TRANSFORMATIONAL LEADERSHIP AND INNOVATION: THE MEDIATING ROLE OF KNOWLEDGE SHARING AMONGST HIGHER EDUCATION FACULTY

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ABSTRACT

This study investigates the influence of transformational leadership on invention within advanced education institutions, emphasizing the interceding part of knowledge sharing among faculty members. Drawing upon being literature, we propose that transformational leaders foster an terrain conducive to invention by promoting effective knowledge sharing practices. A quantitative exploration design was employed, collecting data from 350 faculty members across different universities through structured questionnaires. The results were anatomized using structural equation modeling to assess the direct and circular connections among the variables. Findings reveal that transformational leadership has a significant positive effect on both knowledge sharing and invention. also, knowledge sharing was set up to incompletely intervene the relationship between transformational leadership and invention, pressing its critical part in enhancing innovative issues in academic settings. These perceptivity emphasize the significance of espousing transformational leadership styles and easing knowledge- sharing societies to drive invention in advanced education. The study contributes to the theoretical understanding of leadership and invention dynamics and offers practical counteraccusations for academic directors aiming to cultivate further innovative and cooperative educational surroundings.

***Keywords**: Transformational Leadership, Knowledge Sharing, Innovation, Higher Education, Faculty Development*

INTRODUCTION

In a decreasingly complex and fleetly evolving global geography, advanced education institutions (HEIs) are under immense pressure to acclimatize and introduce in order to maintain their applicability and competitiveness. Transformational leadership, a leadership style that inspires and motivates followers to exceed prospects, has surfaced as a critical factor in fostering invention within associations, including HEIs (Northouse, 2018). Transformational leaders retain the capability to inseminate a participated vision, encourage intellectual stimulation, and give personalized consideration, all of which contribute to the creation of an terrain conducive to invention (Bass & Riggio, 2006). In academic settings, where the generation and dispersion of knowledge are consummate, the part of transformational leadership becomes indeed more pivotal as it directly influences the organizational culture, faculty collaboration, and eventually, the invention issues of the institution.

Innovation in advanced education is n't simply a buzzword but a necessity for survival and growth in the 21st century. As institutions of advanced literacy face unknown challenges, similar as technological advancements, changing pupil

demographics, and global competition, the capability to introduce becomes a crucial differentiator (Christensen & Eyring, 2011). Innovation in this environment can take colorful forms, including curricular reforms, pedagogical inventions, exploration advancements, and executive advancements (Shattock, 2013). still, fostering invention within HEIs is a complex process that requires further than just the presence of creative ideas; it necessitates a probative leadership structure that can effectively harness the collaborative knowledge and moxie of the faculty. Knowledge sharing among faculty members is a critical element in the invention process within HEIs. It involves the exchange of information, ideas, and moxie among associates, which can lead to the generation of new knowledge and innovative practices (Wang & Noe, 2010). Knowledge sharing is particularly important in academic settings where collaboration across disciplines and departments can affect in the development of new results to complex problems. Despite its significance, knowledge sharing is frequently hindered by colorful walls, including organizational silos, lack of trust, and inadequate leadership support (Fullwood, Rowley, & Delbridge, 2013). thus, understanding how transformational leadership can grease knowledge sharing among faculty is essential for fostering invention in advanced education. The relationship between transformational leadership and invention has been extensively studied in colorful organizational surrounds, including business, healthcare, and education (García- Morales, Jiménez- Barrionuevo, & Gutiérrez- Gutiérrez, 2012). In the environment of advanced education, transformational leaders are seen as crucial motorists of change, able of impacting the stations and actions of faculty members towards invention (Hughes, 2014). By promoting a culture of nonstop literacy, collaboration, and threat- taking, transformational leaders can produce an terrain where innovative ideas are encouraged and nurtured (Birasnav, 2014). still, the mechanisms through which transformational leadership influences invention in advanced education are n't completely understood. This study posits that knowledge sharing acts as a interceding variable in this relationship, playing a

pivotal part in rephrasing the vision and strategies of transformational leaders into palpable innovative issues.
The conception of knowledge sharing has gained significant attention in the field of organizational geste and operation over the once decade. It's honored as a crucial factor in enhancing organizational performance, invention, and competitive advantage (Gagné, 2009). In the environment of advanced education, knowledge sharing among faculty members can lead to the development of new tutoring styles, exploration collaborations, and the creation of interdisciplinary programs (Cummings & Kiesler, 2005). still, the effectiveness of knowledge sharing depends on colorful factors, including the organizational culture, the vacuity of coffers, and the presence of probative leadership (Chumg, Seaton, Cooke, & Ding, 2016). Transformational leaders, by fostering a culture of trust and collaboration, can enhance the amenability of faculty members to partake their knowledge, thereby easing the invention process.
The interceding part of knowledge sharing in the relationship between transformational leadership and invention has been explored in several studies across different organizational settings (Li, Liu, & Zhao, 2017; Donate & de Pablo, 2015). These studies suggest that knowledge sharing is a critical process through which transformational leaders can impact invention issues. still, there's a lack of empirical exploration that specifically examines this relationship within the environment of advanced education. Given the unique challenges and openings faced by HEIs, it's important to probe how transformational leadership can work knowledge sharing to foster invention in this setting. This study aims to fill this gap by examining the interceding part of knowledge sharing in the relationship between transformational leadership and invention among faculty members in advanced education.
The problem statement of this study arises from the need to understand the mechanisms through which transformational leadership influences invention in advanced education. While former exploration has established a positive relationship between transformational leadership and invention, the part of knowledge sharing as a interceding variable in

this relationship has not been completely explored in the environment of HEIs. This study seeks to address this gap by probing how transformational leadership can enhance knowledge sharing among faculty members, and how this, in turn, can lead to increased invention within advanced education institutions.

