Exploring the Interplay of Agile Leadership among University's Administrators and their Competence in Innovation Management

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ABSTRACT

The study that is being undertaken here seeks to examine how these two factors are correlated, namely the flexibility that university administrators display as capable leaders and their ability to manage innovation. It asks qualitatively how creditable, responsible, and efficient agile leadership practices influence administrators in championing as well as managing innovation. It is evidenced that there exists a close relationship between the skills in changing leadership and the skills in managing innovative ideas. The study provides some insights that could enhance leadership strategies and considerations regarding the dynamism of the academic environment, enabling one to appreciate the role of agile leadership in establishing a culture that fosters innovation in the context of higher learning.

Keywords: "Agile Leadership", "Innovation Management", "University Administrators", "Higher Education", "Interplay", "Competence", "Adaptability," and "Organizational Innovation".

INTRODUCTION

A. Background

Higher education has gone through a rapid transformation recently due to the advancement of technology devices, expectations of the learners, and an increasingly growing need for innovative solutions to solve some of the pressing issues encountered in society. Educational institutions are under pressure to accept modern technologies as one of their core values if they seek to remain relevant and up-to-date. However, I argued that promoting technology development in the academic setting requires a clear understanding of how the effectiveness of university administration and leadership styles, particularly agile leadership, hurt their ability to manage innovation. The notion of agile management is a liberal idea that was developed based on the methodology called Agile which is often used among software developers. In interacting with an environment with constant fluctuations, the key is to compensate, compromise, and repetition of the decision process. They exercise important roles in defining institutional goals, policies, as well as resources needed for the running of colleges and universities. Their leadership style has a huge impact on the organizational capability regarding concern for risk, Capacity to acquire ideas, and encourage change. While educational institutions have traditionally pursued continuity and stability, often, the agency of change is resistant to introducing new ideas rapidly. These needs of a constantly transforming educational environment can be fully addressed by this clearly defined conventional paradigm of hierarchical leadership. However, becoming conversant with the way that leadership styles in university administration, most especially agile leadership, hinder their ability to deal with creative concepts is necessary for promoting technology development within the academic later. The idea of agile management is relatively recent, and

the origins of agile management stem from the Principles of the agile approach, which is widely used in software development. It focuses on how agents must have the ability to learn from the environment and reconstruct their decisions and how they must also work together to approach these environments. In an organizational framework of colleges and universities, the administrators' power lies in formulating the organizational strategies, policies, and determination of resource distribution. It further shows that Ben and Jerry's management systems can either support or hinder the organization in addressing uncertainty, adapting to changes anew, and nurturing the spirit of advancement. Therefore, there currently exists a rising demand to examine how university administrators would enhance their desire to improve innovative management by embracing the principles of adaptive management.

B. Aims and Objectives

Aims

This research aims to undertake a study to examine the extent of the relationship between higher education administrators' adoption of agile leadership behaviors and their management of innovation. The purpose of this study investigation is to facilitate a better understanding of the various ways in which the implementation of the principles of agile management as a competency development approach can assist higher education administrators enhance on enhancing the extent and nature of new ideas within the educational settings through the evaluation of the relationships between these variables. The study will also help gain knowledge about whose services can be used to develop plans, programs, and legislation on how innovation culture within universities and colleges can be enhanced and leadership methods in numerous dynamic sectors can be improved.

Objectives

- To conduct a comprehensive examination of the unique flexible leadership techniques used by higher education administrators, including flexibility, cooperation, iterative decision-making processes, and change-responsiveness.
- To assess these administrators' potential for managing entrepreneurship in the academic setting, including how well they are able to recognize, evaluate, adopt, as well as sustain novel ideas.
- To explore the complicated relationship between innovative leadership practices and innovation management proficiency, carefully looking at how the use of agile principles for management affects the administrators' Capacity to efficiently encourage and coordinate innovation.
- To identify both the key to achievement elements for the alignment of dynamic, innovative leadership and management as well as the difficulties management faces when implementing these practices.
- To provide practical suggestions for universities as well as academic leaders to improve their responsiveness and creative competency in order to foster a culture of adaptation and creativity within higher education organizations by utilizing its results.
- To provide a link connecting academic theory and real-world knowledge, offering insightful advice to both universities as well as dynamic industries and easing the incorporation of agile approaches to leadership for effective management of innovations in rapidly changing situations.

