How Do Transformational Leadership and Affective Trust Enhance Creativity?

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Abstract

The pressure of competitive higher education has affected most universities, and whether the utilization of human capital as a resource to foster creativity, increase motivation, and boost innovation is an important topic to investigate. This study aims to explore the relationship between the elements of transformational leadership, affective trust, and intrinsic motivation and their impact on creativity to increase the performance of lecturers at Vietnamese universities, where most of them are also creators. Quantitative research is applied with data collected from full-time lecturers at Vietnamese universities from December 2023 to January 2024. The hypothesized correlations were investigated using structural equation modeling on a sample of 311 participants in Vietnam. The findings reveal substantial causal correlations between transformational leadership, affective trust, intrinsic motivation's determinants, and the creativity to improve performance and positive behavior from the lecturers' perspective. These results imply that leaders should focus on the prefix role of transformational leadership, which is the origin of affective trust, intrinsic motivation, and creativity, to raise the standard of higher education. In particular, affective trust needs more attention because it has the most vital mediating role in enhancing the impact of transformational leadership on lecturers' creativity.

1- Introduction

Regarding human capital, it employs social exchange theory (SET) and transformational theory (TRT) to achieve these objectives. Universities are critical in creating and supplying high-quality, talented employees as the groundwork for establishing and growing creative and inventive capacities that serve the country's development and contribute to humanity's knowledge [1], which is the focus of the role of the instructor [2]. Over the past years, the university has undergone a process of expansion and transformation, facing domestic and international challenges of student loyalty [3], which should always be interested in innovating the training program and improving the instructor's quality and role [2, 3]. In the realm of higher education, these reforms were accompanied by a shift in both transactional and transformational leadership, which made lecturers' performance better and more efficient [4], which was a key factor affecting intrinsic motivation, creativity, and performance [5], and positively impacting the lecturer's competence as well as the lecturer's performance through capacity [6]. There are many leadership styles in non-education and education, from classical to modern [7].

Concerning leadership styles in recent decades, transformational leadership (TL) has become one of the most prevalent leadership theories in organizational behavior research [8]. It significantly impacts organizational learning and

knowledge management process capability [9]. Transformational leadership is a relationship-oriented leadership style [10], so the leader focuses on maintaining relationships between individuals with mental and material interests [11], inspires employees by raising awareness of the importance of organizational value, motivates employees, and encourages them to shift their interest from personal interest to the organization, as the organization's overall achievement to a greater level of motives and ethics [12]. Many studies have shown that the leader who creates the working environment influences the organization's success, which is the crucial source that impacts employees' affective trust, intrinsic motivation, and creativity [13]. Transformational leadership is the key factor, acting as an influence prefix for employees' affective trust, intrinsic motivation, and creativity [14, 15]. Transformational leadership has a favorable relationship with employees' creativity [16-18]. These studies showed that leaders' ability to practice transformational leadership enhanced employee creativity in different organizations. In higher education, most researchers agree that the transformational leadership style has an evident positive relationship with work performance, increasing lecturers' intrinsic motivation and creativity potential [19].

The quality of lecturers affects students' grades and learning outcomes, so intrinsic motivation and creativity are critical factors in determining the quality of university training [20]. According to previous research, transformational leadership is directly linked to performance, intrinsic motivation, and creativity [2, 5, 21]. However, many studies have also discovered that transformational leadership is related to lecturers' performance through mediating factors such as intrinsic motivation and job satisfaction [4]. The leader's image is central to the university management structure [22]. Although universities usually highly possess high-quality human resources, without a proper leader, the organization can be chaotic and disoriented [23]. Transformational leadership is a leadership style that brings success in higher education [24], a vital and practical approach to higher education management [25], and has an important effect on higher education [22, 26].

Most previous studies have confirmed that transformational leadership impacts individual creativity through the mechanism of a mediator [27]. Therefore, this study examines how transformational leadership affects intrinsic motivation, affective trust, and creativity. Further, some valuable discoveries have been made that other studies have not done before [28]. In fact, scientists are still debating the impact of transformational leadership style on creativity in many professions. Hence, there needs to be more specific research on this relationship with the expectation of narrowing the behavioral management gap in educational services, especially research in emerging markets like Vietnam, where creativity does not have enough environment to express and develop.