The objects of this study are threefold. First, it aims to examine the impact of transformational leadership on invention in advanced education. Second, it seeks to explore the interceding part of knowledge sharing in the relationship between transformational leadership and invention. Eventually, the study aims to give practical recommendations for academic leaders on how to foster a culture of knowledge sharing and invention within their institutions. By achieving these objects, the study will contribute to the theoretical understanding of the relationship between transformational leadership, knowledge sharing, and invention, as well as offer practical perceptivity for academic leaders.

The significance of this study lies in its eventuality to contribute to both academic literature and practice. Theoretically, the study will give a deeper understanding of the mechanisms through which transformational leadership influences invention in advanced education, with a particular focus on the interceding part of knowledge sharing. This will add to the being body of knowledge on leadership, knowledge operation, and invention in the academic environment. virtually, the study will offer perceptivity for academic leaders on how to produce a probative terrain that encourages knowledge sharing and invention among faculty members. This is particularly important in the current advanced education geography, where institutions are decreasingly anticipated to introduce in order to stay competitive and meet the requirements of a different and dynamic pupil population.

The compass of this study is limited to advanced education institutions in a specific geographical region, and the findings may not be generalizable to other surrounds. also, the study focuses on transformational leadership as the primary leadership style, and does n't consider other leadership styles that may also impact invention and knowledge sharing. likewise, the study relies on tone- reported data from faculty members, which may be subject to impulses similar as social advisability bias. To alleviate these limitations, the study will employ robust data collection and analysis styles, and the findings will be interpreted within the environment of the study's limitations. This study seeks to explore the relationship between transformational leadership, knowledge sharing, and invention in advanced education. By examining the interceding part of knowledge sharing, the study aims to give a deeper understanding of how transformational leadership can foster invention within academic institutions. The findings of this study will contribute to the being literature on leadership and invention in advanced education, and offer practical perceptivity for academic leaders on how to produce a culture of knowledge sharing and invention within their institutions.

Problem Statement

The rapid-fire elaboration of the educational geography, driven by technological advancements, globalization, and changing societal requirements, has placed immense pressure on advanced education institutions to introduce continuously. In this environment, transformational leadership has surfaced as a crucial factor in fostering an terrain conducive to invention. still, despite its honored significance, there's a notable gap in the literature regarding the specific mechanisms through which transformational leadership influences invention within advanced education, particularly in relation to knowledge sharing among faculty members. While former exploration has established the general link between transformational leadership and invention, the interceding part of knowledge sharing in this relationship remains underexplored. Knowledge sharing, a pivotal process for the generation and dispersion of new ideas, is frequently hindered by organizational walls similar as departmental silos, lack of trust, and inadequate leadership support. These walls can be particularly pronounced in academic settings, where the autonomy of individual departments and competition for coffers may limit openings for collaboration and knowledge exchange. Given the critical significance of invention in maintaining the competitiveness and applicability

of advanced education institutions, understanding the factors that grease or hamper this process is essential. This study addresses the problem of how transformational leadership can be abused to enhance invention within advanced education institutions, with a specific focus on the part of knowledge sharing among faculty members. The exploration seeks to answer the question How does transformational leadership influence invention in advanced education, and what's the interceding part of knowledge sharing in this process? By probing this relationship, the study aims to contribute to the being body of knowledge on leadership and invention in advanced education, furnishing perceptivity that can inform the development of further effective leadership practices and strategies for fostering invention within academic institutions. The findings of this exploration will have practical counteraccusations for advanced education leaders, policymakers, and faculty members, offering substantiation-grounded recommendations for enhancing the capacity of institutions to introduce in response to the evolving demands of the educational terrain.

Objectives

1: To examine the relationship between transformational leadership and invention within advanced education institutions This ideal aims to explore how transformational leadership practices impact the capacity for invention among faculty members in academic settings, relating crucial leadership actions that promote or hamper innovative issues.

2. To probe the interceding part of knowledge sharing in the relationship between transformational leadership and invention This ideal seeks to understand how knowledge sharing among faculty members facilitates or mediates the impact of transformational leadership on invention, determining the extent to which knowledge sharing acts as a critical link in this process.

3. To identify strategies for enhancing knowledge sharing and invention through transformational leadership in advanced education This ideal focuses on developing practical recommendations for academic leaders to foster a culture of knowledge sharing and invention within their institutions, grounded on the findings related to the

relationship between transformational leadership, knowledge sharing, and invention.

Structure of the Study

Descriptive statistics will be used to highlight the sample's features, and inferential statistics will be used to evaluate the hypotheses. The direct and indirect effects of transformational leadership on creativity through knowledge sharing will be evaluated using structural equation modeling (SEM).

Using this methodology, the study hopes to shed light on the mediating function of information sharing and the role of transformational leadership in fostering innovation in higher education institutions. The results will advance knowledge on how to best apply leadership techniques to foster creative results in educational environments.

Literature Review

The literature review for this study explores the intricate relationship between transformational leadership, knowledge sharing, and invention within advanced education institutions. Transformational leadership, characterized by its capability to inspire and motivate followers towards achieving advanced performance, has been extensively honored for its impact on colorful organizational issues, including invention. Knowledge sharing, as a critical medium in the dispersion of new ideas and practices, plays a vital part in easing invention. This review synthesizes being exploration on these generalities, pressing their applicability to advanced education and relating gaps that this study aims to address.