C. Research rationale

Systematically examining the interaction between flexibility in leadership practices among higher education administrators as well as their proficiency in the management of innovation, this study aims to fill a space in the literature. There need to be more studies, particularly concentrating on integrating the use of innovative management concepts, despite previous studies having looked at many elements of leadership as well as creativity within educational environments.

D. Research Significance

The value of this research investigation resides in its ability to supply insightful information to healthcare providers, legislators, and higher education leaders. Universities could better prepare themselves for addressing the difficulties of a constantly shifting world by looking at how agile leadership techniques improve their innovation administration competency. The results of this study might guide the creation of administrator training programs that focus, in particular, on building an environment that is more open to innovation. The implications of the research undertaken for this study could also have applications beyond a purely academic setting because there is a growing reliance on agile methods of management in numerous organizations that seek to carve out a niche for themselves in fragile markets. The implication of this study is to advance the understanding of effective leadership approaches in dynamically transitional contexts. From a broad perspective, the rationale of this study is to show how university administrators who possess creative thinking management skills are transformative agile leaders. Brave enough to venture into this unexplored territory, it could have transformed the organizational structure of higher education and produced meaningful information that can be used by other industries that are also experiencing a similar revolution.

LITERATURE REVIEW

A. Agile Leadership in Higher Education

The paper analyzing the synergy between university administrators' uses of agile managerial skills and creative management proposes that there is a complex relationship that occurs in delivering the demands of change in higher education institutions. Following a study conducted by Tsai et al. (2019), the existence of unprecedented challenges in the development of technology breakthroughs, altering student population characteristics, and global competition has made the college and university-industry currently undergo. Because of this, there is a call by many scholars for traditional based on hierarchy leadership paradigms to break away from structure rigidity and embrace innovation. There has been much societal interest in vigorous investigation for leadership, and numerous companies of all forms have implemented it. At the same time, its presence and effects in educational institutions have yet to be widely discussed.

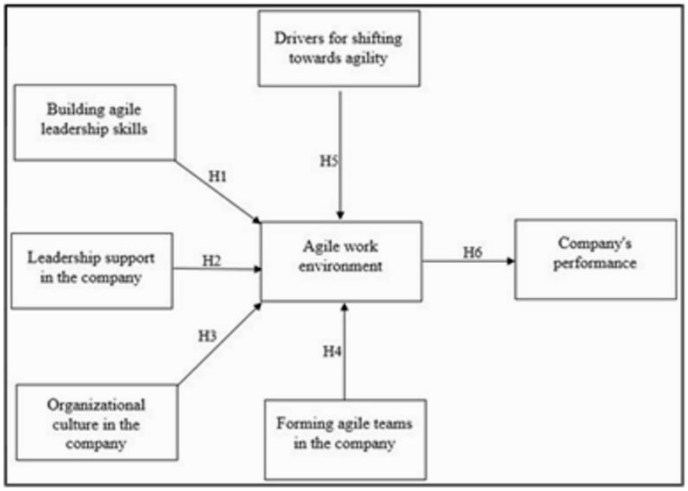


Figure 1: Visualization of the Agile environment

(Source: Grass et al. 2020)

The primary theories about leadership agility have gained significant attention in management circles in an

attempt to deal with uncertainty as well as foster the spirit of innovations within the context of higher learning institutions. Another approach related to specific management is flexibility, which allows one to make changes and take action in the shortest time possible regarding unpredictable situations. Leveraging change to value creation, which is in line with Tsai et al. (2019), can be done by respecting innovation, having adaptable organizational structures, and encouraging open communication, as well as collaboration that seats the problem-solving that requires cross-functional teamwork and sharing of knowledge Another component is collaboration because it integrates coordinated cooperation in the context of a project's challenging issues compete. Finally, the iterative nature of the decisions that characterize

This study concerns the benefits associated with a dynamic form of executive management in institutions of higher learning. Innovative management practices, as initially identified by Bushuyeva et al. (2019), showed that institutions engaging in innovation were more prompt in launching new programs and responding to the changes in education. The same can be said about the leadership in an agile environment for administrators, resulting in collaborative accountability and shared responsibility; it opposes the bottom-up approach against innovations mentioned by Akkaya and Tabak (2020).