This study aims to investigate the relationship between transformational leadership style and creativity in higher education. Except for the first part introducing the issues to be researched, the following parts of the article are designed to address the above goal. Specifically, the second part of the literature review mentions concepts and proposes hypotheses, while the next part presents methodology. The following two sections illustrate the research results and discuss the findings of this study. The sixth part is the conclusion, and the final part presents limitations and future research directions based on the results achieved.

2- Literature Review

2-1- Transformational Leadership (TL)

For modern organizations, the job of leaders can be viewed as a strategic goal [29]. The reason for this might be that productive leaders are required to foster followers' mindsets and etiquettes [30], regulate team proceedings and results [31], and the general performance of the organization [32]. Meanwhile, transformational leadership is based on a leader's characteristics, personality, and ability to inspire and change employees' perceptions of organizational values [9]. Transformational leadership occurs when leaders care about and support followers in achieving performance goals by encouraging them to challenge assumptions and consider independently for better performance [33]. Transformational leadership has adjusted employees' visions, modifying them to managerial visions and turning them into reality.

In other words, certain transformational leadership behaviors, such as drawing attention, affecting, encouraging, and enhancing intellectual and personal judgment, can be considered part of the transformative process [34]. Yukl [35] states that transformational leadership can boost work productivity because it prospers employees' knowledge and potential. Transformational leadership has a considerable favorable impact on subordinates' mental health [36]. In other words, transformational leadership appears to assist individual managers in becoming stronger leaders, and the relative effectiveness of this approach is still being investigated [37]. A transformational leader will have transformational ideas that go beyond what others are thinking and an enthusiasm to communicate ideas and support employees in different ways that will energize them and instill meaning attached to transformational ideas. Notably, transformational leadership observes the people with organizational ambitions and aspirations, motivates them, and develops new working techniques for the employees to collaborate with the organizations more efficiently and creatively.

2-2- Creativity

Creativity is making new and helpful ideas, products, procedures, and motivation [38, 39]. According to Greenberg [40] and Gong et al. [41], creativity develops new, valuable ideas that help improve work efficiency [41]. That means creativity originates from creative thinking, skill, and accumulated expertise of individuals based on mainstream education and experience. Shi [11] defined creativity as generating innovative and helpful ideas to solve workplace problems, resulting in real and meaningful outcomes for a business. Furthermore, creativity at work only arises more when there are conditions or support from the leader. Then, employees can focus on performing their job responsibilities without being dominated by feelings of fear and anxiety when devising new methods of operation [42, 43].

Numerous studies have found that the transformational leadership style, inspirational leadership, and employee confidence are suitable for forming workplace creativity, which arouses employees' creativity potential [44, 45]. Leaders will recognize the employee's working context and create a space large enough for employees to promote their creativity [46]. Transformational leadership is an essential influence on innovation, driven by organizational change [26]. In higher education, transformational leadership promotes efforts to shape the culture of academic transparency, innovation, and increased competitiveness [47]. Transformational leadership is recognized as beneficial to knowledge management [26]. Changing the educational model to the new student-centered model requires lecturers to be more active, have high professional qualifications, possess creativity, and improvise to play multiple roles while teaching [24]. On that basis, hypothesis H1 is stated as follows:

H1: *Lecturers' creativity is enhanced by transformational leadership.*

2-3- Intrinsic Motivation

According to STD, intrinsic motivation is one's work that is motivated by passion and commitment to work and also is one's efforts for intrinsic reasons such as enjoyment and concern [43, 48, 49]. Intrinsic motivation is defined as motivation that is motivated by the individual's positive responses to the job itself rather than by factors outside the job [23, 50, 51]. Individuals are motivated to engage in the creation process by intrinsic motivation because they appreciate their work [28, 48]. Interestingly, the leader's behavior is pivotal in employee attitudes and behavior [44]. Based on transformational leadership theory, transformational leadership is very interested in creating intrinsic motivation to promote employees' full potential, be concerned with the individual, respect autonomy, and understand employees' wishes. Employees do not introduce restrictive, pressured rules, and they increase the empowerment of employees as they get used to the job, respect, and sympathy with employees, generating and increasing employee intrinsic motivation [44]. The leader acts as the principal agent in the organization's impedance or intrinsic motivation creation of employees [52]. The transformational leadership style is relationship-oriented and focuses on maintaining relationships between individuals with mental and material interests while increasing employees' intrinsic motivation and helping them accomplish their assigned tasks [53]. In higher education, transformational leadership is a role model for increasing intrinsic motivation [2]. On that basis, hypothesis H2 is presented as follows:

H2: *The intrinsic motivation of lecturers is boosted by transformational leadership.*

Components of creativity theory [54] and self-determination theory [43, 48, 55] suggest that intrinsic motivation plays a critical role in promoting creativity, with employees willing to put forth a concerted effort and spend a significant amount of time engaged in creative activities despite the lack of monetary compensation [49]. When producing unique ideas, intrinsic motivation enhances employees' propensity to be curious, daring, and persistent [56]. Employees with intrinsic motivation are more adaptable in their cognitive performance and more determined to develop novel solutions previously unavailable [57]. Intrinsic motivation helps them enjoy doing their job by allowing them to find new ways in a new way compared to the usual ways of doing things in the past, and individuals are motivated to engage in the creative process by intrinsic motivation because they love creating things [28, 42, 48]. In organizational development, intrinsic motivation has always been a critical component that supports employees in performing their responsibilities well and is the basis for the impact of environmental factors on creativity [58]. Several investigations have concluded that intrinsic motivation influences creativity [42, 58]. In higher education, a lecturer's intrinsic motivation unleashes the creative potential of the lecturer, and the lecturer maximizes their capacity to perform the task, improving the lecturer's and students' capacity in universities [4]. On that basis, hypothesis H3 is expressed as follows:

H3: *The influence of intrinsic motivation on faculty creativity is favorable.*

2-4- Affective Trust

Affective and cognitive trust are two types that influence how an employee reacts to a leader's behavior [59]. In it, cognitive trust refers to belief from reason, an objective assessment of employees about the leader's outstanding personal characteristics such as trustworthiness, competency, and morals [60]. The intense emotional relationship between leaders and employees when they engage in social exchange is called effective trust [59, 61], also known as faith from the heart [60]. This natural belief only develops when employees believe leaders act for their benefit. According to the SET [62], employees respond when leaders perceive positive signs [63, 64]. When a successful series of reactive exchanges can

transform a working relationship into a quality social mutual relationship, individuals can thus become emotionally committed to the organization [65]. Leaders always build employee trust in transformational leadership to improve effectiveness [66]. Leaders with the transformational leadership style strictly adhere to personal value systems, called ultimate values, with no material exchange between leader and employee, creating unity and, more importantly, employees' trust in the organization [52]. With transformational leadership, trust has the most decisive impact on employees—incredibly emotional trust [67]. In higher education, a transformational leader is viewed as capable of adapting to change, inspiring faculty members to continue to uphold and achieve outstanding achievements [20]. On that basis, the following is the H4 hypothesis:

H4: Transformational leadership has a positive effect on faculty affective trust.

People can be motivated to increase intrinsic motivation following SDT [48]. Intrinsic motivation is associated with a behavioral performance by the emotions of excitement directly related to the act of love and satisfaction. Meanwhile, extrinsic motivation arises from extrinsic means [43] such as money, fame, and accolades as the means to motivate individual action. Intrinsic motivation is a psychological factor arising from the perception of affective trust from the strong mutual relationship between leaders and employees when they participate in the exchange process of social change [59]. Affective trust leads to love and inspiration at work, creates intrinsic motivation, and stimulates employees' creativity so that they perform the assigned tasks beyond expectations [43, 48]. On that basis, hypotheses H5 and H6 stated as follows:

H5: Affective trust has a favorable correlation with lecturers' intrinsic motivation.

H6: Affective trust has a good correlation with lecturers' creativity.