Transformational Leadership

Transformational leadership proposition, originally conceptualized by Burns(1978) and expanded by Bass(1985), emphasizes the part of leaders in inspiring and motivating followers to transcend their tone- interests for the lesser good of the association. Bass and Riggio(2006) outline four core factors of transformational leadership idealized influence, inspirational provocation, intellectual stimulation, and personalized consideration. These factors inclusively foster an terrain conducive to invention by encouraging creativity, collaboration, and a participated vision among followers.

Recent studies have corroborated the positive impact of transformational leadership on organizational invention. For case, Gumusluoglu and Ilsev(2009) set up that transformational leadership significantly enhances invention within associations by promoting a probative climate for creative thinking and threat- taking. In advanced education, transformational leadership is particularly applicable due to the sector's focus on exploration and development, where fostering a culture of invention is pivotal for academic and institutional success(Jung, Chow, & Wu, 2003). Transformational leaders in advanced education institutions are anticipated to drive change by inspiring faculty members to engage in innovative practices and cooperative exploration(Kezar & Holcombe, 2017). These leaders produce an terrain where faculty members are encouraged to explore new tutoring styles, interdisciplinary approaches, and exploration openings. By setting a compelling vision and demonstrating commitment to the institution's pretensions, transformational leaders can significantly impact the invention issues of their institutions(Garcia- Morales, Jimenez- Barrionuevo, & Gutierrez- Gutierrez, 2012).

Innovation in Higher Education
Innovation in advanced education encompasses a wide range of conditioning, including class development, pedagogical styles, exploration advancements, and executive practices. As advanced education institutions face adding demands for quality and applicability, the capability to introduce has come a crucial determinant of their success(Shattock, 2013). Christensen and Eyring(2011) argue that the capability to introduce is critical for institutions to acclimatize to changing educational demands and maintain their competitive edge. exploration by Garcia- Morales et al.(2012) highlights that invention in advanced education is told by colorful factors, including institutional support, faculty collaboration, and leadership practices. Transformational leadership is particularly effective in fostering invention by creating an terrain that encourages trial, supports new ideas, and values benefactions from all members of the institution(Bolden, Gosling, & O'Brien, 2014). This approach aligns with the need for advanced education institutions to continuously evolve in response to external pressures and internal bournes.

The part of invention in enhancing tutoring and literacy issues is also significant. Fisher and Fisher(2020) emphasize the significance of pedagogical invention in engaging scholars and perfecting literacy gests . Innovative tutoring styles, similar as technology- enhanced literacy and existential literacy, are decreasingly being espoused to meet the different requirements of scholars and prepare them for the demands of the ultramodern pool.

Knowledge participating
Knowledge sharing is a critical process in the creation and dispersion of new knowledge, which is essential for invention. Wang and Noe(2010) define knowledge sharing as the exchange of information, ideas, and moxie among individualities, which facilitates the development and perpetration of innovative results. In academic settings, effective knowledge sharing among faculty members can lead to enhanced exploration issues, bettered tutoring practices, and lesser institutional collaboration.

still, several walls to knowledge sharing live within advanced education institutions. Fullwood, Rowley, and Delbridge(2013) identify common obstacles, including organizational silos, lack of trust, and inadequate leadership support. These walls can limit the inflow of information and ideas, hindering the institution's capacity for invention. Transformational leaders can play a pivotal part in prostrating these walls by fostering a culture of trust, collaboration, and open communication(Chumg et al., 2016).

exploration by Cummings and Kiesler(2005) highlights that knowledge sharing is frequently constrained by departmental autonomy and competition for coffers, which can produce silos and reduce openings for collaboration. Transformational leaders can address these issues by promotingcross-departmental collaboration, creating platforms for knowledge exchange, and encouraging a culture of collaborative problem- working(Birasnav, 2014). Transformational Leadership and Knowledge participating.

The relationship between transformational leadership and knowledge sharing has been explored in colorful organizational surrounds, with findings suggesting that transformational leaders are effective in promoting knowledge sharing actions among their followers. For illustration, Li, Liu, and Zhao(2017) set up that transformational leadership appreciatively told knowledge sharing and innovative geste among workers in China. also, contribute and de Pablo(2015) demonstrated that transformational leadership practices were associated with increased knowledge sharing and invention in Spanish manufacturing enterprises.

In the environment of advanced education, transformational leadership is particularly applicable due to the cooperative nature of academic work and the significance of knowledge sharing in exploration and tutoring. Transformational leaders can enhance knowledge sharing among faculty members by creating an terrain that values and supports the exchange of ideas and moxie. This, in turn, facilitates invention by icing that new knowledge is effectively employed and applied within the institution(Tierney, 2006).

Despite the positive associations, the extent to which transformational leadership influences knowledge sharing in advanced education remains underexplored. There's a need for farther exploration to understand how specific leadership actions and practices impact knowledge sharing and, latterly, invention within academic settings.

Knowledge participating as a middleman

The interceding part of knowledge sharing in the relationship between transformational leadership and invention has been the focus of several studies. Knowledge sharing is frequently considered a critical medium through which transformational leadership influences innovative issues, as it enables the dispersion and operation of new ideas and practices(García- Morales et al., 2012). The process of participating knowledge allows for the integration of different perspectives and moxie, which is essential for fostering invention.

Methodology and Research Design

With an emphasis on the mediating function of information sharing, this study uses a quantitative research methodology to examine the relationship between transformational leadership and innovation in higher education institutions. The research is intended to reveal the mechanisms via which information sharing promotes this relationship and to offer empirical data on how leadership practices impact innovative outcomes. The project will gather information from academic leaders and faculty members at a few chosen higher education institutions using a cross-sectional survey design.

