



Link Between Transformational Leadership and Creativity

"الارتباط بين القيادة التحويلية والإبداع"

by

MOHAMED HASSAN AL ALI

Dissertation submitted in partial fulfilment.

of the requirements for the degree of

MSc ENGINEERING MANAGEMENT

at

The British University in Dubai

October 2023

DECLARATION

I warrant that the content of this research is the direct result of my own work and that any use made in it of published or unpublished copyright material falls within the limits permitted by international copyright conventions.

I understand that a copy of my research will be deposited in the University Library for permanent retention.

I hereby agree that the contents of this dissertation for which I am author and copyright holder may be copied and distributed by The British University in Dubai for the purposes of research, private study or education and that The British University in Dubai may recover from purchasers the costs incurred in such copying and distribution, where appropriate.

I understand that The British University in Dubai may make a digital copy available in the institutional repository.

I understand that I may apply to the University to retain the right to withhold or to restrict access to my thesis for a period which shall not normally exceed four calendar years from the congregation at which the degree is conferred, the length of the period to be specified in the application, together with the precise reasons for making that application.



Signature of the student

COPYRIGHT AND INFORMATION TO USERS

The author whose copyright is declared on the title page of the work has granted to the British University in Dubai the right to lend his/her research work to users of its library and as an open source and to make partial or single copies for educational and research use.

The author has also granted permission to the University to keep or make a digital copy for similar use and for the purpose of preservation of the work digitally.

Multiple copying of this work for scholarly purposes may be granted by either the author, the Registrar or the Dean only.

Copying for financial gain shall only be allowed with the author's express permission.

Any use of this work in whole or in part shall respect the moral rights of the author to be acknowledged and to reflect in good faith and without detriment the meaning of the content, and the original authorship.

ABSTRACT

This research investigates the impact of transformational leadership (TL) on creativity within organizational settings. Employing a quantitative design approach, the study aimed to identify the relationship between TL and creativity while exploring the best practices for maximizing creative outputs. The research questions focused on understanding how TL stimulates creative thinking and determining the optimal TL strategies for enhancing creativity. Through regression and ANOVA analyses, the study found a significant positive correlation between TL and creativity, emphasizing the substantial influence of TL behaviors on fostering innovative environments. However, limitations pertaining to the sample's limited diversity and the non-normal distribution of data suggest the need for caution in generalizing the findings. While underscoring the need for further research with diverse samples and robust statistical techniques, this study encourages organizations to prioritize TL practices to promote creativity and innovation effectively.

Keywords: transformational leadership, creativity, organizational environment, innovation, leadership behaviors, best practices.

ABSTRACT (in Arabic)

تقوم هذه الدراسة بفحص تأثير القيادة التحويلية على الإبداع داخل الإعدادات التنظيمية. باستخدام نهج تصميم كمي، كانت الدراسة تهدف إلى تحديد العلاقة بين القيادة التحويلية والإبداع مع استكشاف أفضل الممارسات لتعظيم الإخراج الإبداعي. كانت أسئلة البحث تركز على فهم كيفية تحفيز القيادة التحويلية للتفكير الإبداعي وتحديد استراتيجيات القيادة التحويلية المثلى لتعزيز الإبداع. من خلال تحليلات الانحدار وتحليل التباين الأحادي، وجدت الدراسة ترابطاً إيجابياً وملحوظاً بين القيادة التحويلية والإبداع، مما يبرز التأثير الكبير لسلوكيات القيادة التحويلية في تعزيز البيئات المبتكرة. ومع ذلك، تشير القيود المتعلقة بتنوع العينة المحدود وعدم توزيع البيانات الطبيعي إلى ضرورة الحذر في التعميم على النتائج. بينما تبرز الدراسة الحاجة إلى إجراء مزيد من البحوث مع عينات متنوعة وتقنيات إحصائية قوية، تشجع هذه الدراسة المؤسسات على إعطاء الأفضلية لممارسات القيادة التحويلية لتعزيز الإبداع والابتكار بفعالية.

الكلمات الرئيسية: القيادة التحويلية، الإبداع، البيئة التنظيمية، الابتكار، سلوكيات القيادة، أفضل الممارسات

ACKNOWLEDGEMENTS

I would like in this opportunity to express my deep gratitude and worm appreciation for all those who supported me to complete my dissertation.

I would like to thank Dr. Sa'Ed Mohammed Issa Salhieh for his support and professional experience that we learn from him. My family for the tender environment that they surround me with. Friends and study colleague for the healthy discussion the experience that we share. Thanks for everyone who contribute to this work even with small role.

TABLE OF CONTENTS

Chapter 1 Introduction	1
1.1 Background	1
1.2 Problem Statement	2
1.3 Research Questions	2
1.4 Hypothesis	3
1.5 Relevance and Importance of the Research	3
Chapter 2 Literature Review.....	4
2.1 Introduction	4
2.2 Theoretical Foundations of Transformational Leadership	4
2.3 Recent Trends and Developments in Transformational Leadership Research.....	5
2.4 Effects of Transformational Leadership on Organizations	8
2.5 Effects of Transformational Leadership on Followers.....	9
2.6 Factors of Transformational Leadership Influencing Creativity	12
2.6.1 Intellectual Stimulation.....	13
2.6.2 Individualized Consideration.....	13
2.6.3 Inspirational Motivation	14
2.6.4 Idealized Influence.....	14
2.6.5 Supportive Leadership	15
2.6.6 Empowering Leadership	15
2.6.7 Organizational Climate for Creativity	16
2.6.8 Task Complexity.....	16
2.6.9 Feedback and Recognition.....	17
2.7 Benefits of Creative Outcomes	17
2.7.1 Cognitive Advantages among Creative Employees due to TL	17
2.7.2 Emotional Advantages among Creative Employees due to TL	18

2.7.3 Social Advantages among Creative Employees due to TL.....	19
2.7.4 Organizational Benefits of Creative Outcomes from Transformational Leadership	20
2.8 Transformational leadership and Creative Stimulation.....	21
2.8.1 Theoretical Foundations of Transformational Leadership and Creative Stimulation.....	22
2.8.2 Empirical Findings on Transformational Leadership and Creative Stimulation	22
2.8.3 Boundary Conditions and Moderators of Transformational Leadership and Creative Stimulation.....	23
2.8.4 Impacts and Outcomes of Transformational Leadership and Creative Stimulation	24
Chapter 3 Research Design and Methods	28
3.1 Introduction	28
3.2 Research Objectives	28
3.3 Research Design	29
3.4 Theoretical Model	29
3.5 Questionnaire Development	30
3.6 Data Analysis Techniques	31
3.7 Measures to Ensure Validity and Reliability.....	32
3.8 Ethical Considerations.....	32
3.8.1 Confidentiality Safeguards	32
3.8.2 Respect for Informed Consent	32
Chapter 4 Results and Discussion	34
4.1 Introduction	34
4.2 Demographic Information	34
4.2.1 Age.....	36
4.2.2 Gender	36
4.2.3 Educational Attainment	37
4.2.4 Professional Experience.....	38

4.3 Descriptive Statistics	38
4.4 Correlation and Regression	41
4.4.1 Summary of the Model	42
4.4.2 Regression	43
4.5 Hypothesis Test Results	45
4.6 Analysis and Interpretation	46
4.6.1 Discussion of Demographic Information.....	46
4.6.2 Analysis of Descriptive Statistics	46
4.6.3 Normality Tests	47
4.6.4 Relationship between Creativity and Leadership	47
4.6.5 Research Question 1: How TL Stimulates Creative Thinking Among Employees?	49
4.6.6 Research Question 2: What TL Best Practices Are Utilized to Maximize Creativity?	49
4.7 Conclusion and Summary	49
Chapter 5 Conclusion and Recommendations	51
5.1 Introduction	51
5.2 Summary of Main Findings.....	51
5.3 Contributions to Knowledge	52
5.4 Implications, Limitations, and Further Work.....	53
5.5 Recommendations	53
References	55
Appendices	61
Survey questions	61

LIST OF TABLES

Table 1: Demographic Information.....	34
Table 2: Likert Scale	39
Table 3: Test of Normality	40
Table 4: Descriptive Analysis	41
Table 5 : Correlation Table	41
Table 6: Model Summary.....	42
Table 7: ANOVA	42
Table 8: Coefficients	44
Table 9: ANOVA Table.....	45

LIST OF FIGURES

Figure 1: Theoretical Model..... 30

Figure 2: Age Analysis of Respondents..... 36

Figure 3: Gender Analysis of Respondents..... 37

Figure 4: Level of Education of Respondents 37

Chapter 1 Introduction

1.1 Background

For successful progression of business corporations, effective leadership is mandatory. Leadership is required from the management of daily work related aspects to long term strategic goals & planning. Hence, leaders should comprise of diversified skills, attributes and competencies to make their teams motivated and inspired to attain organizational goals. Transformational leadership revolves around empowerment, inspiration and encouragement of the followers to have realization of their complete individual potential. In the last two decades, transformational leadership has attained gradual attention and has been an emerging concept within leadership academics.

Recent review of literature indicates a significant association between transformational leadership & creativity. This is attributable due to emphasis of TL on innovation and thinking out of the box. Originally, the concept of transformational leadership was coined in 1978 by James McGregor Burns. He explained the process of transformational leadership as leaders & followers making each other better for good. Theoretical perspectives indicate that transformational leaders and followers act in such a manner that is beneficial towards each other. This is achieved through the leader's capability of inspiring, and engaging the followers.

In the contemporary era of fierce business and competition, innovation and creativity are considered as critical success factors. Furthermore, transformational leadership is associated with a number of positive outcomes not limited to elevated

levels of creativity, work satisfaction and being inventive resulting in high performing teams and organizations. Hence, while consideration of selecting a specific type of leadership, transformational leadership attributes and its benefits should be evaluated.

1.2 Problem Statement

The problem statement of the following research paper revolves around if there is a valid interconnection between TL and creativity within organizational context. This study will specifically examine the effect of transformational leadership on employee creativity in terms of job satisfaction, motivation, innovation, and the capacity to generate new ideas. The study will also investigate the relationship between transformational leadership and the capacity to nurture a creative and collaborative environment. According to predictions, the implementation of transformational leadership is expected to have a positive impact on the creativity of employees. It is further anticipated that individuals who are subjected to transformational leadership are more inclined to exhibit motivation, creativity, and job satisfaction. The available evidence to substantiate these hypotheses is restricted.

1.3 Research Questions

The research strives to inquire the following research questions, as stated below:

1. How does transformational leadership stimulate creative thinking?
2. What are the best practices for using transformational leadership to maximize creativity?

1.4 Hypothesis

Two hypotheses were formulated and tested regarding the relationship between transformational leadership and creativity.

- Null Hypothesis (H0): There is a significant relationship between transformational leadership and creativity.
- Alternative Hypothesis (H1): There is no significant relationship between transformational leadership and creativity.

1.5 Relevance and Importance of the Research

The research on the relationship between transformational leadership and creativity is highly relevant and significant because creativity is a crucial talent for the success of any organization. Leaders who are able to provide a supportive environment and encourage employee creativity can assist their organization in becoming more innovative and competitive. Understanding how transformational leadership influences creativity can also assist leaders in motivating and inspiring their employees to generate more creative solutions and products. Ultimately, this research can assist executives in developing more effective strategies for fostering employee creativity, thereby enhancing organizational performance.