From the theoretical basis and research overview, the author inherits and selectively adjusts to propose a model as shown in Figure 1, including (1) Transformational leadership, (2) Affective trust, (3) Intrinsic motivation, impact on the creativity of lecturers according to research by Deci & Ryan [48, 55], Ryan & Deci [43], Ritz et al. [68], Campbell et al. [69], Kuvaas & Dysvik [70], Kuvaas et al. [71]. The following is the proposed research model:
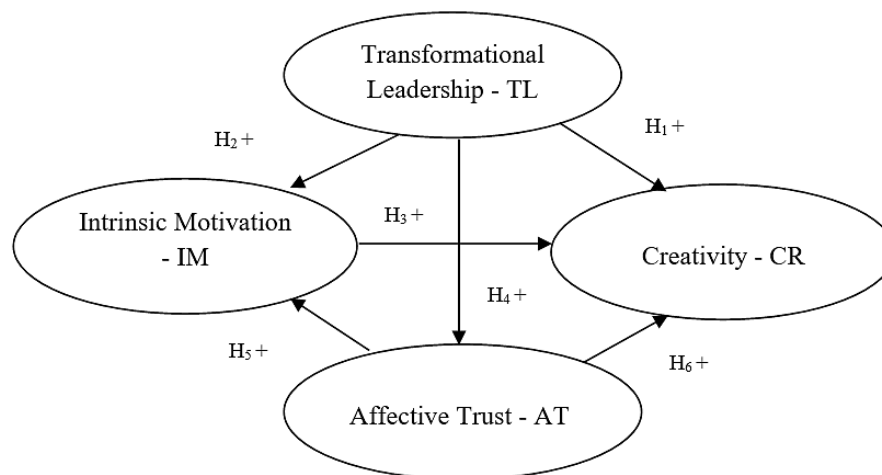

Figure 1. The conceptual framework

3- Research Methods

An online questionnaire survey was constructed to obtain primary data from full-time lecturers working in universities in Vietnam. Most of them are universities with significant training in economics. Therefore, the actual number of lecturers in economics employed by the universities was unknown, and non-probability sampling was adopted. The questionnaires were sent through emails, telephone calls, and personal visits to collect data from December 2023 to January 2024. From 625 questionnaires distributed to lecturers, this study only received 343 responses, for a response rate of 54.88 percent. By discarding 32 incomplete or inconsistent responses, 311 questionnaires can be used for further tests and analysis. Notably, only 29% had their doctoral degree, but it appropriately reflects the status of lecturers' qualifications at Vietnamese universities. In addition, more than 78% are over 35 years old, and 84% have worked as lecturers for over ten years.

All observed variables are measured using a 5-level Likert scale. Respondents were asked to rate how strongly they agreed with the statements in the questionnaire (See Table 1). Transformational leadership is measured by five observed variables designed from the scale of Ritz et al. [68] and Campbell et al. [69]. Affective trust is measured by five observed variables inherited from Park et al. [59]. Five observed variables estimate intrinsic motivation adjusted from the scale of Kuvaas & Dysvik [70] and Kuvaas et al. [71]. Creativity is measured by five observed variables built by Soda et al. [72] and Houghton and Diliello [73].

Table 1. Questionnaire

Code	Content	Source
Transformational Leadership (TL)		
TL1	My leader talks excitedly toward what would be achieved.	
TL2	My leader communicates a vision that motivates me to work hard.	
TL3	My leader always suggests new ways to do work.	[68,69]
TL4	My leader often discusses his vision for the future of the organization	
TL5	My leader can the ability to lead organizational change.	
Affective Trust (AT)		
AT1	I trust leadership to listen fairly to my concerns.	
AT2	I trust leadership to clearly communicate ethical expectations.	
AT3	I trust my direct superiors to have integrity.	[59]
AT4	I trust my direct superiors to be unbiased.	
AT5	I feel comfortable talking with leaders about conflicts in the workplace.	
Intrinsic Motivation (IM)		
IM1	I feel very inspired by the work of lecturers.	
IM2	I find the teaching profession very interesting.	
IM3	I feel that the teaching profession is a meaningful profession.	[70,71]
IM4	Sometimes I become so inspired by my lecturer's work that I forget everything around me.	
IM5	I intend to stick with the teaching profession for a long time.	
Creativity (CR)		
CR1	I come up with new ideas to improve work efficiency.	
CR2	I show you how to optimize your workflow.	
CR3	I offer new methods to improve the quality of lecturing and training.	[72,73]
CR4	I come up with creative solutions to problems that arise.	
CR5	I have many opportunities to participate in professional groups.	