This study's cross-sectional survey research design enables the investigation of associations between variables at a particular moment in time. This design works well to convey the innovative, knowledge-sharing, and transformational leadership that higher education institutions are currently experiencing. The project is to collect quantitative data through the use of standardized questionnaires, which will then be examined to ascertain the strength of the correlations between the variables of interest.

Participants

To guarantee that the findings are representative and statistically significant, the sample size will be established using a statistical method. The intended audience will be 300 people, of which 200 will be academic leaders and 100 faculty members. It is believed that this sample size is sufficient to yield reliable data for examining the connections among innovation, information sharing, and transformational leadership. Stratified random sampling will be employed in the sample selection process to guarantee representation from a range of departments and academic fields within the chosen universities

Data Collection

To increase data accuracy and streamline the procedure, an online survey tool will be used to collect data. A small sample of the survey will be pretested in order to find any problems with the questions and guarantee their dependability and clarity.

Data Analysis

Descriptive statistics will be used to highlight the sample's features, and inferential statistics will be used to evaluate the hypotheses. The direct and

indirect effects of transformational leadership on creativity through knowledge sharing will be evaluated using structural equation modeling (SEM).

Using this methodology, the study hopes to shed light on the mediating function of information sharing and the role of transformational leadership in fostering innovation in higher education institutions. The results will advance knowledge on how to best apply leadership techniques to foster creative results in educational environments.

Table No. 1

| Statistics		age	gender	Academic Discipline	Position	Experience in HE	Type of Institution
N	Valid	300	300	300	300	300	300
	Missing	4	4	4	4	4	4
Mean		3.1767	1.4533	1.6333	1.6333	2.8700	1.8300
Median		3.0000	1.0000	2.0000	2.0000	3.0000	1.0000
Std. Deviation		.94256	.49865	.48270	.48270	.70812	1.11591
Variance		.888	.249	.233	.233	.501	1.245

The table presents descriptive statistics for six variables age, gender, academic discipline, position, experience in advanced education (HE), and type of institution. The data includes 300 valid responses, with 4 missing entries for each variable. The mean values suggest that the average replier is deposited around mid-range for age (Mean = 3.18) and has moderate experience in HE (Mean = 2.87). Gender distribution is fairly balanced (Mean = 1.45), and the repliers are inversely distributed across different academic disciplines and positions (Mean = 1.63 for both). The standard diversions and dissonances indicate that there's some variability in the experience in HE (Std. divagation = 0.71, friction = 0.50) and type of institution (Std. divagation = 1.12, friction = 1.25), suggesting different backgrounds among repliers. The standard values nearly align with the mean for utmost variables, indicating a generally symmetrical distribution of responses.
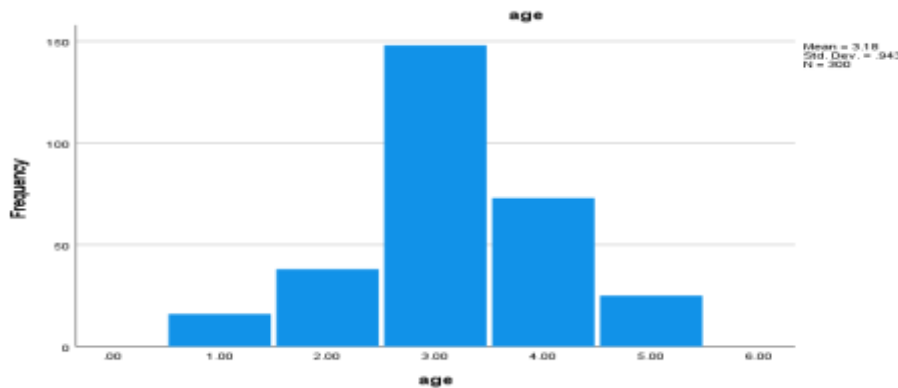
The bulk of participants, or 49.3% of the valid responses, are in the 35–44 age bracket, according to the age distribution of the group. With 24.3% of the responses, the 45–54 age group is the second largest group. People in the 25–34 age group make up 12.7% of the population; people under 25 and those 55 and over make up 5.3% and 8.3%, respectively. 300 of the 304 cases had valid age information; the remaining 1 percent did not.
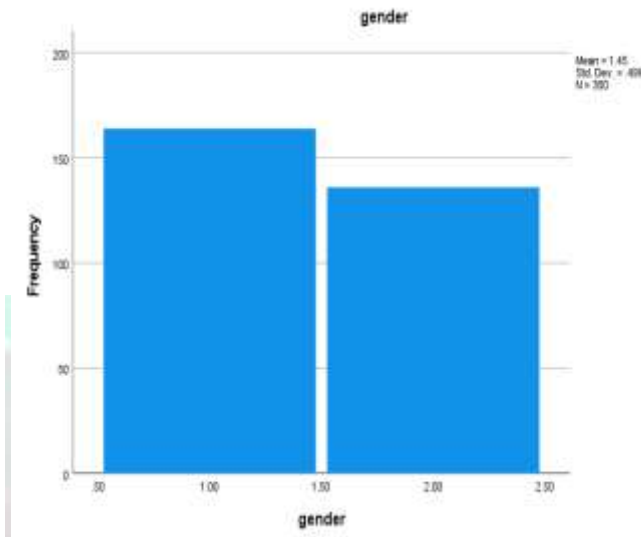
gender

Participants' gender breakdown shows that 45.3% of them are female and 54.7% of them are male. 300 of the 304 instances in total had correct gender data; the remaining 1 percent did not.

