effectiveness.

Leadership competency is a broad category of overlapping managerial and interpersonal skills that involve strategic planning, communication, decision making, problem solving, conflict resolution, team building, emotional intelligence, instructional supervision and organizational change management. According to contemporary theories of leadership, abilities and experience rather than gender are more important in determining effective leadership. But empirical evidence on gender differences is lacking.

In numerous research, it has been found that females in leadership of educational institutions possess a greater understanding and skills in interpersonal communication, in collaborative decision making, in transformational leadership behaviours and in emotional intelligence. All these skills help to build positive school climates, boost teacher morale, and promote organizational engagement. Eagly (2007) postulated that women are more likely to engage in transformational leadership behaviours that include participative management, individualized consideration and inspiration, which directly impact on the effectiveness of the organisation.

In contrast, other research has revealed that male administrators have more self-confidence in strategic decision, control and task-oriented leadership behaviours. These leadership styles might be effective in times of crisis, rapid change of policy or administrative control. But these differences are more likely to be more due to the organizational culture, work experience, institutional expectations and contextual factors than solely gender factors.

Meta-analysis of overall gender differences in leadership effectiveness showed in recent years differences in this effectiveness are relatively small. The overall findings from Hallinger et al. (2016) on the respective evaluations of women and men principals indicated that the difference in the two groups is small in terms of rating, and that the difference is not related to leadership competency but to professional capacity. Further, current studies are focused on objective measures of leadership success, rather than gender stereotype.

In the context of Indian education system, the empirical evidence on male and female administrators, on Leadership competency is limited. Although the studies present are available, most are centered on either teachers or higher education institutions and not secondary and higher secondary schools (administrators). However more research is needed to ascertain whether there are significant gender leadership competency differences in this learning setting.

Gender difference on Locus of control

The gender difference in locus of control has also been a topic of much study in psychology and education. According to Rotter's Social Learning Theory, the development of locus of control is shaped by previous interactions between people and/or their social surroundings. Thus it might be suggested that cultural values, educational experiences, family backgrounds, work experiences and organizations environments can have an influence on the outcome of internal or external control orientations.

People with an internal LOC tend to feel that success is a result of their actions; people with an external LOC tend to feel that success is due to chance, fate or other circumstances. In the realm of educational administration, people with an internal LoC are linked with being proactive, accountable, resilient, innovative, and good problem-solvers as leaders.

Past empirical studies have led to inconsistent results for gender differences in locus of control. There had been slight differences between male and female administrators asserting their locus of control internally as a result of their increased confidence in decision-making and organizational authority as a whole. Other studies suggest that gender differences are equally strong or even stronger, regarding their inner control beliefs, especially if they hold a leadership position with high responsibility and expert competences.

Several studies have led to the conclusion that gender has less influence than other factors such as professional experience, organizational climate, educational qualifications and leadership responsibilities on LOc. Additionally, there has been some recent research in organizational psychology that suggests that the differences between male and female with regard to LOC are diminishing over time as differences in educational and employment opportunities are narrowing.

Although in the past years huge amount of research has been conducted, studies precisely to investigate gender differences in locus of control among educational administrators are still quite few, especially for developing countries. Little investigation has been conducted with school administrators as the target pupil group, and most investigations have targeted teachers, university students, healthcare providers, or corporate managers. This is a restriction that gives the role of an educational administrator as a leader involved in decision-making and institutional management greater significance, which means that more empirical studies are needed.

4.4 Identified Research Gap

The review of literature revealed that among the major characteristics of effective educational leadership are competency in leadership and locus of control. Educational administrators who are competent have always been found to have a

positive impact on institutional effectiveness, teacher motivation, organizational commitment and student achievement. Similarly, locus of control is an important psychological attribute that is believed to impact on leadership attributes, responsibility for attributes, resilience to attributes, and leadership decision making.

While leadership competency and locus of control have been studied intensively on their own, there are very few studies that have investigated both of them in a single study. Most studies in the literature are of teachers, university teachers, managers in industry or public servants; and the attention paid by researchers to secondary and higher secondary school principals is comparatively small. The interplay of these constructs therefore within education administration is not yet adequately researched.