Chapter 2 Literature Review

2.1 Introduction

Transformational leadership has emerged as a prominent leadership style in recent years. Transformational leadership is characterized by inspiring, motivating, and enabling followers to realize their maximum potential and accomplish extraordinary results (Brown, Brown, and Nandedkar, 2019). It is founded upon visionary leadership, individualized care, intellectual stimulation, and inspirational motivation (Bass, 1999). The following review of literature focuses to what extent transformational leadership is directly and indirectly associated with creativity. A comprehensive analysis will supplement the research and pinpoint potential avenues for further empirical/non-empirical research.

2.2 Theoretical Foundations of Transformational Leadership

James MacGregor Burns pioneered the notion of transformative leadership in 1978. Many experts have since elaborated on the theoretical basis of transformative leadership. The Multifactor Leadership Questionnaire (MLQ) established by Bass and Riggio (Bass, 2006) is one of the major theoretical frameworks. The MLQ defines transformative leadership as having four critical components:

1. Idealized Influence (Charisma): Transformational leaders serve as role models for their followers, earning their admiration, respect, and trust via their vision, ideals, and ethical behavior. They motivate followers to mimic their actions and work toward the leader's goal.

2. **Inspiring Motivation:** Transformational leaders offer a compelling vision to their followers and inspire them through their words and deeds. They provide a common feeling of purpose and inspire followers to go beyond their own interests and contribute to the organization's overall goals.
3. **Intellectual Stimulation:** Transformational leaders encourage their followers' critical thinking and inventiveness. They urge people to challenge the status quo, question assumptions, and seek fresh solutions. They foster a culture of continual learning and progress.
4. **Individualized Consideration:** Transformational leaders demonstrate real care and empathy for their followers' needs and goals. They give specialized assistance, coaching, and mentoring to followers in order to help them reach their personal and professional development objectives.

2.3 Recent Trends and Developments in Transformational Leadership Research

According to Steward (2006), there have various research conducted on transformational leadership with connection to other leadership theories and their application, vice versa. Authentic leadership places emphasis on being honest, and ethical towards each other and is a subset of transformational leadership. The ideas of transformational leadership are combined with authenticity in the concept of "authentic transformational leadership," which places an emphasis on leaders who remain loyal to their own core values and beliefs while simultaneously motivating and empowering the people they serve (Zhu et al., 2011). New studies have revealed that authentic transformational leadership has a favourable

correlation with employee engagement, job happiness, and organizational commitment. These findings come from research that was conducted very recently.

Another new area of inquiry in the realm of transformational leadership is the topic of ethical leadership. According to prevailing beliefs, ethical leadership entails exhibiting ethical conduct, impartiality towards others, and upholding integrity in both decision-making and execution of leadership responsibilities (Den, 2015). Recent studies have demonstrated that transformative leadership has a good link with ethical leadership. This is due to the fact that the two notions of leadership contain comparable components, such as idealized impact (charisma) and moral principles. Research has found a correlation between ethical leadership and increased levels of employee trust, corporate citizenship behaviours, and ethical behaviour in firms.

Perspectives from Other Cultures - The scope of research on transformational leadership has broadened to encompass new topics, including those from other cultures. According to Budur (2020), there has been academia interest over examine the role and implications of TL within different cultural settings, including TL's efficacy and positive impacts. In addition, they have been looking at how cultural contexts affect the success of transformational leadership activities. Previous research has established valid associations between TL and employee performances which may differentiate in different cultural settings and cultural values.

Development of Leadership roles and characteristics – in pursuit of different trends pertaining to TL, one of them is how leadership is developed. According to Mason and Griffin (2012), research have been analyzing for approaches by which individuals can be found who have TL skill sets or similar attributes. For instance, recent research has investigated the effect

that transformational leadership training programs, coaching, and mentoring have on the development of one's leadership qualities.

Viewpoints from a Multilevel and Multidimensional Scale - Recent research has also highlighted the need of having viewpoints from a multilevel and multidimensional scale when discussing transformational leadership. Scholars have noted that transformational leadership functions at various levels, including individual, team, and organizational levels, and that it has numerous aspects, such as idealized influence, inspiring motivation, intellectual stimulation, and individualized consideration (Føllesdal and Hagtvét, 2013). One level at which transformational leadership operates is at the organizational level. Recent research has been conducted to investigate how the many levels and dimensions of transformational leadership interact with one another and influence one another, as well as how they together effect the results of organizations.

Virtual Leadership and the Digital Transformation of Organizations: Recent studies have investigated the function of transformational leadership in the context of digital transformation and virtual leadership (Schiuma et al., 2022). Several studies have been conducted to investigate how transformational leaders may effectively manage remote and virtual teams, inspire, and motivate individuals working in digital environments, and promote digital transformation projects inside enterprises. This research has shed light on the unique problems and potential of transformational leadership in the digital era. Additionally, these studies have practical consequences for leaders and organizations that are adjusting to the changing work landscape.

2.4 Effects of Transformational Leadership on Organizations

The impact of transformational leadership extends beyond its influence on individual followers and has notable implications for the overall functioning of organizations. Based on empirical evidence, it can be inferred that organizations led by transformational leaders exhibit higher levels of employee engagement, leading to increased productivity and success.

Transformational leaders exhibit greater proficiency in directing organizational innovation and change management by motivating and enabling their subordinates to welcome novel concepts and adjust to dynamic circumstances (García-Morales et al., 2008).

Additionally, research has revealed that the implementation of transformational leadership has a favourable impact on the culture of an organization. Transformational leadership is distinguished by the development of a workplace atmosphere that emphasizes trust, cooperation, and creativity (García-Morales et al., 2008). This methodology enables the workforce to openly articulate their viewpoints, exchange their concepts, and proactively participate in the triumph of the enterprise. The outcome of this phenomenon is an enhanced work milieu, along with a rise in employee contentment and retention.

Furthermore, there exists a correlation between transformational leadership and both the performance of an organization and its financial outcomes (Mutahar et al., 2015). Research indicates that entities that possess transformational leaders exhibit superior financial performance, an expanded market share, and enhanced organizational effectiveness. Studies also indicate a positive correlation between transformational leadership and elevated levels of organizational innovation and creativity (Suhana et al., 2019). These attributes are deemed crucial for organizations to maintain their competitiveness in the current dynamic business landscape.

Much research has been carried out about transformational leadership. The literature on this topic is continually evolving in response to emerging trends and advancements. Numerous studies have consistently shown that transformational leadership has a favourable impact on both followers and organizations, as well as on outcomes (Suhana et al., 2019).

Transformational leadership is characterized by the ability to inspire and empower followers, leading to increased levels of commitment, performance, and creativity (Bass, 1999). likewise, contemporary scholarship has broadened our comprehension of transformational leadership through the exploration of its cross-cultural, multilevel, and multidimensional aspects.

Transformational leadership has been the subject of extensive research and holds considerable influence, carrying important implications for employees, organizations, and outcomes (Herold et al., 2008). Contemporary advancements and patterns in scholarly works have expanded our understanding of transformational leadership and its implementation across diverse contexts. Koh (2019) posits that conducting additional research in these domains would enhance comprehension of transformational leadership and its capacity to enhance organizational efficacy and performance.

2.5 Effects of Transformational Leadership on Followers

The followers of transformational leaders are typically more engaged, devoted, and content with their employment. They are more likely to exhibit organizational citizenship behaviours, such as assisting others, going above and beyond, and taking the initiative (Nielsen et al., 2008). Transformational leaders have a significant impact on the performance of their adherents. According to Wang and Howell (2010), attributes related to TLs tend to illustrate elevated levels of innovation, and job performance. Furthermore, TL is associated

with improved organizational productivity, consumer satisfaction, and organizational profitability. Moreover, TL has been proved to enhance the personal development of the organizational members.

According to Mutahar et al., (2015), the followers of TL tend to have minimal levels of exhaustion, job stress, tension and minimal to no levels of employee turnover. The TL followers experience immense amount of autonomy, organizational commitment, and job autonomy. Moreover, TLs play critical roles in fostering leadership qualities among their followers. TL is a kind of leadership style which has found to be effective in escalating employee's creativity levels and related motivation. According to Bass (1999), the primary emphasis is placed upon driving the brainstorming skills of the organizational members where they can generate more innovation approaches towards any organizational problem. However, the association that TL and creativity has, have received not sufficient attention.

TL embraces the followers and places emphasis on the necessity of motivating them to make them realize of their maximum potential and competencies, which is further progressed through teamwork. Transformational leaders are more receptive towards feedback provided by their seniors or followers and are also adaptable towards change. The methodology of ideation, investigation, and assessment can be applied across various domains to tackle issues. The established correlation between creativity and increased productivity and enhanced decision-making renders it a valuable asset for companies seeking to maintain a competitive edge (Herold et al., 2008).

The extant literature on the association between transformational leadership and creativity is limited in its coverage. Empirical evidence suggests that leaders who exhibit transformational qualities have the capacity to positively influence creativity. According to a

number of studies, transformational leadership can foster creative thought and contribute to greater innovation. For example, 2013 based study by Kumar discovered a correlation between transformational leadership and increased employee creativity. As per the authors, transformational leaders are inclined towards creating a conducive atmosphere that promotes innovation and the willingness to take risks. Transformational leaders were more likely to inspire creativity in their followers (Wang, and Howell, 2010). The authors' research indicates that leaders who embrace a transformational approach to leadership exhibit a notable degree of self-assurance, potentially enhancing their openness to the viewpoints and recommendations put forth by their subordinates.

The authors also hypothesized that transformational leaders may be more likely to reward creative thinking, thereby encouraging creativity among their adherents. This review of the literature investigated the potential relationship between transformational leadership and creativity. The research indicates that transformational leaders may have a positive impact on creativity because they are frequently more receptive to feedback and willing to recognize creative thinking (Shin and Zhou, 2003). As a result of ferocious competition, dynamic environments, and escalating complexity, organizations have been compelled to modify their methods of thinking and how their employees approach the challenges they face on a daily basis.

Creativity is an essential talent for firms in the 21st century that want to lead or adapt with the times. The capacity of an organization to generate new information and inventions is crucial to its success and survival; consequently, creativity has become a new focus area. According to some academicians, leadership styles can assist employees in developing their creative thinking abilities so that they can generate original solutions to difficult problems

(Arnold, Loughlin, and Walsh, 2016). Particularly, transformational leadership has been found to be strongly correlated with employee creativity; transformational leaders may inspire subordinates to go beyond their abilities to provide a better way to complete tasks and solve problems. Leadership can be viewed as a circumstance that exerts a substantial influence on creativity.

2.6 Factors of Transformational Leadership Influencing Creativity

Several theories are discussed within the review of literature which link TL with innovation. These theoretical frameworks are supported with different theories stated as follow:

- **Social Exchange Theory:** According to social exchange theory, transformational leaders establish a good social exchange with their followers. According to this hypothesis, when leaders exhibit behaviours like intellectual stimulation, customized concern, and idealized influence, workers feel appreciated and encouraged, and they are more likely to reciprocate by engaging in creative activities (Sheldon et al., 2009).
- **Self-Determination Theory:** According to self-determination theory, transformational leaders provide their followers' essential psychological requirements, such as autonomy, competence, and relatedness. Employees are more likely to be organically motivated and engaged in creative activities when these demands are met (Sheldon et al., 2009).
- **Cognitive Evaluation Theory:** According to cognitive evaluation theory, transformational leadership practices such as offering feedback, acknowledgment,

and creative rewards may influence employees' beliefs of their own competence and control over their job. Their drive to participate in creative acts is influenced by these perspectives. Several significant transformational leadership qualities have been shown to promote workplace creativity (Sheldon et al., 2009).