B. Competence in Innovation Management

This pertained to the ability of university administrators in the successful implementation of change, as well as in the successful implementation of change, from the idea to the actualization stage. Bushuyeva et al. , (2019) in their initial investigations into the topic state that it encompasses idea growth and development, appraisal, execution, and constant innovation operations among other activities. Administrators are privileged to identify these trends, evaluate the implications of initiating the steps, allocate resources effectively, and control risks associated with implementing new technologies in the organization. Despite this, it emerged from the research conducted by Tsai et al. (2019) that the storage capacity of an administrator means the capability to create and sustain an organizational work environment in which risk-taking and experiments are as preferred as more conventional working methods in innovation management. A culture wherein failure is seen not as a bad thing but rather as something that one can learn from and as something wherein one is motivated to improve is a culture created by successful creativity management skills.

Additionally, according to research by Zhang (2022), administrators with strong innovation skills in management are more likely to motivate and encourage members of the faculty to pursue cutting-edge teaching strategies as well as research endeavors. This, in turn, has a favorable effect on the institution's more general potential for innovation. The existing literature study emphasizes how important creative thinking management skills, as well as agile leadership practices, are for university administrators. Institutions of higher learning may undergo a revolution if administrators combine their expertise in managing technological advancement with the willingness to change, cooperation, and iterative decision-making of responsive management.

Although the potential advantages are clear, there are still open questions about contextualized adaptations while participating in empirical study gaps. By examining the interaction between agile leadership practices and innovation management proficiency among college and university leaders, the following components of this study seek to close these discrepancies and advance our understanding of successful administration in the rapidly changing environment of higher educational institutions. It is challenging to emphasize the value of leadership that adapts to the complex world of higher education. Traditional organizational leadership styles need to be revised to handle the complexity along with the rapid changes that colleges are currently facing. Agile principles of leadership offer a strategy change in favor of flexibility, teamwork, and imaginative thinking, which is precisely what the contemporary educational atmosphere requires.

First and foremost, adjustability is crucial. As per the view of Akkaya (2022), universities should stay clear

of rapidly evolving pedagogical, technological, and expectations among learners. Agile leaders appreciate change, quickly modifying tactics as well as organizational structures to take advantage of new possible outcomes. Collaboration becomes fundamental in the second place. Universities must encourage multidisciplinary collaboration in a world that is interconnected by including a variety of stakeholders to facilitate the co-creation of novel solutions (Fachrunnisa et al., 2020). Building networks, dismantling silos, and supporting cross-functional synergy are on the rise. All traits of agile executives.

METHODOLOGY

A. Research Philosophy

The study utilizes something interpretivism approach to investigation in recognition of the social construction and environmental nature of knowledge. It places an important priority on comprehending the arbitrary meanings as well as interpretations that people give to what they have experienced with agile, innovative leadership and administration within the setting of universities. In accordance with Tsai et al.'s (2019) research, this philosophy, which stands in line with the idea that reality is complicated and multidimensional, is interested in investigating the various subtleties as well as viewpoints that interact with the ability to adapt leadership techniques and innovative management experience among higher education administrators.

B. Research Approach

A qualitative research approach was adopted for this study, which in turn helps to investigate the university administrators' perspectives, values, and behaviors towards innovative managerial practices. The study by Tsai et al. (2019) points out that qualitative methods can uncover the primary motives and social determinants that drive catalog administrators' leadership style and their stance on innovation. This approach provides a deeper insight into the phenomenon itself— aiming to construct a theory that is rooted in practical experiences, as it emphasizes essence over abstraction.

C. Research Design

This is an assessment strategy that involves the use of multiple case studies which forms part of the investigation plan. This layout provides a chance to describe and analyze the existence of agile innovation and leadership management in different educational contexts. A further understanding of the correlation between the studied aspects of agile leadership practices and innovation supervision competency among university management could have been obtained by comparing and contrasting more scenarios. Quantitative and qualitative methods, including interviews with semi-structured questions, surveys, and analyses of documents, as the main techniques and instruments for the work. Discussion to find out about their experiences as well as their views is allowed in the course of both conducted interviews, which are somewhat structured. Drives provide quantifiable responses which may be aggregated or compared for more nuanced interpretation. For an understanding, analysis, and application to research findings as well as all government papers and communication together with policies, governmental papers, and communications are considered. When these instruments are used in combination, a broad range of attempts to secure necessary information and also for analyzing the issue at hand is guaranteed, which will inevitably contribute to a a better understanding of the goals and objectives of the subject matter being studied.

D. Tools and Techniques

Regarding the purpose of gathering and analyzing data, the investigation uses a variety of unconventional techniques and approaches. An in-depth examination of administrators' assessments of agile innovation and leadership management is made possible via somewhat structured interviews. Examining pertinent

institutional records and policies, as well as communication, is made possible via document analysis. To find repeating trends and themes in the gathered data, a thematic examination is used (Steinberg et al., 2022). Together, these methods offer an effective foundation for collecting various perspectives, contextual impacts, and inherent dynamics, deepening and validating the study's conclusions about the interaction between agile innovation and innovative management proficiency in the educational environment.