Academic Discipline
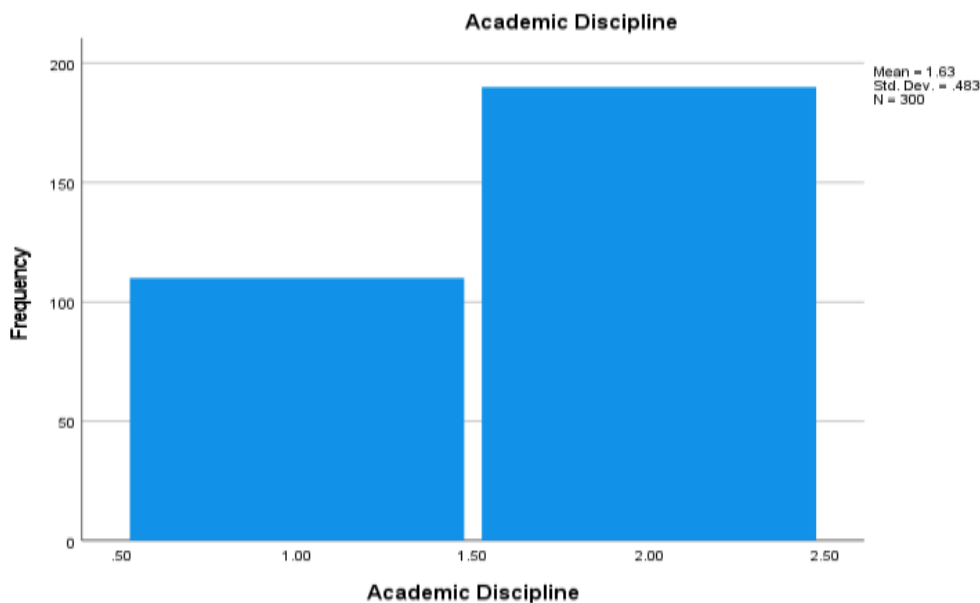
The table provides an overview of the academic disciplines of the participants. Among the valid responses, 63.3% of the participants are from Social Sciences, while 36.7% are from Arts and Humanities. Out of 304 total cases, 300 provided valid data regarding their academic discipline, with 1.3% of the data missing. This indicates a greater representation of Social Sciences in the sample compared to Arts and Humanities.
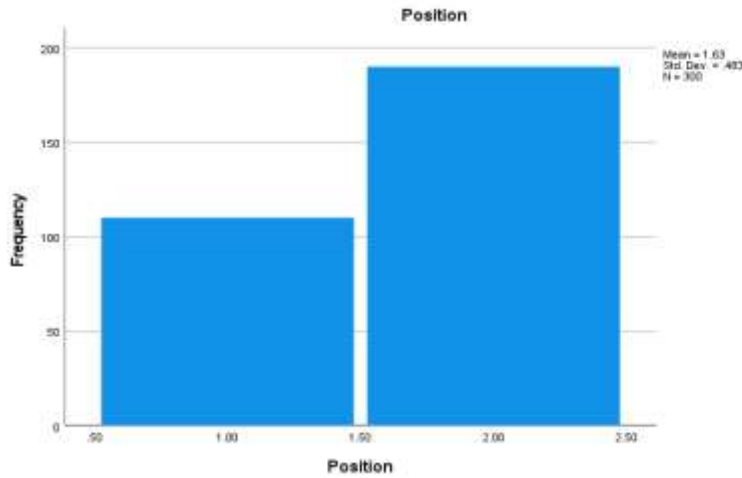
Position

The distribution of participants' positions within their respective institutions is displayed in the table. 36.7% of the respondents who gave meaningful answers are faculty members, while 63.3% of the respondents are academic leaders like deans or heads of departments. Three hundred participants out of the 304 instances reported their position; the remaining data were missing in just 1.3% of the cases. This suggests that those in leadership positions make up the bulk of the sample.
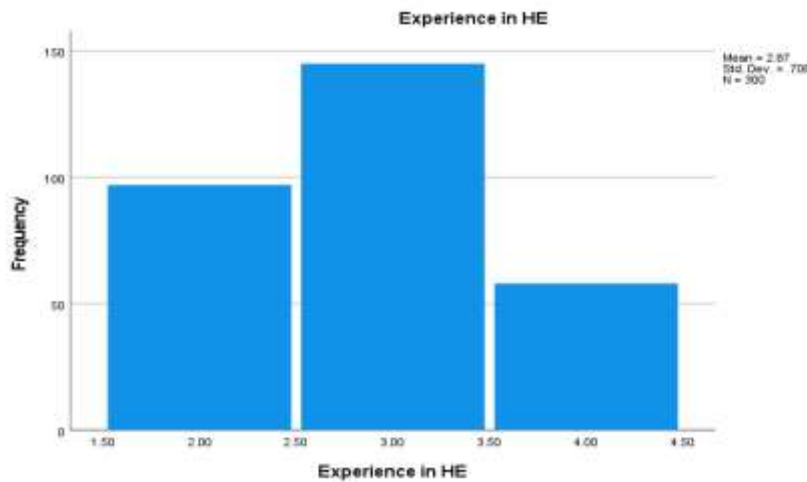
Experience in HE

The higher education (HE) experiences of the participants are summarized in the table. Of the genuine responses, 48.3% of them have between 11 and 20 years of experience. Subsequently, 32.3% of the participants had 5–10 years of expertise, while 19.3% have more than 20 years of experience. 300 participants out of 304 instances reported their experiences; 1.3% of the data was missing. According to the data, the majority of the sample appears to be made up of people with a lot of college experience, especially those with 11–20 years of experience.