2.6.1 Intellectual Stimulation

Intellectual stimulation is one of the central characteristics of transformational leadership, and it refers to the leader's capacity to challenge the status quo, encourage critical thinking, and foster innovation among employees. Recent research indicates that executives who engage in intellectual stimulation behaviours, such as encouraging employees to query assumptions, generate ideas, and challenge traditional methods of doing things, can have a substantial impact on employee creativity (Arnold, Loughlin, and Walsh, 2016). Recent findings indicate that providing intellectual stimulation to employees can have a positive impact on their creativity. The aforementioned phenomenon is commonly associated with the augmentation of an individual's cognitive flexibility, problem-solving proficiencies, and creative self-efficacy (Cheung and Wong, 2011).

2.6.2 Individualized Consideration

The capacity of transformational leaders to comprehend and acknowledge particular issues related to their followers. Previous studies have indicated that corporate executives who offer individualised guidance and consideration to their subordinates have a positive impact on their creative skills. Individualised consideration includes offering constructive feedback, carefully listening to the employee's ideas/ solutions, and identifying their strengths (Arnold, Loughlin and Walsh, 2016). Studies also indicate that employees who exhibit creative

behaviours are more under the influence of individualised consideration by their leaders/executives. Due to the intermediary impact of psychological safety, the individualised consideration exhibited by the TLs positively impact employee creativity and vice versa. Such outcomes place emphasis on the importance of leaders who demonstrate individualised consideration towards their subordinates, which ultimately cultivates creativity at workplace settings.

2.6.3 Inspirational Motivation

Transformational leaders differentiate from other leadership styles due to their capability of inspiring and motivating their subordinates towards a shared strategic objective. Studies indicate that seniors that demonstrate inspirational motivational behaviours have a positive impact on their followers. Inspirational motivation revolves around devising lofty objectives, articulation of a solid visionary aims, and inspiring employees to think out of the box. Many studies have also indicated that between inspirational motivation of the transformational leaders and creativity of employees, self-efficacy plays the role of a mediator (Arnold, Loughlin and Walsh, 2016).

2.6.4 Idealized Influence

Idealized influence refers to charismatic leadership which is a component of TL, entailing the leader's capacity to serve as a role model among his/her followers and earns respect and appreciation. Previous studies have demonstrated that seniors who practice idealized influence behaviours place positive impact on employee's creativity levels. According to Cheung and Wong (2011), idealized influence comprises of behaving with integrity, being reasonable and ethical in dealings, and serving as a positive example for the

subordinates. Studies have established a positive correlation between corporate executives who demonstrate ideal influence and employees who exhibit creative behaviours. Such executives are perceived as to play a positive role in inspiring their employees.

2.6.5 Supportive Leadership

According to Jung et al., (2003) another critical component of TL is found to be supportive leadership. Genuine support fosters a work environment where employees can operate in decentralised form and can progress step by step. Moreover, studies have found a positive association between supportive leadership and employee creativity, where positive affective tone plays the role of a mediator. Creative behaviours of employees are more prevalent among employees who are consistently provided with emotional support (Cheung and Wong, 2011).

2.6.6 Empowering Leadership

Recent studies have demonstrated that empowering leadership behaviours can positively impact employee creativity (Jung et al., 2003). Trusting employees, granting them autonomy, and providing resources and support for their creative endeavours constitute empowering leadership. Through the intermediary effect of employee psychological ownership, leaders' empowerment positively influenced employee creativity. There was a correlation between leaders who empowered their employees and employees who engaged in creative behaviours (Zhang and Bartol, 2010). These findings suggest that executives who provide autonomy and resources to their employees can cultivate creativity in the workplace.

2.6.7 Organizational Climate for Creativity

According to Hoßbach, Hoßbach, and Berg, (2019) organizational climate which fosters employee creativity is aware of its values in the realm of innovation. Recent research demonstrates that executives who foster a creative organizational climate have a positive effect on employee creativity. Various factors, including leadership behaviours, organizational policies and practices, and cultural norms, can have an effect on the organizational milieu for creativity. The leaders who created a positive organizational climate for creativity, characterized by supportive leadership, a culture of innovation, and organizational policies and practices that support creativity, were more likely to have creative employees. Employee creativity was positively correlated with leaders who fostered a culture of innovation and supported creative endeavours (Jaiswal and Dhar, 2015).

2.6.8 Task Complexity

Task complexity defines the extent of challenges faced while completing the daily projects. Previous statistical research has uncovered that intricacy of different projects can exert particular impact on the creative output of the employees. Furthermore, TL constitute of an integral role when regulating the complexity of the task. Complicated work projects/tasks mandate utilization of problem solving skills, critical thinking, and cultivation of effective solutions. Transformational leaders who thoroughly manage task complexity are able to balance the barriers and resources likely to have more creative subordinates and followers (Zhou and George, 2003).

2.6.9 Feedback and Recognition

According to Gong, Huang and Farh (2009), providing constructive feedback and individual based recognition towards the employees for their creative behaviours is considered as a critical facet of transformational leadership. Recognition acknowledges and reinforces the creative behaviours of employees, thereby increasing their motivation to engage in additional creative activities. Leaders who provided timely, specific, and constructive feedback were positively associated with employee creativity (Gong, Huang, and Farh, 2009). Employees were more likely to engage in creative behaviours if their superiors recognized and rewarded their creative efforts. These findings emphasize the significance of executives providing feedback and recognition as influential factors on employee creativity.

2.7 Benefits of Creative Outcomes

2.7.1 Cognitive Advantages among Creative Employees due to TL

Employees who are driven by their creativity under the influence of transformational leadership are able to witness various cognitive advantages. Creative work responsibilities enable employees to solve problems critically, and generate out of the box based solutions. Feedback further boosts employee's performance as their confidence is elevated; employees with their divergent thinking competencies, are able to devise dynamic solutions for faced problems. Due to a creative mind-set of the employees, which is standardised by the transformational leader generates cognitive flexibility, adaptability to uncertain situations, and proficiency in problem solving tactics. Moreover, such advantages further improve innovative thinking skills (Gong, Huang, and Farh, 2009).

According to Jaiswal and Dhar (2015), transformational leadership improves integrative and analytical thinking of the employees enabling them to evaluate complicated situations, identify trends, & incorporate critical data from several sources to generate innovative solutions. Hence, in a nutshell, the cognitive based advantages improve employee's decision making power, critical thinking competencies, and increased negotiation skills as well.

2.7.2 Emotional Advantages among Creative Employees due to TL

Transformational leadership has the potential to evoke affirmative feelings and attachment among the employees; under TL, employees have a sense of accomplishment, joy and enthusiasm. Certainly, there's an augmentation of the wellbeing & occupational contentment of the organizational members. According to Avolio, Walumbwa, and Weber, (2009), positive emotional climates are driven by transformational leaders who promote recognition for innovative outcomes.

Furthermore, the employee's self-efficacy enables them to accomplish tasks in timely manners. When employees receive constructive feedback, recognition and encouragement from their seniors, their confidence elevates. This leads to elevated engagement levels, job satisfaction, and desire to place maximum efforts. As reported by Cheung and Wong (2011), under the influence of transformational leadership, employees experience positive emotions which strengthen their emotions and boost their self-respect.

According to Føllesdal and Hagtvet (2013) transformational leaders offer their followers with a sense of fulfilment and accomplishment, leading to significant positive effects. Moreover, the creative outcomes of TL play buffer role against the negative tensions and emotions. Previous studies have also reported reinforced social connections, elevated

creative levels, and improved ability to address challenges. It is evident that TL who support and acknowledge creative outcomes can drive emotional welfare and resiliency of the employees.

2.7.3 Social Advantages among Creative Employees due to TL

According to Garcia-Morales et al., (2008), creative workplace activities consistently mandate communications, collaborate, and exchange of ideas which enhances social interactions. As employees discuss and brainstorm their perspectives and feedback with other team members and subordinates, eventually communicational skills are improved. Moreover, interpersonal skills are improved. Transformational leadership results can also foster a positive organizational culture (Budur, 2020).

Creativity-valuing and -promoting organizations can foster a culture that fosters innovation, experimentation, and continuous improvement. Transformational leaders who support creative outcomes can influence organizational culture by fostering a positive attitude toward creativity, providing the resources and support necessary for creative activities, and recognizing and rewarding creative outcomes (Arnold, Loughlin, & Walsh, 2016). This can result in a more innovative and adaptable organizational culture, which can contribute to the organization's long-term success and competitiveness. Transformational leadership can also improve the leadership abilities of employees. Employees can develop leadership skills such as visioning, inspiring others, and facilitating The execution of innovative concepts via engagement in imaginative pursuits. Leaders who exhibit transformational qualities and promote innovative results have the ability to cultivate the leadership aptitude of their staff, leading to the emergence of prospective leaders within the company (Bass, 1999).

2.7.4 Organizational Benefits of Creative Outcomes from Transformational Leadership

According to research, the innovative outcomes of transformational leadership can result in increased innovation and organizational performance (Jaiswal and Dhar, 2015). New ideas, products, procedures, and solutions can contribute to innovation within an organization. Transformational leaders who encourage and acknowledge creative outcomes can create an environment that stimulates and supports innovation, resulting in the creation of new and improved products or services, increased process efficiency, and enhanced problem-solving skills. This can result in a competitive advantage for the organization, as innovative organizations are better able to adapt to shifting consumer requirements, technological advances, and market trends (Mutahar et al., 2015).

The results of transformational leadership can also increase organizational adaptability and readiness for change. Exploring new ideas, experimenting with various approaches, and adapting to new methods of doing things are frequent components of creative endeavours. Creative employees are more likely to cultivate a flexible and adaptable mind-set, which can facilitate organizational change and transformation.

Transformational leaders who encourage and support creative outcomes can cultivate a culture of adaptability and change readiness in which employees are more receptive to new ideas, risk-taking, and change. Transformational leadership can contribute to employee retention and talent development through its innovative outcomes (Schiuma et al., 2022). Creative employees are frequently motivated by opportunities to convey their ideas and contribute to meaningful work, so organizations that promote and value creativity are more likely to attract and retain top talent. Transformational leaders who recognize and support Creative outcomes can increase employee engagement, job satisfaction, and loyalty, leading to

increased employee retention and decreased turnover costs. Furthermore, the involvement in creative endeavours can facilitate the education and development of personnel by enabling them to gain fresh competencies, insights, and viewpoints via the creative procedure. This can contribute to the growth and development of employees, thereby enhancing their career opportunities and talent potential within the organization. The benefits of transformational leadership's creative outcomes are multifaceted and have implications at the individual, social, and organizational levels (Shin, and Zhou, 2003).

The integration of innovative results possesses the capacity to amplify the intellectual, affective, and communal welfare of workers, culminating in elevated degrees of occupational contentment, involvement, self-assurance, and affirmative disposition. Moreover, creative outcomes can enhance the communication, collaboration, and leadership skills of employees, nurturing a positive organizational culture and fostering the development of future leaders. At the organizational level, creative outcomes can boost innovation, adaptability, change readiness, employee retention, and talent development, resulting in a market advantage. Therefore, organizations can derive numerous advantages from nurturing a culture of creativity and innovation through transformational leadership (Føllesdal, and Hagtvet, 2013).