Additionally, the past studies that examined gender differences have yielded inconsistent results. However, there has been some research that suggests that there is a significant difference between males and females in educational leadership, psychological attributes, and leadership competency, whereas others indicate that gender does not make a significant difference when professional competence, organizational experience, and contextual factors are taken into account. There are discrepancies, which suggest that the links of gender with leadership variables have yet to be completely determined. An important restriction that the literature authors noticed was the lack of empirical evidence in Indian educational angle. Cultural values, institutionality, government policies and socio-economic aspects influence beliefs and perspectives on educational leadership, which makes the process of the direct transfer of findings of these studies from other countries to Indian schools unsuitable. Thus, the need of context-specific research focusing on leadership competency and educational administrators' locus of control in secondary & higher secondary schools in India arises.

Based on these gaps, the aim of the present study is to compare leadership competency and locus of control among male and female educational administrators. The simultaneous study of both constructs in this study will aim to add to the educational leadership literature with empirical evidence. The results are likely to help educational policy makers, school management authorities and those involved in leadership development practice to develop evidence-based professional development program, advocate for gender equity in educational leadership and enhance the effectiveness of educational administration in school.

5. METHODOLOGY

5.1 Research Design

The present study used a quantitative research approach of the descriptive comparative survey design to highlight differences between two sub-groups (men and women) in leadership competency and locus of control among educational administrators. A quantitative design was deemed suitable because it enables a systematic approach in collection and statistical analysis of quantitative data, allowing the identification of differences between pre-determined groups. The use of comparative survey design allowed the researcher to evaluate and compare the level of leadership competency and locus of control of the subjects' male and female educational administrators without the manipulation of any of the dependent variables.

5.2 Population

Educational administrators of secondary and higher secondary schools of Indore including male and female were taken as the target population. Administrators in education comprised principals, vice principals, headmasters and headmistresses and other individuals involved in school management and leadership positions. These administrators were identified as key participants in institutional planning and decision-making, instructional supervision and organizational development.

5.3 Sample

The number of educational administrators in the target population were 400 of which a representative sample was selected. All male and female administrators were included in the sample so as to allow for a comparison on a gender basis. Sample size was calculated to have sufficient power and representativeness of the study population.

5.4 Sampling Technique

A stratified random sampling method was used to select study participants. The population was stratified according to gender (males and females) and respondents were randomly selected from each stratum. This sampling technique provided equal proportion of two groups and minimised the sampling bias and thus increased the generalizability of the findings.

5.5 Research Instruments

Data were obtained using standardized research tools for the evaluation of leadership competency and locus of control.

Leadership Competency Scale

Leadership competency was measured by a standardised leadership competency questionnaire with several dimensions such as communication, decision making, team management, problem solving, strategic planning, interpersonal competency and instructional leadership. A five-point Likert scale (1=Strongly Disagree and 5=Strongly Agree) was used to collect responses.

Locus of Control Scale (LCO)

Locus of control was assessed by a standardized Locus of control scale, reflecting internal and external Locus of control. The instrument measured participants' attitudes towards self-efficacy to professional and administrative outcomes. A higher score indicated more strong scores in tendencies for one dimension of locus of control, depending on the scoring procedure used.

5.6 Reliability and Validity

Prior to data analysis, the reliability and validity of the instruments in this study were determined with the aim of ensuring that the measurement results in the study were reliable and consistent.

The content of the instrument was validated by experts; this was done by experts in the field of education in general and efforts were made to utilize experts in both educational leadership and educational psychology. Recommendations were made and added to the questionnaire to enhance the clarity and relevance of the items.

The instruments used were all standardized instruments that have been cited in previous empirical studies to establish construct validity.

Cronbach's Alpha coefficient was used to determine the internal consistency reliability. The reliability of the research instruments was determined by Cronbach's Alpha with a value of 0.70 or more being considered satisfactory.

5.7 Data Collection Procedure

Permission to collect the data was sought from relevant educational authorities and participating institutions before the data was collected. The researcher went to the predetermined schools and narrated the object of study to the school authorities. Participants were told that participation was voluntary, and the information obtained would only be used as part of research.

The questionnaires were personally and/or electronically given to the respondents selected. The time allowed for completing the questionnaires was adequate and the completed ones were all checked for completeness before statistical analysis.