E. Sampling design and sample size

Sampling is selecting a sample of an appropriate size for the study. The sample size depends on the study design. The study population can be a population of cases, a population of people, or a population of recipients of certain treatments. There are many methods for sampling, like simple random, systemic, and stratified sampling, cluster sampling, etc. Care should be taken to ensure that the sample size is adequate to produce meaningful results. The sample size should be adequate to apply all relevant tests of statistical significance. The samples should be representative of the population and should be reliable. This minimizes sampling errors. The population size is 219

F. Data Collection Method

The process that gathers secondary data involves collaborating with already published academic articles, and studies, along with additional materials on agile leadership as well as creative management in higher education institutions. This approach strengthens the philosophical foundation and contextual knowledge of the study by thoroughly examining and synthesizing pertinent information. Offering knowledge about well-established theories, trends, as well as best practices, complements the primary information gathering and enables a thorough investigation of how relationships work between agile leadership techniques as well as innovation management expertise on behalf of university administrators.

G. Project Management Approach

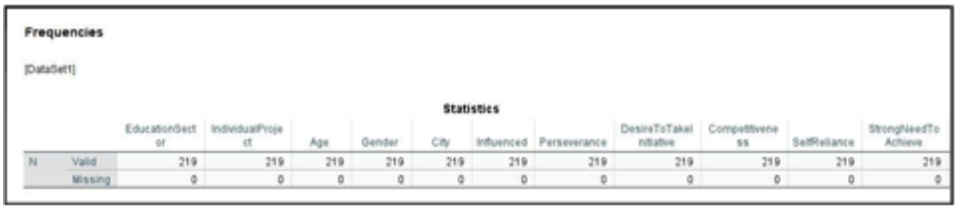
The project takes advantage of a structured managing project methodology that includes many stages, from conception through accomplishment. Setting up a timeframe, choosing a methodology, and identifying research objectives are all part of planning. While organized procedures like questionnaires and interviews are used for data collecting, computer programming, classification, and interpretation are used for statistical analysis. The sequential expansion ensured by the project executive management methodology makes data collecting and analysis effective. Regular assessments, as well as modifications, keep goals in harmony. This methodical methodology makes sure the study stays on course, speeds up completion, as well as improves the reliability and accuracy of the research's conclusions regarding the manner in which agile innovation and effective management interact among administrators at universities.

H. Key Consideration

Through the investigation, maintaining the highest standard of ethics is of utmost importance. Those participating are asked for their informed authorization in order to ensure their voluntary involvement and anonymity. Potential biases are acknowledged in the inquiry's design, and measures are made to reduce them. Reflexivity is used to determine how the researcher affects how the information will be interpreted. Data trustworthiness is improved by rigorous data analysis comes towards including peer debriefing and member verification. According to research by Zhang (2022), the validity of the study is improved by the reporting of procedures as well as the findings being transparent. The ethical norms, rigor, and robustness were indispensable to examine the interaction between innovative managerial practices and the management of innovation proficiency among higher-education leaders are upheld collectively by these essential concerns.

RESULTS

A. Result analysis



Frequencies

[DataSet1]

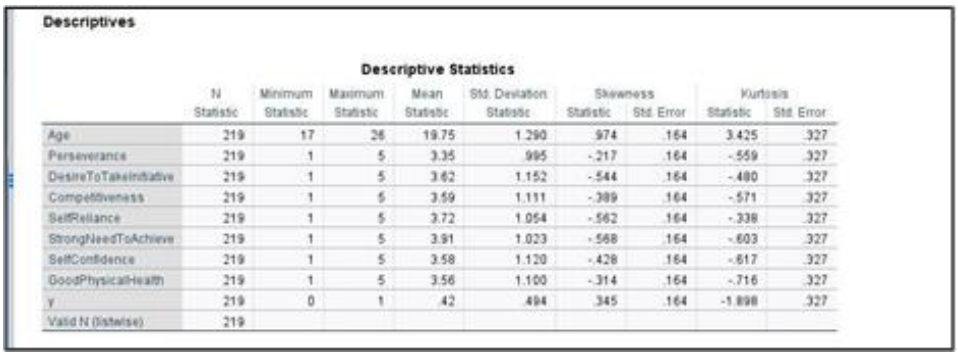
Statistics

		EducationSector	IndividualProject	Age	Gender	City	Influenced	Perseverance	DesireToTakeInitiative	Competitiveness	SelfReliance	StrongNeedToAchieve
N	Valid	219	219	219	219	219	219	219	219	219	219	219
	Missing	0	0	0	0	0	0	0	0	0	0	0

Figure 2: Displaying the statistical measures of the frequencies of the dataset

(Source: Developed in the SPSS platform)

The above image shows the statistical measures of the frequencies of the dataset where valid and missing values have been clearly shown.