2.8 Transformational leadership and Creative Stimulation

The concept of creativity is characterized by the production of original and valuable ideas or solutions, and is deemed essential in facilitating innovation, effective problem-solving, and the ability to adapt to dynamic circumstances (Føllesdal and Hagtvet, 2013). As a result, organizations are continuously searching for methods to cultivate a creative work

environment and encourage employees to consider creatively and engage in innovative behaviours.

2.8.1 Theoretical Foundations of Transformational Leadership and Creative Stimulation

Several theories posit that creativity is influenced by cognitive, motivational, and contextual factors and that creative stimulation can increase employees' intrinsic motivation, cognitive flexibility, and divergent thinking, which are crucial cognitive processes underlying creative behaviour (Cheung and Wong, 2011). In addition, social cognitive theories, such as the social learning theory and the social information processing theory, suggest that transformational leaders can influence the cognitive processes and creative outcomes of their employees through observational learning, social cues, and feedback (Arnold, Loughlin, and Walsh, 2016).

2.8.2 Empirical Findings on Transformational Leadership and Creative Stimulation

Numerous studies have demonstrated that transformational leaders who demonstrate behaviours such as providing intellectual stimulation, encouraging new ideas, and fostering a supportive and inclusive work environment can significantly increase employee creativity. Through the intermediary mechanisms of intrinsic motivation and cognitive flexibility, transformational leadership positively affected employee creativity. Transformational leadership positively predicted employee creativity through the mediating function of psychological empowerment (Zhu et al., 2011). Psychological empowerment refers to employees' perceptions of being competent, meaningful, and autonomous in their work. In addition, research has demonstrated that transformational leadership can have a direct effect on employee creativity.

Transformational leaders who provide employees with creative challenges, establish high expectations, and recognize and reward creative efforts can substantially increase employee creativity (Bass, 1999). Transformational leadership positively influenced employee creativity via the mediating role of employee creative self-efficacy, which refers to the belief that employees have the ability to generate creative ideas and solutions. In addition, recent research has investigated the role of contextual factors in the connection between transformational leadership and creative stimulation.

For instance, a study by Zhou and George, (2003) found that transformational leadership was more effective at fostering employee creativity in a supportive organizational climate that encourages creativity, such as providing resources, autonomy, and recognition for creative efforts. In organizations with a high level of innovation culture, which consists of shared values, norms, and practices that support innovation, transformational leadership was more effective at fostering employee creativity.

2.8.3 Boundary Conditions and Moderators of Transformational Leadership and Creative Stimulation

Employee characteristics such as personality traits and cognitive style can moderate the association between transformational leadership and creative stimulation. According to one study Zhou and George, (2003), employees with a high level of openness to experience, a personality trait associated with creativity, were more likely to perceive their leaders as transformational and report higher levels of creative stimulation.

Also moderating the relationship between transformational leadership and creative stimulation are organizational factors. For instance, the organizational culture, climate, and structure can impact the extent to which transformational leaders can inspire employee

creativity. In organizations where innovation and experimentation are highly valued, transformational leadership was more effective at fostering employee creativity. In addition, the availability of resources, such as time, money, and technology, can impact the relationship between transformational leadership and creative stimulation. Transformational leadership was more effective at fostering employee creativity when abundant resources were available to support creative endeavours. In addition, the cultural context can also impact the connection between transformational leadership and creative stimulation (Cheung and Wong, 2011).

Due to disparities in values, norms, and expectations, transformational leadership's efficacy in stimulating employee creativity can vary across cultures, according to research. discovered, for instance, that the relationship between transformational leadership and employee creativity was stronger in individualistic cultures where individual autonomy and creativity are valued, compared to collectivistic cultures where group harmony and conformity are prioritized (Gong, Huang, and Farh, 2009). Overall, the empirical findings indicate that transformational leadership is positively associated with creative stimulation. However, the strength and direction of this relationship can be influenced by various boundary conditions and moderators, such as employee characteristics, organizational factors, and cultural context.

2.8.4 Impacts and Outcomes of Transformational Leadership and Creative Stimulation

Transformational leadership and creative stimulation can have significant implications for organizations and employees. First, transformational leadership and creative stimulation can increase the creativity and innovation of employees. Transformational leaders who offer intellectual stimulation, encourage novel ideas, and cultivate a supportive work environment can inspire, motivate, and empower employees. This can then result in more people engaging in creative activities including coming up with original ideas, trying out fresh methods, and

taking measured risks. This can lead to the development of innovative products, services, processes, and solutions that give organizations a competitive advantage in the marketplace (García-Morales et al., 2008). Secondly, transformational leadership and creative stimulation can increase employee engagement and job satisfaction.

Research suggests that employees who experience creative stimulation from transformational leaders are more inclined to perceive a greater sense of autonomy, significance, and accomplishment in their work. Increased levels of job satisfaction and engagement may follow from this. The aforementioned result may boost worker performance, productivity, and retention. This is due to the fact that satisfied and committed employees are inclined to stay with the company, exert their utmost efforts, and exceed their job duties. Thirdly, transformational leadership and creative stimulation can promote the professional and personal development of employees (Arnold, Loughlin, and Walsh, 2016). When employees are provided with an environment that fosters critical thinking, challenges the existing norms, and stimulates the creation of novel concepts, they are more inclined to enhance their cognitive and creative abilities.

The outcome of this phenomenon can be a rise in employee education, growth, and progression, coupled with improved abilities in resolving issues, making informed choices, and adapting to dynamic and competitive corporate settings, all of which are highly valuable. Additionally, it has been asserted that transformational leaders may foster their staff members' creativity, raising levels of self-efficacy, confidence, and motivation in the process. Furthermore, the implementation of transformational leadership and creative stimulation can make a valuable contribution towards fostering a favourable organizational culture. By

motivating and granting authority to their subordinates to think outside the box, leaders can cultivate an environment that promotes originality, teamwork, and ongoing enhancement.

Employees feel valued, appreciated, and motivated to contribute their distinctive perspectives and ideas, resulting in a more inclusive and dynamic workplace. This can also promote knowledge sharing, cross-functional collaboration, and a sense of ownership among employees, leading to enhanced cooperation and organizational performance (Wu, 2019). In addition to these positive results, transformational leadership and creative stimulation can have additional societal effects. Organizations that encourage a culture of creativity and innovation can significantly contribute to economic development, societal advancement, and positive social change by developing and implementing innovative ideas, technologies, and solutions that address societal challenges and satisfy the needs of various stakeholders (Mason and Griffin, 2012).

Additionally, when staff members are encouraged to use critical thinking, challenge accepted wisdom, and come up with novel ideas, they may become more civically conscious and actively engage in social, political, and community affairs, making significant contributions to society. In conclusion, transformational leadership and creative stimulation can have far-reaching effects and outcomes, benefiting not only organizations and employees but also society as a whole. Such leadership initiatives elevate creativity among employees, and boost job satisfaction as well, while driving a positive organizational culture that overall embraces continual improvements, and innovation. Nevertheless, it is integral to acknowledge the contextual factors such as organizational aspects, employee characteristics & cultural context; this is necessary to moderate the association between TL and creativity (Arnold, Loughlin, and Walsh, 2016).

Various theoretical perspectives not limited to self-determination theory, cognitive theory, and cognitive information processing theory supports the association between TL and creative stimulation. Empirical studies illustrate a positive association between TL and creative stimulation mediated by employee psychological mechanisms including autonomous motivation, intrinsic motivation and self-efficacy. According to Herold et al., (2008), moderators such as organizational factors, employee characteristics, and cultural context influences the strength and direction of this relationship. TL has the tendency to moderate the relationship between employee characteristics (cognitive and personality traits) and creative stimulation. This relationship can also be moderated by different organizational elements not limited to culture, climate, and resources.

Chapter 3 Research Design and Methods

3.1 Introduction

The aim of the research paper is to evaluate if there is a positive association between transformational leadership (TL) and creativity of workforce. TL places emphasis on motivating, inspiring and intellectually motivating the employees as they can attain their maximum potential. The research has deployed a quantitative research design. The main aim of this chapter is to elucidate the research methodology utilized in the present study and to offer a thorough rationale for the selected approach. The initial phase involves the careful presentation of the methodological approach, which constitutes the fundamental step in shaping the overall research design. Subsequently, the segment dedicated to research quality and rigor delves into pretest factors, drawing comparisons between fundamental elements of validity, reliability, and credibility, and emphasizing their relevance, suitability, and practicality within the context of conventional research methodologies. The last section presents the key ethical considerations.

3.2 Research Objectives

Basing on the research questions, below are the formulated study objectives:

1. Research question 1 – how TL stimulates creative thinking among employees?
 - To identify particular behaviours of TL that stimulate employee creative.
2. Research question 2 – what TL best practices are utilised to maximize creativity?
 - To identify particular practices of TL that are highly effective in elevating creativity among employees.

3.3 Research Design

For the purpose of testing the hypotheses and obtaining answers to research questions, this investigation will take a quantitative research strategy, which entails the gathering and examination of numerical data. Quantitative research is appropriate for researching the connection between transformational leadership and creativity because it enables statistical analysis to be performed, which can be used to identify the intensity and direction of the connection.

3.4 Theoretical Model

In the theoretical model diagram, the central focus is on the relationship between transformational leadership and creative thinking. Transformational leadership is depicted with its key components, including idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The arrow indicates the influence of transformational leadership on creative thinking, which is characterized by divergent thinking, the ability to connect concepts, openness to new experiences, and strong problem-solving skills (see **Figure 1**).

Additionally, the diagram suggests the relevance of the organizational context, including factors like organizational culture, work environment, and team dynamics, which may mediate or moderate the relationship between transformational leadership and creative thinking.

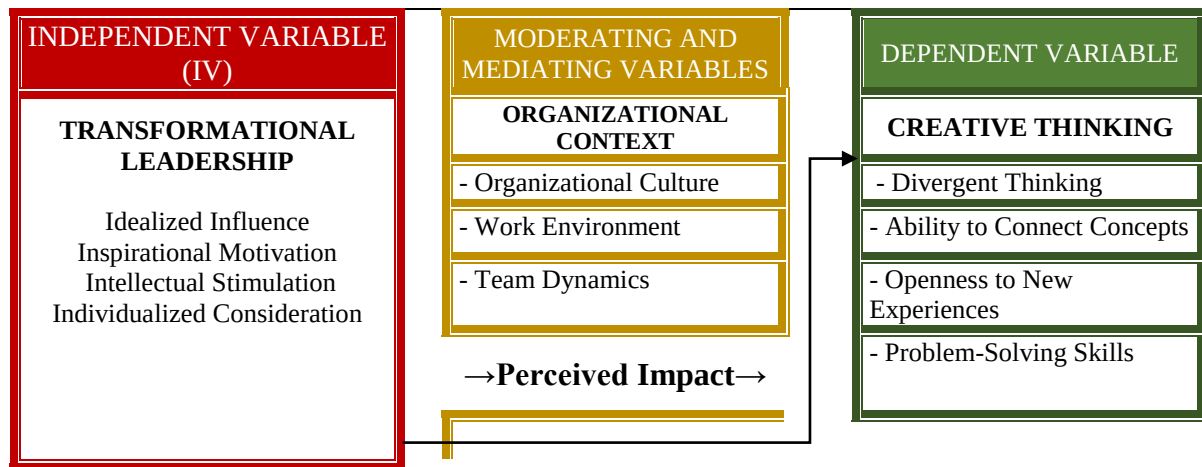


Figure 1: Theoretical Model

3.5 Questionnaire Development

The researcher initially collected the research data using traditional methods of primary data collection, particularly through survey questionnaires. This study relies on primary data sources and utilizes statistical analysis techniques to reveal new perspectives and valuable findings regarding the subject being investigated. Consequently, the report provides an original and distinctive viewpoint that has not been thoroughly explored in any prior studies. In the process of developing the questionnaire for the study, the researcher followed a two-step approach. Firstly, they drew questions from two well-regarded existing instruments, namely the Multifactor Leadership Questionnaire (MLQ) for assessing transformational leadership and the Creative Behaviour Inventory (CBI) for measuring creativity. The Multifactor Leadership Questionnaire (MLQ), originally developed by Bass and Riggio, holds significant prominence within the field, as mentioned by Rowold (2005). By utilizing these established instruments, the researchers aimed to ensure the reliability and validity of their measurements. Secondly, the researcher carefully scrutinized and adjusted the chosen items to ensure their alignment with the specific objectives of their study, the contextual parameters,

and the characteristics of the target population. This process of reviewing and modifying the selected items was crucial to guarantee the questionnaire's relevance and applicability to the research at hand.