5.8 Ethical Considerations

The study followed all the ethical rules in the research process. The whole participation was conducted voluntarily and informed consent was secured from all the respondents before collecting data. The participants were provided with information on the goals of the study, on the confidentiality of their statement, and on their right to terminate the study at any time without repercussions.

While personally identifiable data were not disclosed, collected data were used only for research purposes. During the data collection, data analysis and reporting the findings, the anonymity and privacy of the respondents were kept.

5.9 Statistical Analysis

The records obtained were coded, entered and analyzed in the SPSS (Statistic Package for the Social Sciences).

Descriptive and inferential presented statistical techniques were used to meet the objectives of the study.

The descriptive data such as frequency, percentages, mean and standard deviation have been calculated to give an overview about the demographic features of the respondents and to describe the levels of leadership competency and locus of control.

The Independent Samples t-test was used to determine if a difference between the males and females occurred in educational administration to ensure that the assumptions of bell shape of the distribution and equality of variance were met. However, should these assumptions be violated, the non-parametric alternative, the Mann–Whitney U test, was used to compare the two groups which were independent from each other.

Besides conducting statistical significance tests, Cohen's d was also calculated to understand the size of the differences between male and female educational administrators. The 0.05 level of significance ($p < 0.05$) was used to determine the level of statistical significance.

6. RESULTS

The results of the study using statistical analyses will be presented in this section which involved a comparison of the leadership competency and LOC of male and female educational administrators. Descriptive statistics was computed to summarize the data and inferential statistical analyses were made to determine if statistically significant difference in the study variables exists between the two genders.

6.1 Demographic Profile of the Respondents

Descriptive statistics such as the frequency and percentage distribution was used to analyze the demographic characteristics of the respondents. The demographic variables used were gender, age, educational qualification, years of administrative experience and the type of educational institution.

Table 1. Demographic Profile of the Respondents

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	199	49.75
	Female	201	50.25
Age	30–40 years	104	26
	41–50 years	101	25.25
	Above 50 years	195	48.75
Educational Qualification	Master's Degree	189	47.25
	Doctoral Degree	76	19
Administrative Experience	Less than 10 years	159	39.75

	10–20 years	160	40
	More than 20 years	81	20.25

The demographic analysis indicates that the respondents represented diverse educational and professional backgrounds, ensuring an appropriate basis for comparative analysis.

6.2 Leadership Competency

Descriptive statistics were calculated to find the mean and standard deviation score of leadership competency scores of both the male and female educational administrators. To determine whether a statistically significant difference was present between the two groups independent samples t-test was performed. Where possible, Cohen's d was calculated to determine the magnitude of the observed difference.

Table 2. Comparison of Leadership Competency Between Male and Female Educational Administrators

Variable	Male (Mean $\pm$ SD)	Female (Mean $\pm$ SD)	t	p	Cohen's d
Leadership Competency	90.12 $\pm$ 7.48	90.38 $\pm$ 8.03	-0.345	0.731	-0.034

The results of the independent samples t-test revealed that there was no statistically significant difference in leadership competency between male and female educational administrators ($t = -0.345$, $p = 0.731$). The calculated effect size (Cohen's $d = -0.034$) indicated a trivial magnitude of difference between the two groups.