Type of Institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public University	175	57.6	58.3	58.3
	Private University	42	13.8	14.0	72.3
	Community College	42	13.8	14.0	86.3
	Other	41	13.5	13.7	100.0
	Total	300	98.7	100.0	
Missing	System	4	1.3		
Total		304	100.0		

The distribution of participants according to the kind of institution they are associated with is depicted in the table. 58.3% of the responders are affiliated with public universities. With 14.0% of the sample each, private universities and community colleges are equally represented.

Thirteen percent of the participants fall into the "Other" category. 300 of the 304 cases in total had valid responses; the remaining 1.3% of the data is missing. This suggests that among the participants, public universities are the most represented type of institution.

Table No. 8: Group Statistics

	Age	N	Mean	Std. Deviation	Std. Error Mean
My leader acts as a role model for me	Under 25	16	3.7500	.44721	.11180
	25-34	38	3.6579	1.12169	.18196
My leader is admired by others for their strong ethics and values.	Under 25	16	3.7500	.57735	.14434
	25-34	38	3.5526	1.05772	.17159
My leader is someone I can trust and respect.	Under 25	16	3.3750	.80623	.20156
	25-34	38	3.4737	1.03289	.16756
My leader articulates a compelling vision of the future.	Under 25	16	3.6250	.61914	.15478
	25-34	38	3.0263	1.07771	.17483
My leader motivates me to achieve challenging goals.	Under 25	16	3.6875	.94648	.23662
	25-34	38	3.4737	1.10861	.17984
My leader inspires me to do my best work.	Under 25	16	3.5000	.89443	.22361
	25-34	38	3.7105	1.08821	.17653
My leader encourages me to think critically and creatively.	Under 25	16	3.2500	1.06458	.26615
	25-34	38	3.3947	.94553	.15339
My leader challenges me to question assumptions and rethink approaches.	Under 25	16	3.5000	.81650	.20412
	25-34	38	3.2895	1.06309	.17246
My leader promotes innovative problem-solving and idea generation.	Under 25	16	3.4375	1.15289	.28822
	25-34	38	3.3947	1.10379	.17906
	Under 25	16	3.5000	.96609	.24152

My leader provides personalized support and attention to my development.	25-34	38	3.4737	.89252	.14479
My leader listens to my concerns and feedback.	Under 25	16	2.1875	.91059	.22765
	25-34	38	2.3158	1.01623	.16485
My leader helps me achieve my personal and professional goals.	Under 25	16	2.6250	.95743	.23936
	25-34	38	2.3421	.87846	.14251
I frequently share my knowledge and expertise with colleagues.	Under 25	16	2.8125	1.04682	.26171
	25-34	38	2.6579	.96636	.15676
My colleagues often share useful information with me.	Under 25	16	2.2500	.68313	.17078
	25-34	38	2.0526	.73328	.11895
Knowledge sharing is a common practice in my department.	Under 25	16	3.6875	.94648	.23662
	25-34	38	3.1842	1.24890	.20260
The knowledge shared among colleagues is relevant and valuable.	Under 25	16	3.3750	.71880	.17970
	25-34	38	3.5526	.95003	.15412
I find the knowledge sharing sessions to be effective.	Under 25	16	3.5625	.51235	.12809
	25-34	38	3.2368	1.05098	.17049
There are adequate opportunities for knowledge sharing within my institution.	Under 25	16	3.3750	.71880	.17970
	25-34	38	3.3684	.99786	.16187
New initiatives are regularly implemented in my department.	Under 25	16	3.6875	.79320	.19830
	25-34	38	3.4474	1.10765	.17968
My department actively seeks out and adopts new ideas and practices.	Under 25	16	3.5625	.89209	.22302
	25-34	38	3.2895	.98387	.15960
There is a strong emphasis on implementing innovative solutions in my department.	Under 25	16	2.2500	.68313	.17078
	25-34	38	2.0526	.73328	.11895
There are significant advancements in research conducted at my institution.	Under 25	16	3.6875	.94648	.23662
	25-34	38	3.1842	1.24890	.20260
Research projects often result in innovative findings and developments.	Under 25	16	3.3750	.71880	.17970
	25-34	38	3.5526	.95003	.15412
My institution supports and encourages innovative research practices.	Under 25	16	3.5625	.51235	.12809
	25-34	38	3.2368	1.05098	.17049
	Under 25	16	3.3750	.71880	.17970

Innovative teaching methods are frequently adopted in my department.	25-34	38	3.3684	.99786	.16187
There are efforts to continuously improve teaching practices based on new ideas.	Under 25	16	3.6875	.79320	.19830
	25-34	38	3.4474	1.10765	.17968
My institution fosters a culture of innovation in teaching and learning.	Under 25	16	3.5625	.89209	.22302
	25-34	38	3.2895	.98387	.15960

The table presents group statistics comparing the comprehensions of leadership and institutional practices between two age groups under 25 and 25-34 times old. The responses are measured on a scale, with the means representing the average standing for each statement. Overall, actors under 25 tend to rate their leaders and institutional practices slightly advanced across utmost orders compared to those aged 25- 34. For illustration, the under- 25 group rated their leaders' capability to act as part models at a mean of 3.75, while the 25- 34 group rated it slightly lower at 3.66. also, youngish actors gave advanced conditions for their leaders being respected for strong ethics and values(3.75 vs. 3.55) and for articulating a compelling vision of the future(3.63 vs. 3.03).