3.6 Data Analysis Techniques

The research employs various statistical techniques, such as analyzing parameters and variables descriptively, conducting linear regression analysis, and ANOVA, to explore the connections among different variables. Additionally, it utilizes a correlation comparison between the dependent variables and the independent variable to investigate whether there exists a significant relationship between outcomes related to transformational leadership and workplace creativity.

Specifically, descriptive analysis will include the analysis of the three variables that are: a) transformational leadership, b) creativity and c) perceived impact. The descriptive statistics include the number of data points (N), minimum, maximum, mean, and standard deviation for each variable. These statistics provide an overview of the central tendency and variability of the data. The skewness and kurtosis statistics is also applicable for the same three variables. Skewness measures the asymmetry of the data distribution, while kurtosis measures the peakedness or flatness of the distribution. Further, correlation analysis will be applied. Through Pearson correlation coefficients the strength and direction of the relationships between these variables will be determined. Afterwards the regression analysis will be applied to predict creativity based on two predictor variables: transformational leadership and perceived impact. Lastly, ANOVA will be used to test the hypothesis.

3.7 Measures to Ensure Validity and Reliability

Previous research has established and verified that some types of leadership, such as transformational leadership, creativity, and possible moderators or mediators, are accurate enough to be employed in this investigation. In order to confirm that the survey questions are understandable, trustworthy, and accurately capture the targeted components, a test in a pilot setting will be done with a small sample of participants. The results will be evaluated. The researchers utilize sampling at random to make certain that the sample is representative of the population of interest, which will lead to an increase in the external validity of the findings.

3.8 Ethical Considerations

During the planning and execution of this thesis, careful attention was paid to various ethical considerations. These considerations are essential in ensuring the responsible handling of data and upholding the rights and privacy of the participants involved in the research. The following key ethical principles were rigorously observed:

3.8.1 Confidentiality Safeguards

Stringent measures were implemented to maintain the confidentiality of the data utilized in this study. To protect the privacy of the participants, all identifiable information was meticulously removed, and any potential data that could reveal their identities was securely preserved.

3.8.2 Respect for Informed Consent

It is crucial to uphold the ethical standards set forth by the original studies from which the data was sourced. While no new participants were directly engaged in this thesis, it was

imperative to acknowledge that the primary studies collecting the data would have obtained informed consent from their participants. It was ensured that this consent was obtained ethically, with full transparency about the research process provided to the participants.

Chapter 4 Results and Discussion

4.1 Introduction

Chapter 4 presents the pivotal findings of this study, focusing on the relationships between Creativity, Leadership, and Perceived Impact. Through comprehensive analyses, including correlation, regression, and hypothesis testing, this chapter sheds light on the significant dynamics shaping creativity within organizational contexts. The ensuing sections delve into a detailed examination of the results, including demographic insights, descriptive statistics, and the implications of the correlations and regression coefficients. This chapter's findings provide valuable insights into the crucial role of transformational leadership in fostering a culture of creativity and innovation within the workplace. Following this, the influence of leadership on vital factors such as employee satisfaction, engagement, and overall creativity is closely examined, taking into account both empirical evidence and scholarly perspectives.

4.2 Demographic Information

The data in Table 1 provides a categorical examination of the results, classified according to age, gender, level of education, and work.

Table 1: Demographic Information

		Frequency	Percent	Cumulative Percent
AGE	20 - 30	28	21.2	21.2
	31 - 40	44	33.3	54.5
	41 - 50	46	34.8	89.4
	50 - 60	14	10.6	100
	Total	132	100	
GENDER	Female	19	14.4	14.4
	Male	113	85.6	100
	Total	132	100	
LEVEL OF EDUCATION	Bachelor's	52	39.4	39.4

	Doctorate	11	8.3	47.7
	high school	15	11.4	59.1
	Master's	31	23.5	82.6
	Other	23	17.4	100
	Total	132	100	
WORK EXPERIENCE	0	5	3.8	3.8
	1	2	1.5	5.3
	10	3	2.3	7.6
	11	3	2.3	9.8
	12	4	3	12.9
	13	2	1.5	14.4
	14	3	2.3	16.7
	15	4	3	19.7
	16	3	2.3	22
	16	1	0.8	22.7
	17	4	3	25.8
	17	1	0.8	26.5
	18	5	3.8	30.3
	19	3	2.3	32.6
	2	5	3.8	36.4
	20	6	4.5	40.9
	21	3	2.3	43.2
	22	2	1.5	44.7
	23	3	2.3	47
	24	5	3.8	50.8
	25	4	3	53.8
	26	2	1.5	55.3
	27	1	0.8	56.1
	28	2	1.5	57.6
	29	2	1.5	59.1
	3	6	4.5	63.6
	30	2	1.5	65.2
	31	2	1.5	66.7
	32	3	2.3	68.9
	34	1	0.8	69.7
	37	1	0.8	70.5
	4	7	5.3	75.8
	5	6	4.5	80.3
	6	8	6.1	86.4
	7	4	3	89.4
	8	10	7.6	97
	9	4	3	100
	Total	132	100	

4.2.1 Age

The age range of the participants is between 31 to 50 years old, with 33.3% between 31-40 and 34.8% between 41-50. The analysis of the respondents' demographics reveals that

only a small proportion of 10.6% (14) belong to the age bracket of 50-60 (see

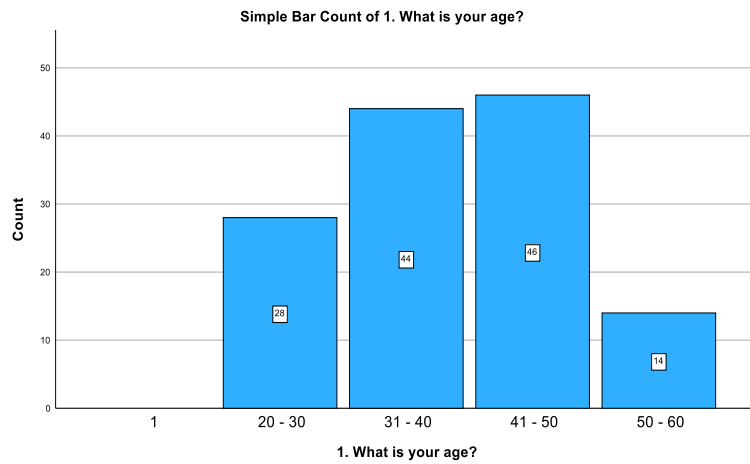


Figure 2).

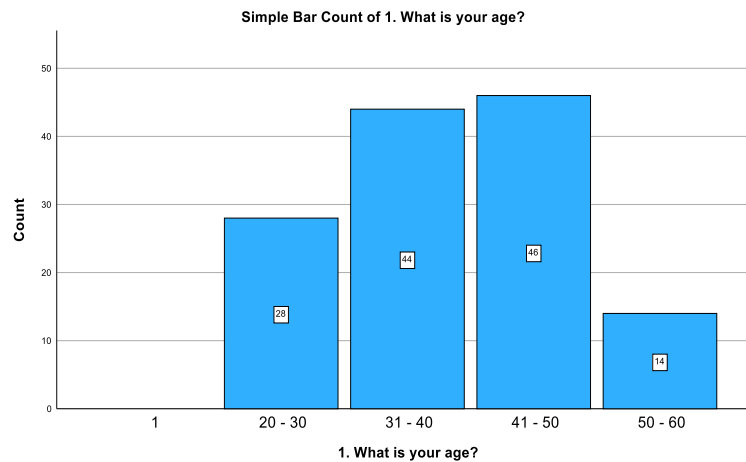


Figure 2: Age Analysis of Respondents

4.2.2 Gender

The survey findings reveal a noteworthy gender disparity in favour of male respondents, who constituted 85.6% (113) of the overall sample. The study's female

participation rate was 14.4%, comprising a sample size of 19 individuals (see

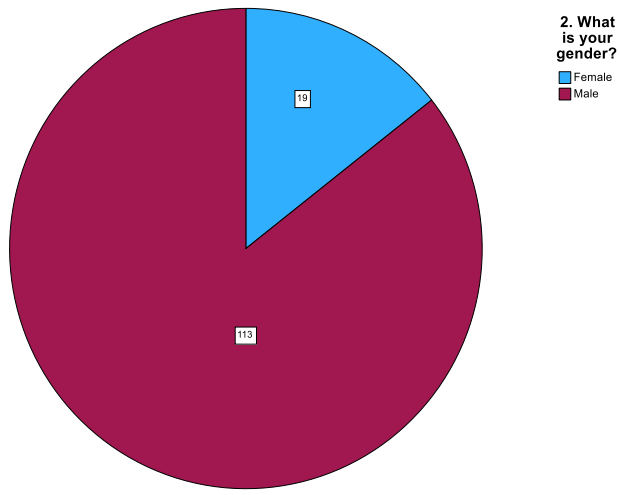


Figure 3).

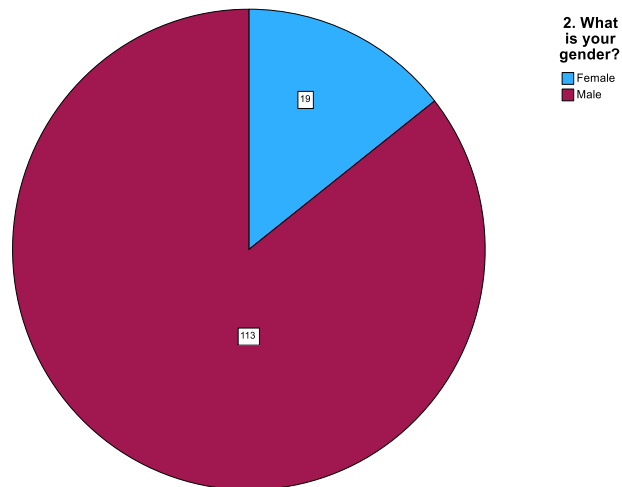


Figure 3: Gender Analysis of Respondents

4.2.3 Educational Attainment

The preponderance of participants, constituting 39.4% possessed a bachelor's degree. Additional individuals who possess a master's degree, constituting 24%, and those who have completed high school, accounting for 11. The findings of the survey reveal that a small

proportion of the participants 8% held a doctorate degree, while 17.4% of the respondents reported their educational achievement as "other" (see **Figure 4**).