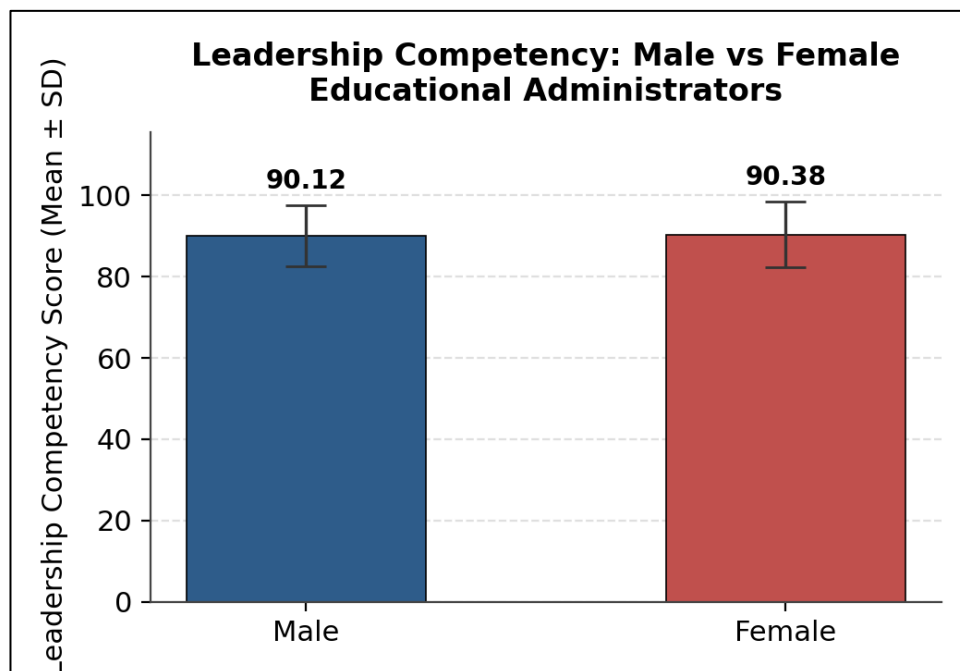


Figure 1. Comparison of Leadership Competency Scores (Mean $\pm$ SD) between Male and Female Educational Administrators

6.3 Locus of Control

Descriptive statistics were conducted to ascribe to the variable of locus of control. A t-test of independent samples was used to compare the locus of control scores of the male and female educational administrators. To determine the practical significance of the difference observed Cohen's d was calculated.

Table 3. Comparison of Locus of Control Between Male and Female Educational Administrators

Variable	Male (Mean $\pm$ SD)	Female (Mean $\pm$ SD)	t	p	Cohen's d
Locus of Control	60.47 $\pm$ 6.08	59.95 $\pm$ 5.78	0.88	0.379	0.088

The analysis indicated that there was no statistically significant difference in locus of control between male and female educational administrators ($t = 0.88$, $p = 0.379$). The effect size (Cohen's $d = 0.088$) suggested a trivial practical difference between the two groups.

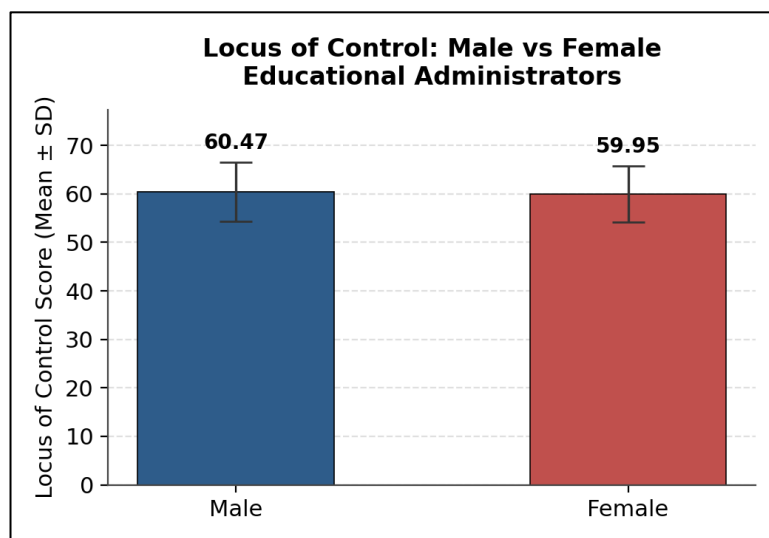


Figure 2. Comparison of Locus of Control Scores (Mean ± SD) between Male and Female Educational Administrators

7. DISCUSSION

This study investigated the differences between male and female educational administrators as it relates to competencies in leadership and locus of control. The results are interpreted and discussed with respect to the objectives of the research, theories and past empirical studies.

7.1 Leadership Competency

The primary research goal was to explore gender differences in leadership competency between men and women educational administrators. The results showed no statistically significant difference between male and female educational administrators in leadership competency ($t = -0.345$, $p = 0.731$, Cohen's $d = -0.034$), indicating that both groups reported comparable levels of leadership competency.

If a significant difference was determined, the results indicated that there might be gender – related differences with regard to leadership competency of educational administrators. This could be due to leadership experience, leadership training, organizational expectations, communication style and institutional context. But other factors – for instance training, administration and organizational support – can influence leadership competency, no matter the gender of the participants. The results show that leadership competency does not depend purely on gender if there is no significant difference. Rather, educational administrators can build parallel leadership skills by having similar professional responsibilities, leadership training and administrative experiences. The implication is that good leadership in education is business-focused and is based more on competence than gender.