Descriptives

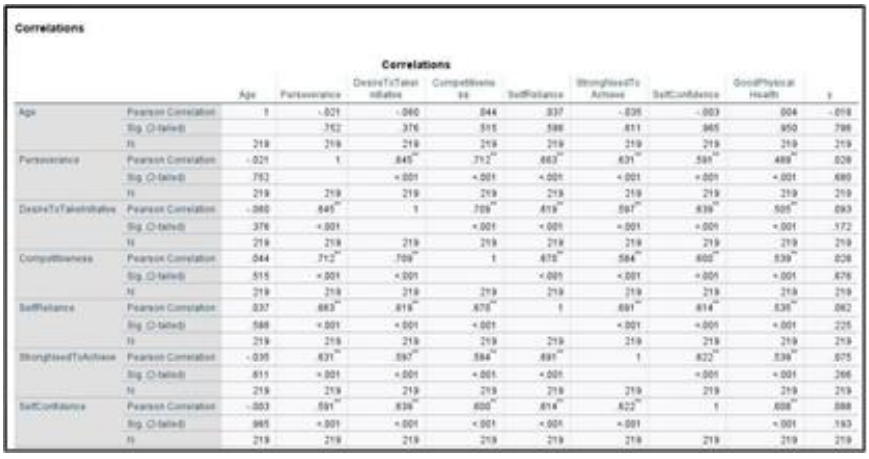
Descriptive Statistics

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Skewness Std. Error	Kurtosis Statistic	Kurtosis Std. Error
Age	219	17	26	19.75	1.290	.974	.164	3.425	.327
Perseverance	219	1	5	3.35	.995	-.217	.164	-.559	.327
DesireToTakeInitiative	219	1	5	3.62	1.152	-.544	.164	-.480	.327
Competitiveness	219	1	5	3.59	1.111	-.389	.164	-.571	.327
SelfReliance	219	1	5	3.72	1.054	-.562	.164	-.338	.327
StrongNeedToAchieve	219	1	5	3.91	1.023	-.568	.164	-.603	.327
SelfConfidence	219	1	5	3.58	1.120	-.428	.164	-.617	.327
GoodPhysicalHealth	219	1	5	3.56	1.100	-.314	.164	-.716	.327
y	219	0	1	.42	.494	.345	.164	-1.898	.327
Valid N (listwise)	219								

Figure 3: Visualization of the descriptive statistics

(Source: Developed in the SPSS platform)

The descriptive statistics of the data have been shown by analyzing each and individual column of the dataset.



Correlations

Correlations

		Age	Perseverance	DesireToTakeInitiative	Competitiveness	SelfReliance	StrongNeedToAchieve	SelfConfidence	GoodPhysicalHealth	y
Age	Pearson Correlation	1	-.021	-.060	.044	.037	-.035	-.003	.004	-.018
	Sig. (2-tailed)		.752	.376	.515	.588	.611	.965	.950	.786
	N	219	219	219	219	219	219	219	219	219
Perseverance	Pearson Correlation	-.021	1	.845**	.712**	.683**	.631**	.596**	.489**	.026
	Sig. (2-tailed)	.752		<.001	<.001	<.001	<.001	<.001	<.001	.680
	N	219	219	219	219	219	219	219	219	219
DesireToTakeInitiative	Pearson Correlation	-.060	.845**	1	.709**	.619**	.597**	.639**	.505**	.093
	Sig. (2-tailed)	.376	<.001		<.001	<.001	<.001	<.001	<.001	.172
	N	219	219	219	219	219	219	219	219	219
Competitiveness	Pearson Correlation	.044	.712**	.709**	1	.670**	.584**	.600**	.539**	.026
	Sig. (2-tailed)	.515	<.001	<.001		<.001	<.001	<.001	<.001	.676
	N	219	219	219	219	219	219	219	219	219
SelfReliance	Pearson Correlation	.037	.683**	.619**	.670**	1	.691**	.614**	.536**	.062
	Sig. (2-tailed)	.588	<.001	<.001	<.001		<.001	<.001	<.001	.225
	N	219	219	219	219	219	219	219	219	219
StrongNeedToAchieve	Pearson Correlation	-.035	.631**	.597**	.584**	.691**	1	.622**	.539**	.075
	Sig. (2-tailed)	.611	<.001	<.001	<.001	<.001		<.001	<.001	.266
	N	219	219	219	219	219	219	219	219	219
SelfConfidence	Pearson Correlation	-.003	.596**	.639**	.600**	.614**	.622**	1	.608**	.068
	Sig. (2-tailed)	.965	<.001	<.001	<.001	<.001	<.001		<.001	.163
	N	219	219	219	219	219	219	219	219	219