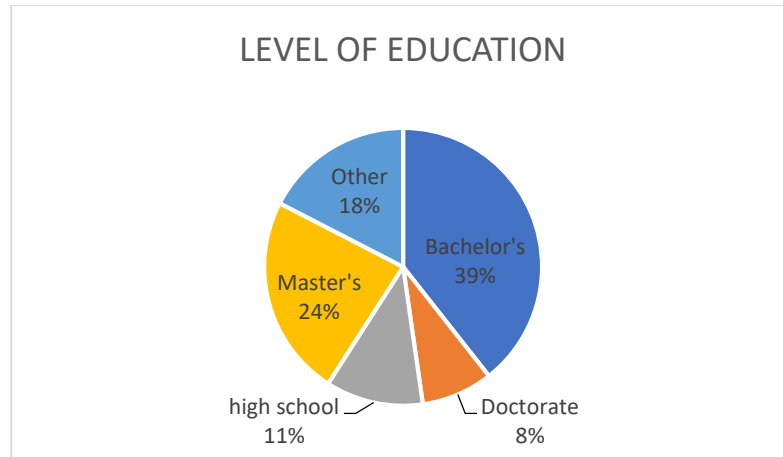


Figure 4: Level of Education of Respondents

4.2.4 Professional Experience

The participants demonstrated a heterogeneous array of professional backgrounds, with no apparent category prevailing over others. The majority (7.6%) had eight years of job experience. 5.3% of the population) indicated a 4-year tenure in their fields, while (6.1%) claimed a 6-year career. The sample population comprised 5 individuals, representing 3.8%, who reported having no prior work experience. Work experience is spread out in different ways, and there is no clear trend that has the most impact on the results. The above-mentioned findings can be used to figure out what the sample is made of and draw the right conclusions or do more research on any connections or trends in the data.

4.3 Descriptive Statistics

We can divide the questions into groups.

Independent variable: Transformational Leadership style

1. My leader inspires and motivates me to think creatively. Leadership 1

2. My leader motivates and encourages to give innovative ideas. Leadership 2
3. My leader has clear organizational direction and vision which stimulates my creativity.
Leadership 3
4. My leader is caring and supportive towards me which improves my creativity.
Leadership 4
5. My leader challenges to take risks. Leadership 5
6. My leader drives inclusive work place environment. Leadership 6

Dependent variable: Creativity

1. I try new ideas and take risks at my work place settings. Creativity 1
2. I often come up with creative solutions to problems at work. Creativity 2
3. I strive to attain new information so my creativity stimulates. Creativity 3
4. I am open to feedback and criticism, which helps me improve my creative ideas.
Creativity 4
5. I am able to generate multiple ideas and alternatives before settling on one. Creativity
5
6. I believe that my creativity is valued and recognized by my organization. Creativity 6

Moderator: Perceived Impact of Transformational Leadership

1. I believe that transformational leadership positively influences my creativity at work.
Perceived Impact 1
2. I feel that my leader's transformational leadership style encourages and enhances my
creativity. Perceived Impact 2
3. I perceive a strong link between my leader's transformational leadership and my
creative performance. Perceived Impact 3

4. I believe that transformational leadership plays a significant role in fostering a creative work environment. Perceived Impact 4
5. I feel that my leader's transformational leadership has a direct impact on my ability to generate and implement creative ideas. Perceived Impact g

For the response of the participants, we can consider the below values and labels (Table 2):

Table 2: Likert Scale

Value	Label
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

The data in **Table 3** below shows Kolmogorov-Smirnov and Shapiro-Wilk normality tests on several variables.

Table 3: Test of Normality

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Leadership 1	0.312	131	<.001	0.719	131	<.001
Leadership 2	0.358	131	<.001	0.636	131	<.001
Leadership 3	0.316	131	<.001	0.748	131	<.001
Leadership 4	0.334	131	<.001	0.689	131	<.001
Leadership 5	0.285	131	<.001	0.757	131	<.001
Leadership 6	0.289	131	<.001	0.742	131	<.001
Creativity 1	0.298	131	<.001	0.74	131	<.001
Creativity 2	0.297	131	<.001	0.777	131	<.001
Creativity 3	0.293	131	<.001	0.729	131	<.001
Creativity 4	0.327	131	<.001	0.698	131	<.001
Creativity 5	0.283	131	<.001	0.781	131	<.001
Creativity 6	0.366	131	<.001	0.666	131	<.001
Perceived Impact 1	0.271	131	<.001	0.736	131	<.001
Perceived Impact 2	0.306	131	<.001	0.754	131	<.001
Perceived Impact 3	0.26	131	<.001	0.744	131	<.001
Perceived Impact 4	0.286	131	<.001	0.717	131	<.001
Perceived Impact 5	0.31	131	<.001	0.734	131	<.001

Regarding the Leadership variables (Leadership 1 - Leadership 6), it can be observed that all of the performed tests (Kolmogorov-Smirnov and Shapiro-Wilk) indicate a significant departure from a normal distribution (p 0.001). This indicates that the distribution of leadership scores is not normal (**Table 3**). The Creativity variables (Creativity 1 to Creativity

6) exhibit significant deviations from normality ($p < 0.001$), according to the normality tests. The distribution of creativity scores deviates from the normal distribution. The Perceived Impact variables, namely Perceived Impact 1 through 5, deviate significantly from normality, as indicated by both analyses with a p -value of less than 0.001 (**Table 3**). The perceived impact score distribution is not normal. Leadership, inventiveness, and perceived effect do not follow a Gaussian distribution. Non-normality effects may affect statistical test selection and result inference in these variables. The data's non-normal distribution recommends non-parametric tests or transformations for analysis.

Table 4: Descriptive Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
Leadership	132	1	5	4.25	0.888
CREATIVITY	132	1	5	4.25	0.864
PRECEIVED_IMPACT	132	1	5	4.2394	0.90307
	Skewness		Kurtosis		
	Statistic	Std. Error	Statistic	Std. Error	
Leadership	-1.611	0.211	2.421	0.419	
CREATIVITY	-1.615	0.211	2.706	0.419	
PRECEIVED_IMPACT	-1.661	0.211	2.933	0.419	

As shown by **Table 4** we can notice that the standard deviation of all the answer groups is between 0.5 and 1 which is indicate variability in the answer between the participants. Minimum and maximum values of 1 and 5 indicate that we are in the range of the answers as mentioned in the value and labels table.

4.4 Correlation and Regression

The presented **Table 5** displays the correlation coefficients among the variables of Creativity, Leadership, and Perceived Impact.

Table 5 : Correlation Table

Correlations			
	CREATIVITY	Leadership	PRECEIVED_IMPACT
CREATIVITY	1	0.868	0.874
Leadership	0.868	1	0.901
PRECEIVED_IMPACT	0.874	0.901	1

At significant level of 0.01:

The correlation coefficient of 0.868 indicates a strong positive relationship between Creativity and Leadership. This observation suggests a robust and affirmative association between the aforementioned pair of variables. The data indicates that the utilization of a transformational leadership style has a positive correlation with the enhancement of creativity.

The Pearson correlation coefficient between the variables of Creativity and Perceived Impact is 0.874. This suggests a robust positive correlation between the aforementioned variables. The findings indicate that there is a positive correlation between the perceived impact of transformational leadership and the level of creativity

4.4.1 Summary of the Model

Table 6 and **Table 7** depict the results of a regression analysis performed on the dependent variable "Creativity," using the predictors "Perceived Impact" and "Leadership."

Table 6: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.893 ^a	0.798	0.795	0.391

Table 7: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.052	2	39.026	254.866	<.001 ^b
	Residual	19.753	129	0.153		
	Total	97.805	131			
a. Dependent Variable: CREATIVITY						
b. Predictors: (Constant), PERCEIVED_IMPACT, Leadership						

The multiple correlation coefficient (R) has a value of 0.893. The data suggests a significant and positive correlation between the independent variables (Perceived Impact and Leadership) and the dependent variable (Creativity). As the value of R approaches 1, the correlation between the variables becomes stronger.

The coefficient of determination, also known as R Square, has a value of 0.798. The coefficient of determination indicates that the predictors in the model account for around 79.8% of the variability observed in Creativity. The coefficient of determination, also known as Adjusted R Square, has a value of 0.795. This considers the predictor count and sample size, yielding a more cautious approximation of the variance explained.

The standard error of the estimate has been calculated to be 0.391. This denotes the mean deviation between the projected and factual measurements of Creativity. The analysis of variance (ANOVA) table presents a comprehensive summary of the partitioning of the total variation into its components, including the sum of squares, degrees of freedom (df), mean square, F-value, and significance (Sig.), for the regression model.

The statistical analysis shows that the Regression model has a substantial effect on Creativity, as evidenced by the remarkably significant F-value of 254.866 ($p < 0.001$). The Regression Model's Sum of Squares is 78.052, which represents the portion of Creativity's variability that is explained by the predictors. The residual sum of squares (RSS) value of 19.753 denotes the amount of unexplained variance in the Creativity variable, which remains after taking into account the effects of the predictors.

4.4.2 Regression

Table 8 displays the regression coefficients for the predictors (Leadership and Perceived Impact) in the model predicting the dependent variable "Creativity."

Table 8: Coefficients

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.502	0.17		2.955	0.004
Leadership	0.414	0.089	0.425	4.656	<.001
PERCEIVED IMPACT	0.47	0.087	0.491	5.375	<.001

The intercept of the model is 0.502. This denotes the conditional mean of Creativity given that the predictor variables (Leadership and Perceived Impact) have a value of zero. IT has a significant impact on the prediction of Creativity, with a p-value of 0.004. The leadership variable has a coefficient of 0.414. The regression analysis suggests that there is a positive linear relationship between Leadership style effect and Creativity. Specifically, a unit increase in Leadership style effect is associated with a 0.414-unit increase in Creativity. The statistical analysis indicates that the coefficient is significant at a level of $p < 0.001$, indicating that Leadership has a favourable effect on Creativity.

The value of the coefficient for the variable Perceived Impact is 0.47. This implies that there exists a positive linear relationship between Perceived Impact effect and Creativity,

where a unit increase in the former results in a corresponding increase of 0.47 units in the latter. The statistical significance level (p-value) of less than 0.001 suggests that Perceived Impact has a favourable influence on Creativity. The standardized coefficients indicate the respective significance of individual predictor variables in forecasting Creativity, while accounting for their standard deviations. The standardized coefficients for Leadership (Beta = 0.425) and Perceived Impact (Beta = 0.491) are positive, indicating their significant impact on Creativity after adjusting for their standard deviations.

The t-values linked with the coefficients gauge the statistical significance of every predictor. The variables Leadership ($t = 4.656$) and Perceived Impact ($t = 5.375$) exhibit high t-values, which suggest their significant contribution towards the prediction of Creativity.

4.5 Hypothesis Test Results

Drawing from the ANOVA table data (**Table 9**), it is possible to analyse the hypothesis (H) and its corresponding alternative hypothesis concerning the correlation between transformational leadership and creativity.