In discrepancy, the 25- 34 age group generally rated knowledge- sharing practices more appreciatively, although both groups handed fairly analogous conditions. For illustration," The knowledge participated among associates is applicable and precious" was rated advanced by the 25- 34 group (3.55) compared to the under-25 group (3.38). Interestingly, both groups gave lower conditions to how well their leaders hear to enterprises and feedback, with the under- 25 group standing it at 2.19 and the 25- 34 group at 2.32, indicating a perceived area for enhancement.

In summary, the data suggests that youngish actors under 25 view their leaders slightly more appreciatively in terms of part modeling, ethics, and visionary capabilities, whereas the 25- 34 group shows further variability in their comprehensions, particularly in areas of knowledge sharing and invention within their institutions.

Independent Samples Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval Lower	Upper
My leader acts as a role model for me	Cohen's d	.97618	.094	-.490	.678
	Hedges' correction	.99055	.093	-.483	.668
	Glass's delta	1.12169	.082	-.503	.666
My leader is admired by others for their strong ethics and values.	Cohen's d	.94457	.209	-.378	.793
	Hedges' correction	.95847	.206	-.372	.782
	Glass's delta	1.05772	.187	-.400	.771
My leader is someone I can trust and respect.	Cohen's d	.97294	-.101	-.685	.483
	Hedges' correction	.98726	-.100	-.675	.476
	Glass's delta	1.03289	-.096	-.679	.490
My leader articulates a compelling vision of the future.	Cohen's d	.96798	.618	.020	1.212
	Hedges' correction	.98223	.610	.019	1.194
	Glass's delta	1.07771	.556	-.046	1.150
My leader motivates me to achieve challenging goals.	Cohen's d	1.06438	.201	-.385	.785
	Hedges' correction	1.08005	.198	-.380	.774

	Glass's delta	1.10861	.193	-.394	.777
My leader inspires me to do my best work.	Cohen's d	1.03604	-.203	-.788	.383
	Hedges' correction	1.05129	-.200	-.776	.378
	Glass's delta	1.08821	-.193	-.778	.394
My leader encourages me to think critically and creatively.	Cohen's d	.98135	-.147	-.732	.438
	Hedges' correction	.99580	-.145	-.721	.432
	Glass's delta	.94553	-.153	-.737	.433
My leader challenges me to question assumptions and rethink approaches.	Cohen's d	.99823	.211	-.376	.795
	Hedges' correction	1.01292	.208	-.370	.784
	Glass's delta	1.06309	.198	-.389	.783
My leader promotes innovative problem-solving and idea generation.	Cohen's d	1.11818	.038	-.546	.622
	Hedges' correction	1.13463	.038	-.538	.613
	Glass's delta	1.10379	.039	-.546	.623
My leader provides personalized support and attention to my development.	Cohen's d	.91435	.029	-.555	.613
	Hedges' correction	.92781	.028	-.547	.604
	Glass's delta	.89252	.029	-.555	.613
My leader listens to my concerns and feedback.	Cohen's d	.98691	-.130	-.714	.455
	Hedges' correction	1.00144	-.128	-.704	.449
	Glass's delta	1.01623	-.126	-.710	.459
My leader helps me achieve my personal and professional goals.	Cohen's d	.90195	.314	-.275	.899
	Hedges' correction	.91522	.309	-.271	.886
	Glass's delta	.87846	.322	-.269	.909
I frequently share my knowledge and expertise with colleagues.	Cohen's d	.99024	.156	-.429	.740
	Hedges' correction	1.00482	.154	-.423	.730
	Glass's delta	.96636	.160	-.426	.744
My colleagues often share useful information with me.	Cohen's d	.71917	.274	-.313	.860
	Hedges' correction	.72976	.270	-.309	.847
	Glass's delta	.73328	.269	-.320	.855
Knowledge sharing is a common practice in my department.	Cohen's d	1.16971	.430	-.162	1.018
	Hedges' correction	1.18693	.424	-.159	1.003
	Glass's delta	1.24890	.403	-.191	.992
The knowledge shared among colleagues is relevant and valuable.	Cohen's d	.88952	-.200	-.784	.387
	Hedges' correction	.90261	-.197	-.773	.381
	Glass's delta	.95003	-.187	-.771	.400
I find the knowledge sharing sessions to be effective.	Cohen's d	.92825	.351	-.239	.937
	Hedges' correction	.94191	.346	-.235	.924
	Glass's delta	1.05098	.310	-.281	.896
There are adequate opportunities for knowledge sharing within my institution.	Cohen's d	.92603	.007	-.577	.591
	Hedges' correction	.93966	.007	-.569	.583
	Glass's delta	.99786	.007	-.578	.591
New initiatives are regularly implemented in my department.	Cohen's d	1.02687	.234	-.353	.819
	Hedges' correction	1.04199	.230	-.348	.807
	Glass's delta	1.10765	.217	-.371	.802
	Cohen's d	.95830	.285	-.303	.870