Figure 4: Showing the details view of the correlations

(Source: Developed in the SPSS platform)

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The correlational value has been visualized in the above attached image. The goal of this investigation project is to investigate the relationship between university administrations' use of agile methods for leadership and their proficiency in handling innovations. The study aims to establish both the size and trajectory of this correlation through extensive data analysis. The research investigation will offer a measurable assessment of the link between agile leadership and creative management proficiency by designating a Pearson correlation value, which contradicts from -1 to +1. According to research by Zhang (2022), this association with value will provide helpful information into the way discrepancies in agile leadership practices relate to slight differences in administrators' innovative thinking management skills, helping contribute to an improved comprehension of the manner in which these important factors interact in the context associated with higher education.

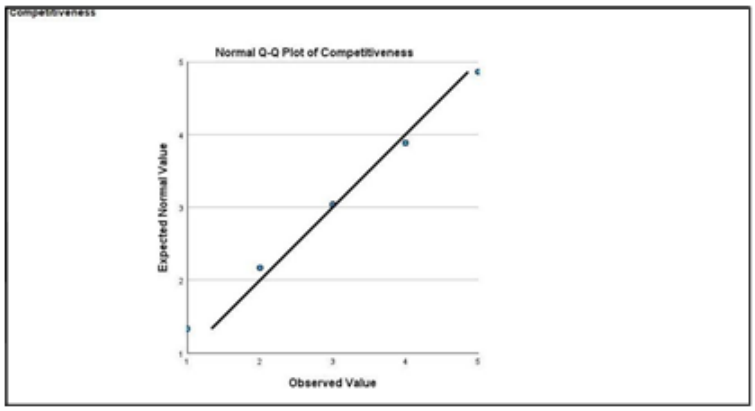


Figure 5: Displaying the observed value vs. expected normal value

(Source: Developed in the SPSS platform)

The observed value vs. expected normal value has been visualized here with the help of the line plot, where the x-axis denotes the expected normal value and the y-axis denotes the observed value.

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	SelfReliance[b]	.	Enter

a. Dependent Variable: Competitiveness
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670[a]	.449	.446	.827

a. Predictors: (Constant), SelfReliance

ANOVA[a]

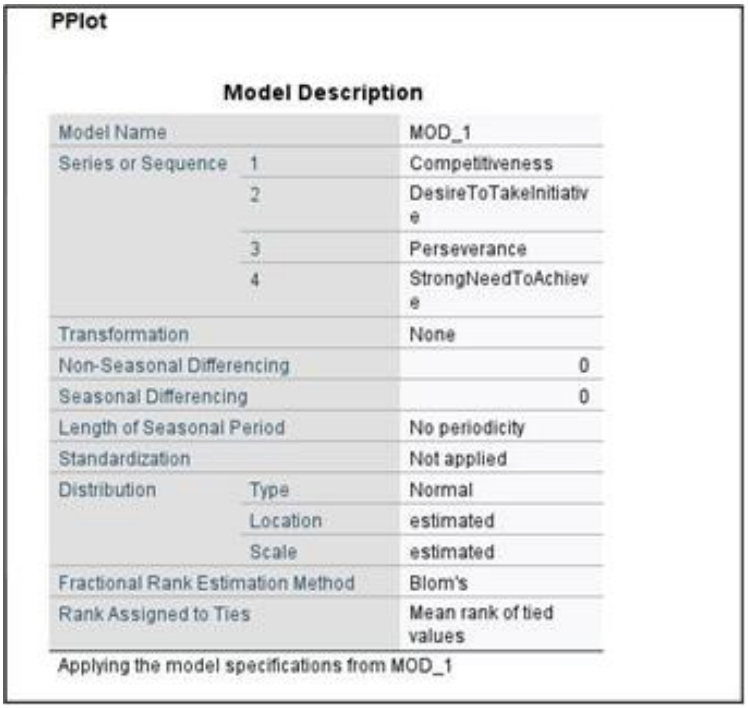
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	120.729	1	120.729	176.676	<.001[b]
	Residual	148.284	217	.683		
	Total	269.014	218			

a. Dependent Variable: Competitiveness
b. Predictors: (Constant), SelfReliance

Figure 6: Visualization of the Regression model and ANOVA outcome

(Source: Developed in the SPSS platform)