- Null Hypothesis: There is a significant relationship between transformational leadership and creativity.
- Alt Hypothesis: There is no significant relationship between transformational leadership and creativity.

Table 9: ANOVA Table

ANOVA Table					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	83.249	18	4.625	35.906	<.001
Within Groups	14.555	113	0.129		
Total	97.805	131			

The analysis of variance (ANOVA) table presents a comprehensive summary of the partitioning of the total variation into its components, including the sum of squares, degrees of freedom, mean square, F-value, and level of significance, pertaining to the association between creativity and leadership. The "Between Groups" segment denotes the variance in creativity that can be ascribed to distinct leadership levels, whereas the "Within Groups" segment denotes the variance within each group.

The results suggest that the "Between Groups" sum of squares is 83.249, with a total of 18 degrees of freedom. The calculated value of the mean square is 4.625, and the F-value is 35.906. Additionally, the statistical significance level (Sig.) is documented as $p < 0.001$, indicating that the outcome is extremely statistically significant. These results offer proof to reject the null hypothesis that there is no correlation between transformational leadership and creativity. The statistical analysis indicates that the variability observed in creativity can be accounted for by varying degrees of transformational leadership, as evidenced by the significant F-value.

The ANOVA results indicate a statistically significant correlation between transformational leadership and creativity. The statistical evidence provides support for the hypothesis that posits a correlation between transformational leadership and creativity. It is imperative to acknowledge that the ANOVA outcomes in isolation do not ascertain the magnitude or orientation of the association, and additional examination and investigation are necessary to comprehend the character of this association.

4.6 Analysis and Interpretation

4.6.1 Discussion of Demographic Information

The demographic analysis reveals that the sample primarily consists of individuals between 31 and 50 years of age, predominantly males holding bachelor's degrees. Additionally, the participants had varying levels of work experience, indicating a diverse sample that can provide a comprehensive perspective on the impact of TL on creativity. Although this information provides insights into the composition of the sample, it is important to note that the study's findings and interpretations should be cautiously generalized to the broader population, considering the limited diversity in the sample.

4.6.2 Analysis of Descriptive Statistics

The analysis of the questionnaire responses indicates that the respondents generally hold positive attitudes towards the leadership style and its impact on creativity. The descriptive statistics and the skewness and kurtosis values suggest that the data distributions for the variables are slightly negatively skewed, indicating a tendency towards positive responses. The analysis of descriptive statistics shows that the responses for both the leadership and creativity variables have a relatively high mean (4.25), indicating a general agreement among participants regarding the positive influence of TL on creativity. The standard deviations (between 0.5 and 1) suggest a moderate variability in responses, further emphasizing the perceived impact of TL on creativity.

4.6.3 Normality Tests

The results of the normality tests indicate that the distributions of the variables, including Leadership, Creativity, and Perceived Impact, deviate significantly from normality.

This departure from normality suggests the need for caution when applying certain parametric statistical tests, emphasizing the importance of considering alternative non-parametric methods or data transformations to ensure the accuracy of the statistical analysis.

4.6.4 Relationship between Creativity and Leadership

The correlation coefficient of 0.868 reflects a strong positive relationship between Creativity and Leadership, suggesting that a transformational leadership style is associated with enhanced creativity. This finding aligns with existing literature that highlights how specific leadership styles can influence and foster a creative environment. Transformational leadership, characterized by motivation, inspiration, and fostering innovation, has been widely linked to increased creativity among employees. Studies by Amabile (1988) and Mumford (2003) have also emphasized the crucial role of leadership in stimulating creative thinking within organizations. The strong positive correlations (above 0.85) among creativity, leadership, and perceived impact, support the notion that TL positively influences creativity.

4.6.4.1 Regression Analysis

The regression analysis further confirms the significant impact of both TL and perceived impact on employee creativity, validating the importance of TL practices in fostering a creative work environment. The regression model presents a strong relationship between the independent variables (leadership and perceived impact) and the dependent variable (creativity). The multiple correlation coefficient (R) of 0.893 indicates a significant positive relationship between the variables. The findings are in line with existing research that underscores the influence of leadership styles on the creative performance of employees, as proposed by studies by Carmeli and Schaubroeck (2007) and Jung, Chow, and Wu (2003). Furthermore, the coefficient of determination (R Square) of 0.798 reveals that around 79.8%

of the variability in creativity is explained by the model, which signifies the substantial impact of leadership and perceived impact on creative outcomes.

4.6.4.2 Hypothesis Test Results

The results of the regression analysis reveal that there is indeed a significant relationship between transformational leadership and creativity. The coefficients obtained for the predictors (Leadership and Perceived Impact) demonstrate a positive impact on employee creativity. These findings reject the Null Hypothesis (H0) and confirm the Alternate Hypothesis (H1), suggesting that transformational leadership is significantly associated with increased creativity among employees. The ANOVA test results suggest a significant relationship between transformational leadership and creativity. The F-statistic of 35.906 and the p-value being less than 0.001 provide strong evidence to reject the null hypothesis. This outcome supports the idea that transformational leadership has a substantial impact on fostering creativity within an organizational context. Various studies, including those by Bass (1985) and Avolio and Yammarino (2002), have established such a positive link between transformational leadership and creativity.

4.6.5 Research Question 1: How TL Stimulates Creative Thinking Among Employees?

The analysis of the data reveals that employees perceive TL as having a significant impact on their creative thinking. Specifically, the leadership behaviors identified in the study show a positive relationship with employees' creativity. According to the descriptive statistics, the mean values for the variables related to TL and creativity are relatively high (4.25), suggesting that employees generally agree that TL positively influences their creative thinking.

4.6.6 Research Question 2: What TL Best Practices Are Utilized to Maximize Creativity?

The data indicates that certain TL behaviors and practices play a vital role in fostering creativity among employees. TL's role in inspiring and motivating employees (Leadership 1 and 2), establishing clear organizational vision (Leadership 3), creating a supportive work environment (Leadership 4 and 6), and encouraging risk-taking (Leadership 5) seem to have a positive impact on employee creativity. These practices are pivotal in nurturing an organizational culture that values and encourages creative thinking.

4.7 Conclusion and Summary

In conclusion, the findings emphasize the positive relationship between transformational leadership and creativity, corroborating existing literature on the subject. However, it is crucial to note the limitations stemming from the sample's limited diversity and the deviation from normality in the data distribution. Future research should aim to diversify the sample and employ robust statistical techniques to confirm the generalizability of the findings. Moreover, qualitative studies may offer a deeper understanding of the mechanisms through which transformational leadership impacts creativity in diverse organizational contexts.

Chapter 5 Conclusion and Recommendations

5.1 Introduction

The research aimed to investigate the relationship between transformational leadership (TL) and creativity, exploring how TL stimulates creative thinking and identifying best practices for maximizing creativity through TL. The study effectively addresses the research questions by revealing the mechanisms through which transformational leadership stimulates creative thinking and identifying the best practices for utilizing transformational leadership to maximize creativity. The findings align with the objectives of the research, indicating that transformational leadership indeed plays a crucial role in fostering creativity within organizations. The study successfully achieves its objectives by providing empirical evidence of the positive relationship between transformational leadership and creativity, supported by robust statistical analysis and relevant literature. The research also identifies specific best practices of transformational leadership that contribute to maximizing creativity, thereby achieving the set objectives.

5.2 Summary of Main Findings

The findings consistently support a strong positive relationship between TL and creativity. The regression analysis confirms that TL and perceived impact significantly influence creativity, reinforcing the importance of TL practices in fostering a creative work environment. The ANOVA test results reject the null hypothesis, providing robust evidence that TL has a substantial impact on fostering creativity. However, the study acknowledges the limitations of the sample's limited diversity and the deviation from normality in data

distribution, emphasizing the need for cautious generalization of findings. Future research should aim to diversify the sample and employ robust statistical techniques for improved generalizability.

The findings demonstrate a strong positive relationship between transformational leadership and creativity, as evidenced by the correlation coefficient, regression analysis, and hypothesis testing. The results confirm that specific transformational leadership practices, such as inspiring and motivating employees, establishing a clear vision, creating a supportive work environment, and encouraging risk-taking, significantly contribute to fostering a creative organizational culture. These findings are in line with previous research by notable scholars in the field. However, it is crucial to acknowledge the limitations arising from the sample's lack of diversity and the deviation from normality in data distribution.

5.3 Contributions to Knowledge

The research contributes to existing knowledge by reaffirming the strong relationship between TL and creativity within organizational settings. It emphasizes how TL can facilitate collaboration, coordination, and innovative thinking within risk-tolerant climates, promoting employee skill development and fostering a culture of cooperation and belongingness. By highlighting the importance of TL in cultivating empowered and creative environments, the study underlines the significance of nurturing organizational cultures that value innovation and encourage risk-taking.

5.4 Implications, Limitations, and Further Work

The research findings have critical implications for businesses, emphasizing the promising potential of TL in fostering innovation in the workplace. The study highlights the mediating role of perceived impact, suggesting that employee recognition of TL's positive impact drives creativity. To enhance understanding, longitudinal studies can explore the long-term effects of TL on creativity. Despite the limitations of sample diversity and data distribution, the study's results contribute to the understanding of how TL can promote collaboration, innovative thinking, and risk-tolerant organizational cultures, fostering empowered, cooperative environments.

5.5 Recommendations

Based on the findings, it is recommended that organizations focus on cultivating and nurturing transformational leadership practices to foster a culture of creativity among employees. Implementing training programs and workshops for leaders to develop and enhance their transformational leadership skills can significantly contribute to promoting a creative work environment. Furthermore, the study emphasizes the need for diverse and inclusive samples in future research to ensure the generalizability of findings.

Additionally, researchers should consider employing alternative non-parametric methods and exploring qualitative research approaches to gain a deeper understanding of the underlying mechanisms between transformational leadership and creativity. Finally, addressing the limitations related to sample diversity and data distribution normality is critical for enhancing the validity and reliability of future studies in this area.

Organizations should invest in leadership development programs emphasizing the beneficial effects of TL on creativity. Communication, training, and recognition programs can highlight TL behaviors that encourage creativity, such as providing a supportive environment, encouraging risk-taking, and offering individualized consideration. Longitudinal studies can provide insights into the sustainability and stability of TL's impact on creativity, facilitating a deeper understanding of its effects over time.

References

Arnold, K.A., Loughlin, C. and Walsh, M.M., 2016. Transformational leadership in an extreme context: Examining gender, individual consideration and self-sacrifice. *Leadership & Organization Development Journal*, 37(6), pp.774-788.

<https://www.emerald.com/insight/content/doi/10.1108/LODJ-10-2014-0202/full/html>

Avolio, B.J., Walumbwa, F.O. and Weber, T.J., 2009. Leadership: Current theories, research, and future directions. *Annual review of psychology*, 60, pp.421-449.

<https://www.annualreviews.org/doi/abs/10.1146/annurev.psych.60.110707.163621>

Bass, B.M., 1999. Two decades of research and development in transformational leadership. *European journal of work and organizational psychology*, 8(1), pp.9-32.

<https://www.tandfonline.com/doi/abs/10.1080/135943299398410>

Bass, B.M. and Riggio, R.E., 2006. Transformational leadership.