The research hypotheses were tested using the covariance-based structural equation modeling (CB-SEM) method using a two-step process [74]. Structural equation modeling is an appropriate method to test complex models [74], especially testing mediation effects. To use this method, the minimum sample size must be ten times the number of observed variables [75]. This study uses four scales with 20 observed variables, so the minimum sample size is 200. Thus, the number of samples is 311, which satisfies the conditions for performing CB-SEM. AMOS 24 was used to perform the analyses. The two-step analysis process includes measurement model assessment (reliability, data validity, and model fit) and structural model assessment (path coefficient and P value assessment).

4- Results

4-1- Measurement Model Assessment

The Cronbach's α of transformational leadership, affective trust, intrinsic motivation, and creativity are 0.829, 0.834, 0.839, and 0.863, respectively. The corrected item-total correlation of the observed variables of the scales is over 0.3. Thus, each scale has satisfactory requirements, satisfying the internal consistency [76]. The Principal Axis Factoring method with Promax rotation is used when exploring factor analysis. The KMO coefficient is 0.938, and the Bartlett test has a significant level of Sig. = 0.000, according to the results, 20 observed variables of the scales are extracted into four factors at eigenvalue = 1.280, with a total variance extracted of 52.66%. The factor loadings for each element are all more than 0.5. As a result, the scales are both convergent and discriminant in their validity [77].

The saturated model has 164 degrees of freedom, Chi-squared = 212,318; Chi-squared/df = 1.295 < 2; p= 0.007; GFI = 0.937; CFI = 0.982; TLI = 0.980; RMSEA = 0.031. The confirmatory factor analysis outcomes show that the model is well-suited to actual data [78]. There is no association between the observed variables' errors, so the set of observed variables achieves unidimensionality [79]. The standardized weights are all bigger than 0.5 and have statistical significance (Sig. = 0.000), thus confirming the convergence value of the scales used in the research model [77]. The correlation coefficients between concepts show that these coefficients are less than one and statistically significant (Table 2). Therefore, the concepts in the model have discriminant validity [80]. The composite reliability [80], the total variance extracted [81], and the Cronbach's Alpha coefficient are greater than 0.5. Therefore, the scales of research concepts meet reliability requirements.

Table 2. Discriminant validity

Relationships			R	Standard Error	T-value	P-value
Transformational leadership	↔	Creativity	0.692	0.051	6.00	0.000
Transformational leadership	↔	Affective trust	0.688	0.052	6.05	0.000
Transformational leadership	↔	Intrinsic motivation	0.643	0.055	6.66	0.000
Creativity	↔	Affective trust	0.701	0.051	5.90	0.000
Creativity	↔	Intrinsic motivation	0.674	0.052	6.21	0.000
Affective trust	↔	Intrinsic motivation	0.686	0.052	6.07	0.000

4-2- Structural Model Assessment

The structural equation modeling tests the research hypotheses of the model. Although the Chi-square value = 212,318; Chi-squared/df = 1.295 < 2; P-value = 0.007, but other indicators are satisfactory: GFI = 0.937; CFI = 0.982; TLI = 0.980; RMSEA = 0.031. SEM results show that this model achieves compatibility with actual data. It should be noted that the structural and saturated measurement models have the same degrees of freedom, and the Heywood phenomenon does not appear in the estimation process.

Table 3 presents the remaining parameters' estimates, and Figure 2 presents the standardized estimates, which show six statistically significant relationships (p < 0.001). The hypotheses from H1 to H6 about the relationship between concepts in the theoretical model are accepted as expected.