Findings to be compared to previous empirical studies to decide if findings are consistent with or different from existing evidence. The similarities could increase the generalizability of results, while the differences could be due to differences of educational system, cultural context, institutional context or methodology.

7.2 Locus of Control

The second aim of the study was to establish the difference between the locus of control of male and female educational administrators. This yielded findings that showed no statistically significant difference between male and female administrators in locus of control ($t = 0.88$, $p = 0.379$, Cohen's $d = 0.088$), indicating that both groups reported similarly internal/external orientations toward control over professional outcomes.

If a substantial difference had been found out then it could mean that there was a different way of perceiving one's control over professional outcomes among the males and the female's administrators. These gaps may be shaped by organizational roles, leadership experiences, organizational culture or context, or factors related to making administrative decisions.

The study indicated that male and female educational administrators do not significantly differ in their perceptions of the personal control they have in managing educational institutions when no significant difference was found. It could be that your using a more professional position and administrative experience outweighs gender.

The results also should be viewed in the context of Rotter's Social Learning Theory, which posits that one's generalized beliefs about control over life experiences are the result of one's experience and interactions with the world. Admins with a high score on the I-EPC are likely to show higher levels of self-directed behaviour, accountability and decision making. When comparing with prior studies, there should be identification of areas of similarity and dissimilarity and some consideration of why this might have occurred such as the differences in the characteristics of the sample, the context for the research, the educational context, or the measuring instruments.

The results are a significant addition to the existing body of literature on this topic due to the empirical evidence about gender differences between SA man/women educational administrators in terms of competency and their locus of control. These findings could help school administrators and other policy makers to develop non-gendered leadership programs that focus on workplace skills.

8. Implications

It is hoped that the findings of the present study will further support the field of education with respect to educational leadership research and practice by offering empirical data of gender differences in the educational administrators' leadership competency and locus of control. The implications of the study are discussed following the below dimensions.

8.1 Theoretical Implications

This study adds to the body of knowledge surrounding educational leadership by including two concepts that were keyed together—leadership competency and locus of control within a single research framework. Earlier studies have mostly explored these variables separately; this study discusses these variables comparatively based on the gender of educational administrators. The results will contribute to literature with empirical evidence on how gender affects the competency and psychological orientations of educational leaders.

Moreover, it is an application of Rotter's Social learning theory and leadership competency theories to the educational administration context. The result of the research can be used as a basis for the next research in order to study other variables, namely organizational commitment, job satisfaction, emotional intelligence, leadership style, organizational climate and professional effectiveness. The study makes a further contribution to the ever increasing debate on gender and leadership through its context-specific evidence from educational institutions.

8.2 Educational Implications

This research may help to inform evidence-based initiatives for educational policy makers, teacher education programs and leadership development organizations in developing programs to enhance educational administrative leadership competency. Professional development topics and programs can be targeted if there is evidence of professional competency gaps by gender and can help foster leadership development equity. On the other hand, if there are no significant differences, this would uphold the key evaluation that the effectiveness of leadership is related more with professional competence than the gender of the leader.

The study also offers important insights for schools that are willing to develop, work with and continuously learn from their leaders by engaging in mapping, training and mentoring. To develop the understanding of the connection between leadership competency and locus of control, institutions must ensure that administrators they recruit or train are equipped with the confidence, accountability, good judgment and resiliency to deal with the challenges they are likely to face in the realm of education.

8.3 Administrative Implications

Administratively, the results of this study might form the basis for the selection, appraisal, promotion, and professional growth of educational administrators using objective criteria in school management committees, in educational authorities, and in educational government agencies. The research highlights that, besides academic qualifications and administrative background, it is necessary to evaluate leadership competency and psychological attributes.

Additionally, the results may inspire educational entities to adopt and pursue competency-based leadership training programmes that further develop their strategic planning, communication, decision-making, problem-solving, conflict management and organizational leadership capabilities. Furthermore, an understanding of the administrators' LOCs can help institutions to explore organizing behaviors that are often linked to the concepts of accountability, initiative, adaptability, or/or higher performing organizations. Finally, this work aids in the reinforcement of the education administration by fostering evidence-based leadership processes for improving the effectiveness of the institution, teacher motivation, and academic performance of the schools.