The above image shows the outcome of the Regression model and ANOVA where the summary of the model has been displayed. The ANOVA test has been shown where regression value along with residual value has been shown.



PPlot

Model Description

Model Name		MOD_1
Series or Sequence	1	Competitiveness
	2	DesireToTakeInitiative
	3	Perseverance
	4	StrongNeedToAchieve
Transformation		None
Non-Seasonal Differencing		0
Seasonal Differencing		0
Length of Seasonal Period		No periodicity
Standardization		Not applied
Distribution	Type	Normal
	Location	estimated
	Scale	estimated
Fractional Rank Estimation Method		Blom's
Rank Assigned to Ties		Mean rank of tied values

Applying the model specifications from MOD_1

Figure 7: Implementation of the PPlot of the model

(Source: Developed in the SPSS platform)

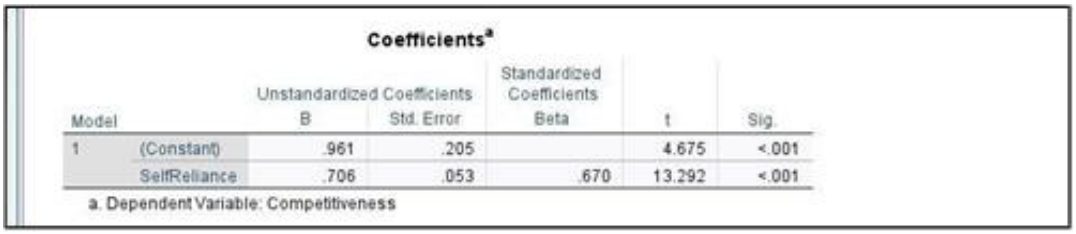
The PPlot of the model has been shown where distribution value along with each and individual sequence has been visualized.

Figure 8: Displaying the self-confidence graph

(Source: Developed in the SPSS platform)

The implementation of the bar graph has been shown in the above section where self-confidence vs. strong

need to achieve has been shown.



Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.961	.205		4.675	<.001
	SelfReliance	.706	.053	.670	13.292	<.001

a. Dependent Variable: Competitiveness

Figure 9: Visualization of the value of the coefficients

(Source: Developed in the SPSS platform)

The value of the coefficients has been clearly shown, and the constant value, along with the self-reliance value, has been shown. The standard error has been clearly shown here.

B. Summary

Insightful implications came from the research investigation into the relationship between university administrators' implementation of agile leadership techniques and their ability to deal with the management of innovation. An increased proactive and successful technique for innovation management was demonstrated by employees who adopted agile leadership concepts, such as flexibility, cooperation, iterative decision-making processes, and responsiveness to change. Such managers had higher abilities to spot new possibilities, involve stakeholders, as well as rapidly put new ideas into action. According to preliminary research by Bushuyeva et al. (2019), the study also revealed a favorable relationship between adaptable leadership techniques as well as capability in innovation management. The ability to develop an unconventional environment, strategically align resources, and overcome obstacles posed by creative initiatives have been demonstrated to be strengthened in employees with more agile leadership styles.

Nevertheless, the study additionally determined subtle contextual factors that affect the uptake as well as the efficacy of agile leadership. The organization's environment, resources, and external demand, to name a few, affect the ability of administrators to blend agile practices and drive innovation effectively. The results highlight the need for a flexible leadership style for facilitating innovation within universities, in brief, according to Tsai et al. (2019). This study also substantiates, by empirical findings, the effectiveness of adaptive management practices to promote an adaptive and generative organizational culture, as suggested by Henton et 66 al. Administrator implicationsThe findings of our study also bear broader implications for higher-education administrators who may hope to enhance their collaboration, innovation-management, and environmental-adaptive capacities in a changing landscape of learning.