Table 3. Hypothesis test

| Hyp.	Relationships	Estimates		T-value	P-value
		Standardized	Unstandardized		
H_1	Creativity ← Transformational leadership	0.317	0.286	3.842	0.000
H_2	Intrinsic motivation ← Transformational leadership	0.307	0.259	3.486	0.000
H_3	Creativity ← Intrinsic motivation	0.267	0.285	3.300	0.000
H_4	Affective trust ← Transformational leadership	0.688	0.624	8.790	0.000
H_5	Intrinsic motivation ← Affective trust	0.475	0.442	5.088	0.000
H_6	Creativity ← Affective trust	0.300	0.298	3.375	0.000
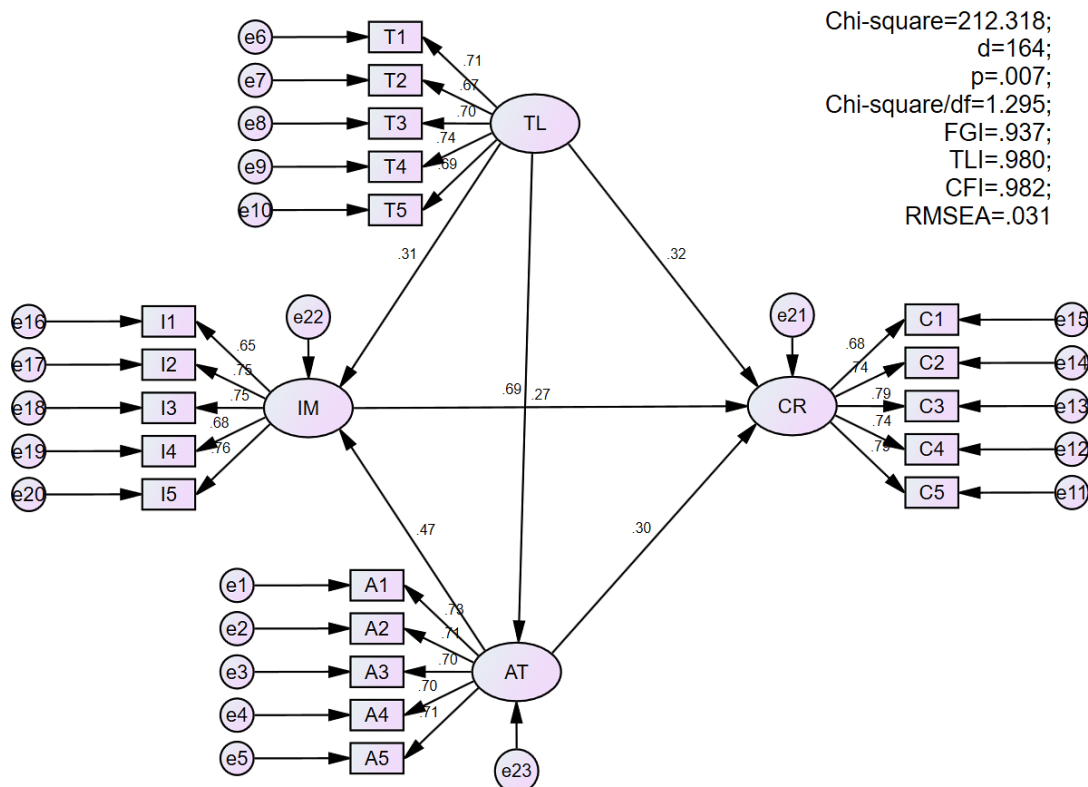
Figure 2. SEM results

The bootstrapping method tested the indirect effect [82]. The model of research that has two mediating variables that affect the relationship between transformational leadership, affective trust, intrinsic motivation, and creativity should analyze the specific indirect effects that are continued by engineering using a sub-plugin bundled with an estimand on AMOS 24. In the association between transformational leadership, affective trust, intrinsic motivation, and creativity, affective trust and intrinsic motivation are mediator variables, as shown in Table 4.

Table 4. The indirect effects

Path	β	P-Value
Transformational leadership → Affective trust → Intrinsic motivation	0.327***	0.001
Transformational leadership → Affective trust → Creativity	0.206**	0.003
Transformational leadership → Intrinsic motivation → Creativity	0.082**	0.003
Affective trust → Intrinsic motivation → Creativity	0.127**	0.002

Note: ***p < 0.001; **p < 0.010.

5- Discussion

In this study, transformational leadership has the most decisive positive impact on affective trust ($\beta = 0.688$, $p < 0.001$). So, transformational leadership considerably influences the perception of the faculty [83]. The most significant aspect for the faculty is affective trust, which influences how lecturers react to the leader's actions, demonstrating a deep emotional relationship between the leader and the instructor since they are involved in the social exchange process. This result is consistent with a study by Campbell et al. [69] on transformational leadership, which found that trust, especially affective trust, has the most decisive impact on employees. Not only that, affective trust poses a solid positive impact on intrinsic motivation ($\beta = 0.475$, $p < 0.001$) and creativity ($\beta = 0.300$, $p < 0.001$). Previous studies also confirmed these results [84-87]. These results indicate that the lecturer's intrinsic motivation was derived from affective trust. Affective trust leads to passion and interest in work, creating intrinsic motivation and stimulating creativity.