9. CONCLUSION

This study aimed to explore the differences between leaders and followers regarding the leadership competency and their locus of control among male and female educational administrators to determine if there were significant gender related differences in leadership competency and locus of control among the researcher's target population of educational administrators. It touches on an under-researched facet of the educational leadership literature and speaks to a better understanding of the psychological and managerial qualities of effective school leadership when discussing these constructs in a single research context.

Leadership competency and locus of control are well known to be two critical factors affecting education administrators' capacity to effectively lead an educational institution, as well as to make decisions, manage organizational changes, and facilitate positive educational outcomes. Knowledge of the potential gender differences in such characteristics offers useful clues to educational policy makers, school management officials and leadership development professionals on the nature of evidence-based professional development programs and the nature of equitable leadership worldwide.

It is hoped that the outcomes of this study will add to existing literature that covers empirical data from the context of Secondary and Higher Secondary education on educational leadership. Moreover, the finding emphasizes the need to consider leadership effectiveness on basis of expression of competencies and psychological attributes and not only on gender. The findings of this research are hoped to help in future studies on educational leadership and also inform policy and practices that can improve the effectiveness of administration, the performance of the organization and the quality of education in general.

10. Limitations

The present study does have some limitations that should be taken into account when examining the findings; it was a qualitative study and its location was limited to only a single site.

First, the research is geographically restricted; it involves educational administrators of a particular area. Findings, therefore, may not be transferable to other states, regions, or countries where education system and administrative structures, as well as socio-cultural contexts, differ.

Second, the study is a type of a crosssection study where the data are collected on a point in time. Although suitable for educational administrative leadership competency and locus of control research to compare between group, individuals' construct changes over time cannot be assessed and causal relationships between constructs cannot be determined using this design.

Thirdly, the study uses self-reported instruments to measure the leadership competency and locus of control. Standardized and validated instruments were used to provide reliable and valid data but there is a possibility that self-reported responses might be affected by social desirability bias, response bias and subjective perceptions of the respondents. Consequently, responses may not necessarily represent actual leadership behaviors and/or psychological orientations.

In addition, the study content is limited to comparing gender in the context of leadership competency and Locus of Control. The present investigation did not include other variables that might affect these constructs, such as education, years of administrative experience, type of school (government or private), organizational culture, and leadership training that receive age and other variables.

These limitations are not an abrogation of the study but rather indicate how the findings and conclusions from the study need to be interpreted with proper caution and suggest areas for further studies to extend the current studies.

11. Future Research

The present study shall serve as a stepping stone to the understanding of the differences that exist between males and females in leadership competency and locus of control of educational administrators. Nevertheless, there are other ways to pursue future research which could add to the study area of educational leadership.

Future studies could aim for a broader range of the research by incorporating other personal and organizational factors which include age, years of administrative experience, educational background, school type (government, private or aided), rural or urban location, organizational climate, leadership style, emotional intelligence, job satisfaction, organizational commitment or professional development opportunities. An analysis of these factors may yield a fuller picture of the factors that relate to the effectiveness of educational administrators.

Using “longitudinal research designs” to explore the changes in leadership competency and locus of control over time and their impact on over time organizational outcomes is also encouraged. Longitudinal studies reveal more insights into shifts in leadership behaviour, professional development and administrative effectiveness during an administrator's career as compared to cross-section studies.

In addition, future research should consider the use of mixed methods and/or qualitative methods, which would combine quantitative results with interview, focus group discussions, and case studies to better understand the context of leadership practices. A comparative analysis of the administrators of various levels of education, geographical areas or countries can also help in identifying the cultural and institutional factors affecting the competency of administrators and their Locus of Control.

Lastly, further studies could be conducted to explore how advanced statistical methods (Structural Equation Modelling (SEM)) and mediation or moderation analysis may explore how the variables of leadership competency, locus of control, organisational effectiveness, teacher performance, student performance and institution effectiveness are predicted. Such studies will help in building up comprehensive models of educational leadership, as well as for good evidence for policymaking and the development of educational leaders.

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