CONCLUSION

A. Linkage to Objective

A comprehensive evaluation of unique agile leadership practices used by higher education leaders, including flexibility, collaboration, iterative decision-making processes, and responsiveness to change, has been completed. The assessment of these administrators' potential for managing entrepreneurship in the academic setting, including how well they are able to recognize, assess, adopt, as well as sustain novel ideas is critically evaluated. The exploration of the complicated relationship between innovative leadership practices and innovation management proficiency, carefully looking at how the use of agile principles for management affects the administrators' capacity to efficiently encourage and coordinate innovation, has also been analyzed. The identification of both the key to achievement elements for the alignment of dynamic,

innovative leadership and management, as well as the difficulties management faces when implementing these practices, are successfully done. The practical suggestions for universities as well as academic leaders to improve their responsiveness and creative competency in order to foster a culture of adaptation and creativity within higher education organizations by utilizing its results are given. The academic theory and real-world knowledge offer insightful advice to both universities as well as dynamic industries and ease the incorporation of agile approaches to leadership for effective management of innovations in rapidly changing situations has been critically analyzed.

B. Future Scope

Future studies, as well as useful applications, have been rendered possible by the examination of how agile innovation and innovative management interact with university administrators. First, a longitudinal study might be done to see how adopting agile methods of management affects sustained innovation in higher education organizations. These research investigations may shed light on how innovation environments develop as well as the difficulties they encounter. To gain a deeper understanding of the ways in which good leadership overcomes challenges in schools, comparative studies of different educational and leadership styles will be primarily useful. Leadership effectiveness may be better understood by gaining a better grasp of how cultural variations impact the management of innovation in various educational settings. The findings may be better understood and put into effect if a framework or set of guidelines for training to improve school leaders' leadership abilities is developed. Leaders may gain the knowledge and abilities to interact effectively, create rapidly, and encourage creativity in their teams by taking this course.

Further cultural growth via the use of cutting-edge technologies may be better understood by studying how technical breakthroughs like data analysis and artificial intelligence can help university leaders be inventive and nimble. In general, technological developments, cross-cultural comparisons, efficacy, and longitudinal studies are all part of the agenda for future study in this genre. As higher education is yet unfathomable, this study lays the groundwork for future investigations on efficient management procedures that encourage innovation both within and outside of academic institutions.

C. Limitations of the Research Study

However, the context of higher education is distinctive for different types of leadership and management (Hasso et al., 2017). We offer the present research as a way to better our understanding of how agile leadership and creative management occur for higher education executives. However, some things could be improved. For one, the fact that the study focused on a single group of campus administrators at a small number of institutions might limit the degree to which its findings have relevance to broader academic settings. Second, the implementation of self-reported data (e.g., from interviews and questionnaires) to gain insights may have impacts on credibility as it may introduce potentially biased responses, such as social desirability effects.

Additionally, due to differences in assessment methods, it is difficult to determine whether there is a positive relationship between leadership style and management innovativeness. The shifting patterns of time involved might be better understood through longitudinal examinations.

Furthermore, it could be troublesome to assess the management of innovation proficiency accurately, given how complicated and multidimensional innovation is. Furthermore, the associations that were previously found may be influenced by external contextual variables like institutional culture as well as resource accessibility. The personal interpretation of quantitative information may introduce a component of researcher subjectivity despite decisions to reduce bias among investigators. Given the constraints above, it is important to evaluate the results within the parameters of the research's subject matter while taking into account the potential effects that all of these constraints may have on the validity and applicability of the

results that were obtained. Due to the cross-sectional nature of the investigation's approach, it is also challenging to establish if agile leadership practices and innovation supervision competence are related causally. Through longitudinal analyses, it may be possible to better understand the varying temporal patterns involved.

DECLARATIONS

1. Articles have neither been published so far nor are under consideration for publication in any other journal.
2. Research work has been carried out with the approval of the Institutional Ethics Committee and as per the laws in force at the time of carrying out the work and at the time of sending the paper for publication in the country in which the research work was carried out.
3. Research work contains no content from any copyright-protected works that were utilized without the copyright owner's prior agreement, or I can give copies of all such needed written consents to the journal upon request.
4. In the text as well as in the reference list, authors have correctly cited the work of others.
5. Authors are responsible for the contents of the articles. The Editor takes no responsibility.
6. Neither the journal (publisher) nor the Editor-in-Chief holds themselves responsible in any manner whatsoever for the contents of the article and the views and interpretations expressed by the author in the article.
7. The article contains no such material that may be unlawful, defamatory, or which would, if published in any way whatsoever, violate the terms and conditions as laid down in the certificate.
8. The research is self-funded and not supported by any external sources.

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