The study results are consistent with self-determination theory and social exchange theory and the conclusions of Okello & Gilson [88] and Chen et al. [89] on the close connection between transformational leadership, intrinsic motivation, and creativity. The outcomes of hypothesis testing H1 and H2, transformational leadership poses a substantial impact on creativity ($\beta = 0.317$, $p < 0.001$) and intrinsic motivation ($\beta = 0.307$, $p < 0.001$). This result shows that the leader is interested in stimulating the intellectual of the lecturer, the leader in the subject of creating the working environment, giving rise to the lecturer's intrinsic motivation. This result is consistent with the theory of transformational leadership in many previous studies, such as Mittal & Dhar [90] on the positive relationship between transformational leadership and creativity and the study of Masa'deh et al. [5] on the positive relationship between transformational leadership and intrinsic motivation. However, it contradicts the findings of Joo et al. [91]. Unlike empowering leadership, transformational leadership gives employees confidence in their work and motivates them to be creative and perform their jobs efficiently.

The results show that intrinsic motivation positively affects creativity ($\beta = 0.267$, $p < 0.001$). Intrinsic motivation has the lowest impact among the factors influencing creativity. However, this is still a contrary result to previous research, when intrinsic motivation did not directly impact creativity [28]. In that study, intrinsic motivation only moderated the relationship between transformational leadership and creativity. This result shows that more research is needed to determine intrinsic motivation's impact on employee creativity accurately. However, this result can be explained by Vietnam's culture and working environment. Due to their collective culture, Vietnamese lecturers often solve problems based on collective consensus [92]. Therefore, they need more stimulation from leaders to increase their motivation, leading to work creativity. In addition, the test results of the mediator variables show that intrinsic motivation and affective trust mediate the relationship between transformational leadership, affective trust, intrinsic motivation, and creativity. This indicates that transformational leadership plays a key role, being the origin of affective trust, intrinsic motivation, and creativity. This result is consistent with the theory of components of creativity, in line with previous studies such as Gumusluoglu & Ilsev [93], Duc & Lam [94], Majeed & Ghazali [95] on the role of turning the mediating of intrinsic motivation in concerning transformational leadership.

6- Conclusion

This study examines the influence of transformational leadership on affective trust, intrinsic motivation, and creativity in public universities with primary economics training in the South of Vietnam. Research findings indicate that transformational leadership and affective trust positively correlate with intrinsic motivation and creativity. Moreover, transformational leadership and affective trust have a favorable connection and intrinsic motivation, and creativity have a positive link. On the other hand, intrinsic motivation is a mediating variable influencing transformational leadership and affective trust's impact on creativity. In contrast, affective trust is a mediating variable influencing transformational leadership's effect on creativity. In Vietnam and other countries, teaching and research are always the core goals that create the quality and reputation of a university. In the process of realizing this core goal, most schools face challenges in promoting motivation to work and unleashing the creative potential of the lecturers so that they can develop their professional and research capabilities in scientific research. Since then, it has set the stage for the organization's sustainable development and, more importantly, for fulfilling society's rising expectations for educational excellence and responding to the continuous change in the higher education environment. In addition, the competitive environment constantly forces managers to search for creativity for the organization. Creativity is a factor that provides firms with a long-term competitive advantage that they may employ to adapt to the ever-changing business environment. Transformational leadership is a leadership style that adapts and leads change, considered essential and practical in higher education management as an influential employee factor in higher education. It is the leadership style that leads to success in higher education. Leaders with transformational leadership are expected to create a new work environment, motivating and stimulating the creative potential of their faculty to improve the quality of higher education and thereby also contributing to the motivation of civil servants to serve in a financially self-reliant public education.

6-1- Limitations and Future Research Directions

This study looks at relationships from a different perspective among economics lecturers at universities in Southern Vietnam. However, the limitation of the small sample size (311) may affect the model's generalizability. Because Vietnam's terrain has the characteristic of extending along the meridian, regional culture dramatically affects the relationships in the model. In the future, it is necessary to have further studies with a large sample and in different regions to assess the overall assessment relationships. Furthermore, in universities, teaching administrators are often high-quality human resources. However, the study only surveyed from the point of view of lecturers on pure teaching tasks; therefore, further groundwork is required to investigate the wide range of relationships between staff members as managers and lecturers as pure teaching staff.