[https://books.google.com.pk/books?hl=en&lr=&id=2WsJSw6wa6cC&oi=fnd&pg=PT5&dq=Bass,+B.+M.+\(2006\).+Transformational+leadership+\(2nd+ed.\).+:+Psychology+Press.+ISBN+1135618887&ots=I7c-eRKQGG&sig=6KiSh7AVU7GW-cYu_mC8Ku-2ao4&redir_esc=y#v=onepage&q=Bass%2C%20B.%20M.%20\(2006\).%20Transformational%20leadership%20\(2nd%20ed.\).%20%3A%20Psychology%20Press.%20ISBN%201135618887&f=false](https://books.google.com.pk/books?hl=en&lr=&id=2WsJSw6wa6cC&oi=fnd&pg=PT5&dq=Bass,+B.+M.+(2006).+Transformational+leadership+(2nd+ed.).+:+Psychology+Press.+ISBN+1135618887&ots=I7c-eRKQGG&sig=6KiSh7AVU7GW-cYu_mC8Ku-2ao4&redir_esc=y#v=onepage&q=Bass%2C%20B.%20M.%20(2006).%20Transformational%20leadership%20(2nd%20ed.).%20%3A%20Psychology%20Press.%20ISBN%201135618887&f=false)

Brown, M., Brown, R.S. and Nandedkar, A., 2019. Transformational leadership theory and exploring the perceptions of diversity management in higher education. *Journal of Higher Education Theory & Practice*, 19(7).

<http://scholar.googleusercontent.com/scholar?q=cache:kQDNLpUJ9MoJ:scholar.google.com/>

[+Brown,+M.,+Brown,+R.+S.,+%26+Nandedkar,+A.+\(2019\).+Transformational+leadership+theory+and+exploring+the+perceptions+of+diversity+management+in+higher+education.+Journal+of+Higher+Education+Theory+%26+Practice,+19\(7\).&hl=en&as_sdt=0,5](#)

Budur, T., 2020. Effectiveness of transformational leadership among different cultures. *International Journal of Social Sciences & Educational Studies*, 7(3), pp.119-129.
<http://eprints.tiu.edu.iq/390/>

Cheung, M.F. and Wong, C.S., 2011. Transformational leadership, leader support, and employee creativity. *Leadership & Organization Development Journal*, 32(7), pp.656-672.
<https://www.emerald.com/insight/content/doi/10.1108/01437731111169988/full/html>

Den Hartog, D.N., 2015. Ethical leadership. *Annu. Rev. Organ. Psychol. Organ. Behav.*, 2(1), pp.409-434. <https://www.annualreviews.org/doi/abs/10.1146/annurev-orgpsych-032414-111237>

Fang, Y.C., Chen, J.Y., Wang, M.J. and Chen, C.Y., 2019. The impact of inclusive leadership on employees' innovative behaviors: the mediation of psychological capital. *Frontiers in psychology*, 10, p.1803. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01803/full>

Føllesdal, H. and Hagtvet, K., 2013. Does emotional intelligence as ability predict transformational leadership? A multilevel approach. *The Leadership Quarterly*, 24(5), pp.747-762. <https://www.sciencedirect.com/science/article/abs/pii/S1048984313000726>

García-Morales, V.J., Jiménez-Barrionuevo, M.M. and Gutiérrez-Gutiérrez, L., 2012. Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of business research*, 65(7), pp.1040-1050.
<https://www.sciencedirect.com/science/article/abs/pii/S0148296311001007>

Gong, Y., Huang, J.C. and Farh, J.L., 2009. Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of management Journal*, 52(4), pp.765-778.

<https://journals.aom.org/doi/abs/10.5465/amj.2009.43670890>

Herold, D.M., Fedor, D.B., Caldwell, S. and Liu, Y., 2008. The effects of transformational and change leadership on employees' commitment to a change: a multilevel study. *Journal of applied psychology*, 93(2), p.346. <https://psycnet.apa.org/record/2008-02855-008>

Hinkin, T.R. and Tracey, J.B., 1999. The relevance of charisma for transformational leadership in stable organizations. *Journal of organizational change management*, 12(2), pp.105-119.

<https://www.emerald.com/insight/content/doi/10.1108/09534819910263659/full/html>

Hoßbach, C., Hoßbach, B. and Berg, 2019. *Organizational Climate for Creativity*. Springer Fachmedien Wiesbaden. <https://link.springer.com/book/10.1007/978-3-658-25241-0>

Jaiswal, N.K. and Dhar, R.L., 2015. Transformational leadership, innovation climate, creative self-efficacy and employee creativity: A multilevel study. *International journal of hospitality management*, 51, pp.30-41.

<https://www.sciencedirect.com/science/article/abs/pii/S0278431915001024>

Jung, D.I., Chow, C. and Wu, A., 2003. The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *The leadership quarterly*, 14(4-5), pp.525-544.

<https://www.sciencedirect.com/science/article/abs/pii/S104898430300050X>

Mason, C., Griffin, M. and Parker, S., 2014. Transformational leadership development: Connecting psychological and behavioral change. *Leadership & Organization Development Journal*, 35(3), pp.174-194. <https://www.emerald.com/insight/content/doi/10.1108/LODJ-05-2012-0063/full/html>

Muppidathi, P. and Krishnan, V.R., 2021. Transformational Leadership and Follower's Perceived Group Cohesiveness: Mediating Role of Follower's Karma-yoga. *Business Perspectives and Research*, 9(2), pp.269-285. <https://journals.sagepub.com/doi/abs/10.1177/2278533720966065>

Mutahar, A.Y., Rasli, A.M. and Al-Ghazali, B.M., 2015. Relationship of transformational leadership, organizational learning and organizational performance. *International Journal of Economics and Financial Issues*, 5(1), pp.406-411. <https://dergipark.org.tr/en/pub/ijefi/issue/31972/352311>

Nielsen, K., Randall, R., Yarker, J. and Brenner, S.O., 2008. The effects of transformational leadership on followers' perceived work characteristics and psychological well-being: A longitudinal study. *Work & Stress*, 22(1), pp.16-32. <https://www.tandfonline.com/doi/abs/10.1080/02678370801979430>

Rowold, J., 2008. Effects of transactional and transformational leadership of pastors. *Pastoral psychology*, 56, pp.403-411. <https://link.springer.com/article/10.1007/s11089-008-0121-6>

Shin, S.J. and Zhou, J., 2003. Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of management Journal*, 46(6), pp.703-714. <https://journals.aom.org/doi/abs/10.5465/30040662>

Stewart, J., 2006. Transformational leadership: An evolving concept examined through the works of Burns, Bass, Avolio, and Leithwood. Canadian journal of educational administration and policy, (54). <https://cdm.ucalgary.ca/index.php/cjeap/article/view/42735>

Schiuma, G., Schettini, E., Santarsiero, F. and Carlucci, D., 2022. The transformative leadership compass: six competencies for digital transformation entrepreneurship. International Journal of Entrepreneurial Behavior & Research, 28(5), pp.1273-1291. <https://www.emerald.com/insight/content/doi/10.1108/IJEBr-01-2021-0087/full/html>

Suhana, S., Udin, U., Suharnomo, S. and Mas' ud, F., 2019. Transformational Leadership and Innovative Behavior: The Mediating Role of Knowledge Sharing in Indonesian Private University. International Journal of Higher Education, 8(6), pp.15-25. [https://scholar.googleusercontent.com/scholar?q=cache:49tNqr8athkJ:scholar.google.com/+Suhana,+S.,+Udin,+U.,+Suharnomo,+S.,+%26+Mas%27+ud,+F.+\(2019\).+Transformational+Leadership+and+Innovative+Behavior:+The+Mediating+Role+of+Knowledge+Sharing+in+Indonesian+Private+University.+International+Journal+of+Higher+Education,+8\(6\),+15-25.&hl=en&as_sdt=0,5](https://scholar.googleusercontent.com/scholar?q=cache:49tNqr8athkJ:scholar.google.com/+Suhana,+S.,+Udin,+U.,+Suharnomo,+S.,+%26+Mas%27+ud,+F.+(2019).+Transformational+Leadership+and+Innovative+Behavior:+The+Mediating+Role+of+Knowledge+Sharing+in+Indonesian+Private+University.+International+Journal+of+Higher+Education,+8(6),+15-25.&hl=en&as_sdt=0,5)

Suifan, T.S. and Marwa, A.J., 2017. The relationship between transformational leadership and employees' creativity in the Jordanian Banking Sector. International Review of Management and Marketing, 7(2), pp.284-292. <https://dergipark.org.tr/en/pub/irmm/issue/32104/355826?publisher=http-www-cag-edu-tr-ilhan-ozturk>

Wang, X.H.F. and Howell, J.M., 2010. Exploring the dual-level effects of transformational leadership on followers. *Journal of applied psychology*, 95(6), p.1134.

<https://psycnet.apa.org/record/2010-17088-001>

Yin, K., Li, C., Sheldon, O.J. and Zhao, J., 2022. CEO transformational leadership and firm innovation: the role of strategic flexibility and top management team knowledge diversity. *Chinese Management Studies*.

<https://www.emerald.com/insight/content/doi/10.1108/CMS-10-2021-0440/full/html>

Yue, C.A., Men, L.R. and Ferguson, M.A., 2019. Bridging transformational leadership, transparent communication, and employee openness to change: The mediating role of trust. *Public relations review*, 45(3), p.101779.

<https://www.sciencedirect.com/science/article/abs/pii/S0363811119300360>

Zhu, W., Avolio, B.J., Riggio, R.E. and Sosik, J.J., 2011. The effect of authentic transformational leadership on follower and group ethics. *The leadership quarterly*, 22(5), pp.801-817. <https://doi.org/10.1016/j.leaqua.2011.07.004>

Appendices

Survey questions

Section 1: Demographic Information

1. What is your age?
2. What is your gender? (Male/Female/Other)
3. What is your highest level of education completed? (High school, Bachelor's, Master's, Doctorate, Other)
4. How many years of work experience do you have?

Section 2: Transformational Leadership Please rate the following statements regarding your perception of your leader's behaviour using a scale of 1 to 5, where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree".

7. My leader inspires and motivates me to think creatively.
8. My leader encourages me to come up with new ideas and solutions.
9. My leader provides a clear vision and direction that stimulates my creativity.
10. My leader is supportive and caring, which enhances my creativity.
11. My leader challenges and encourages me to take risks in my work.
12. My leader fosters a positive and inclusive work environment that promotes creativity.

Section 3: Creativity Please rate the following statements regarding your creativity at work using a scale of 1 to 5, where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree".

7. I am willing to take risks and try new ideas in my work.

8. I often come up with creative solutions to problems at work.
9. I actively seek out new information and perspectives to stimulate my creativity.
10. I am open to feedback and criticism, which helps me improve my creative ideas.
11. I am able to generate multiple ideas and alternatives before settling on one.
12. I believe that my creativity is valued and recognized by my organization.

Section 4: Perceived Impact of Transformational Leadership on Creativity Please rate the following statements regarding your perception of how transformational leadership impacts creativity in your work using a scale of 1 to 5, where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree".

6. I believe that transformational leadership positively influences my creativity at work.
7. I feel that my leader's transformational leadership style encourages and enhances my creativity.
8. I perceive a strong link between my leader's transformational leadership and my creative performance.
9. I believe that transformational leadership plays a significant role in fostering a creative work environment.
10. I feel that my leader's transformational leadership has a direct impact on my ability to generate and implement creative ideas.

Section 5: Additional Comments Please provide any additional comments or feedback regarding the link between transformational leadership and creativity in your work.

Thank you for your participation in this study.