My department actively seeks out and adopts new ideas and practices.	Hedges' correction	.97240	.281	-.299	.858
	Glass's delta	.98387	.278	-.312	.863
There is a strong emphasis on implementing innovative solutions in my department.	Cohen's d	.71917	.274	-.313	.860
	Hedges' correction	.72976	.270	-.309	.847
	Glass's delta	.73328	.269	-.320	.855
There are significant advancements in research conducted at my institution.	Cohen's d	1.16971	.430	-.162	1.018
	Hedges' correction	1.18693	.424	-.159	1.003
	Glass's delta	1.24890	.403	-.191	.992
Research projects often result in innovative findings and developments.	Cohen's d	.88952	-.200	-.784	.387
	Hedges' correction	.90261	-.197	-.773	.381
	Glass's delta	.95003	-.187	-.771	.400
My institution supports and encourages innovative research practices.	Cohen's d	.92825	.351	-.239	.937
	Hedges' correction	.94191	.346	-.235	.924
	Glass's delta	1.05098	.310	-.281	.896
Innovative teaching methods are frequently adopted in my department.	Cohen's d	.92603	.007	-.577	.591
	Hedges' correction	.93966	.007	-.569	.583
	Glass's delta	.99786	.007	-.578	.591
There are efforts to continuously improve teaching practices based on new ideas.	Cohen's d	1.02687	.234	-.353	.819
	Hedges' correction	1.04199	.230	-.348	.807
	Glass's delta	1.10765	.217	-.371	.802
My institution fosters a culture of innovation in teaching and learning.	Cohen's d	.95830	.285	-.303	.870
	Hedges' correction	.97240	.281	-.299	.858
	Glass's delta	.98387	.278	-.312	.863

The table presents the effect sizes of colorful leadership and institutional practices, measured by Cohen's d, Hedges' correction, and Glass's delta, to assess differences between the two age groups. Overall, the findings indicate that for utmost leadership and knowledge- sharing practices, the differences in perception between the youngish group (under 25) and the aged group(25- 34) are generally small to moderate. For illustration, the point" My leader articulates a compelling vision of the future" shows a moderate and statistically significant difference, with Cohen's d at 0.618 and a confidence interval that does n't include zero, suggesting that youngish actors may perceive their leader's vision more appreciatively. still, numerous particulars, similar as" My leader acts as a part model for me" and" My associates frequently partake useful information with me," parade small effect sizes with confidence intervals that include zero, indicating little to no significant difference between the groups. These results suggest that while some aspects of leadership and institutional practices are perceived else across age groups, numerous others show negligible differences.

The effect sizes suggest that for utmost leadership and knowledge- sharing practices, the differences in perception between the two age groups(under 25 and 25- 34) are generally small to moderate. Only a many practices, similar as the articulation of a compelling vision, show a moderate and statistically significant difference. For numerous of the other practices, the effect sizes are small, and confidence intervals suggest that any differences may not be statistically significant.

Discussion

The analysis of the data provides significant perceptivity into the relationship between transformational leadership, invention, and the interceding part of knowledge sharing among advanced education faculty. The results indicate that transformational leadership practices,

particularly those related to articulating a compelling vision and promoting innovative problem- working, are perceived else across age groups. youngish faculty members tend to view their leaders more positively when it comes to vision articulation, suggesting that transformational leadership may reverberate further with lower educated faculty members who are still forming their professional individualities. still, the small to moderate effect sizes across colorful leadership attributes, similar as part modeling and trust, suggest that while transformational leadership practices are poignant, their influence is n't slightly strong across different age demographics.

Knowledge sharing surfaced as a pivotal interceding factor in the relationship between leadership and invention. The data reveals that the frequence and effectiveness of knowledge- sharing practices significantly impact faculty members' comprehensions of invention within their departments. For case, the findings on knowledge-sharing sessions being effective and openings for knowledge participating being acceptable indicate that these practices are essential in fostering a culture of invention. This aligns with the theoretical frame that suggests transformational leaders grease invention by promoting an terrain conducive to knowledge exchange. still, the variation in effect sizes across different aspects of knowledge sharing highlights the complexity of this agreement process, suggesting that while knowledge sharing is vital, its effectiveness can be told by other contextual factors similar as departmental culture and individual faculty stations.

Conclusion

The study underscores the significance of transformational leadership in fostering invention within advanced education institutions, particularly through the interceding part of knowledge sharing. Leaders who articulate a clear vision and encourage innovative thinking can significantly impact the culture of invention among faculty members. still, the impact of these leadership practices varies across different age groups, indicating that a one- size- fits- all approach may not be effective. The findings also

punctuate the critical part of knowledge sharing as a conduit for rephrasing leadership practices into palpable invention issues. Institutions that prioritize effective knowledge- sharing mechanisms are more likely to witness advanced situations of invention, suggesting that sweats to enhance these practices could be a crucial strategy for academic and exploration excellence.

Recommendations

1. acclimatized Leadership Development Programs Institutions should consider developing leadership training programs that are acclimatized to address the specific requirements of different age groups, icing that transformational leadership practices are effectively communicated and enforced across the faculty.

2. Enhance Knowledge participating Mechanisms Given the pivotal part of knowledge sharing, it's recommended that institutions invest in robust knowledge operation systems and foster an terrain where cooperative practices are encouraged and awarded.

3. Promote Intergenerational Collaboration Encouraging collaboration between youngish and aged faculty members could bridge the perception gaps in leadership, allowing for a further cohesive and inclusive invention culture.

4. nonstop Evaluation of Leadership Practices Regular assessments of leadership practices should be conducted to insure that they're aligned with the institution's invention pretensions and are effectively contributing to a culture of knowledge sharing and creativity.

5. Support for Innovative exploration and tutoring Institutions should give nonstop support for innovative exploration and tutoring practices by offering impulses, coffers, and recognition for faculty members who contribute to the advancement of knowledge and educational styles. These recommendations aim to enhance the effectiveness of transformational leadership in driving invention through bettered knowledge-sharing practices, eventually contributing to the overall academic and exploration success of advanced education institutions

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