7- Declarations

7-1- Author Contributions

Conceptualization, S.H.; methodology, S.H.; software, M.P.; validation, S.H. and M.P.; formal analysis, M.P.; investigation, S.H.; resources, S.H.; data curation, S.H.; writing—original draft preparation, S.H.; writing—review and editing, S.H. and M.P.; visualization, M.P.; supervision, S.H.; project administration, S.H.; funding acquisition, S.H. All authors have read and agreed to the published version of the manuscript.

7-2- Data Availability Statement

The data presented in this study are available on request from the corresponding author.

7-3- Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

7-4- Institutional Review Board Statement

Not applicable.

7-5- Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

7-6- Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

8- References

[1] Wargo, T. A., Herfina, Z. A., & Muhamad Riyad, M. (2020). Improving Creativity through Strengthening Transformational Leadership, Self-Efficiency and Achievement Motivation. PalArch's Journal of Archaeology of Egypt/Egyptology, 17(6), 12898-12911.

[2] Azizah, Y. N., Rijal, M. K., Rumainur, Rohmah, U. N., Pranajaya, S. A., Ngiu, Z., Mufid, A., Purwanto, A., & Mau, D. H. (2020). Transformational or transactional leadership style: Which affects work satisfaction and performance of Islamic university lecturers during COVID-19 pandemic? Systematic Reviews in Pharmacy, 11(7), 577–588.

[3] Chen, Y. C. (2016). The Drive behind International Student Loyalty in Higher-Educational Institutions: A Structural Equation Model. Asia-Pacific Education Researcher, 25(2), 315–323. doi:10.1007/s40299-015-0264-z.

[4] Angriani, M. R., Eliyana, A., Fitrah, H., & Sembodo, P. (2020). The effect of transactional and transformational leadership on lecturer performance with job satisfaction as the mediation. Systematic Reviews in Pharmacy, 11(11), 1263–1272. doi:10.31838/srp.2020.11.180.

[5] Masa'deh, R., Obeidat, B. Y., & Tarhini, A. (2016). A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: A structural equation modelling approach. Journal of Management Development, 35(5), 681–705. doi:10.1108/JMD-09-2015-0134.

[6] Rusydi, M. (2017). The Role of Leadership in Supporting the Competence and Achievements of Lecturers Kopertis Region Ix City of Makassar. Review of European Studies, 9(4), 170. doi:10.5539/res.v9n4p170.

[7] Maheshwari, G. (2022). Influence of Teacher-Perceived Transformational and Transactional School Leadership on Teachers' Job Satisfaction and Performance: A Case of Vietnam. Leadership and Policy in Schools, 21(4), 876–890. doi:10.1080/15700763.2020.1866020.

[8] Fischer, T., & Sitkin, S. B. (2023). Leadership Styles: A Comprehensive Assessment and Way Forward. Academy of Management Annals, 17(1), 331–372. doi:10.5465/annals.2020.0340.

[9] Chunhui, L., Ahmad, A., & Azar, A. S. (2024). The Impact of Transformational Leadership on the Work Performance of University Teachers through the Mediation of Organization Culture: Literature Review. UCJC Business and Society Review, 21(80), 260–299.

[10] Lester, P. B., Harms, P. D., & DeSimone, J. A. (2024). Taken to the extreme: Transformational leadership, psychological capital, and follower health outcomes in extreme contexts. Military Psychology, 36(2), 137–147. doi:10.1080/08995605.2022.2147361.

[11] Shi, H. (2021). The Influence of Safety-Specific Transformational Leadership and High-Quality Relationships on Mindful Safety Practices through Safety Climate: A Study in Chinese Petroleum Industry. Journal of Applied Security Research, 16(3), 328–344. doi:10.1080/19361610.2020.1761744.

[12] Khan, H., Rehmat, M., Butt, T. H., Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: a mediation model. Future Business Journal, 6(1), 40. doi:10.1186/s43093-020-00043-8.

[13] AlKayid, K., Selem, K. M., Shehata, A. E., & Tan, C. C. (2023). Leader vision, organizational inertia and service hotel employee creativity: Role of knowledge-donating. Current Psychology, 42(4), 3382–3394. doi:10.1007/s12144-022-02743-6.

[14] Fareed, M. Z., Su, Q., Almutairi, M., Munir, K., & Fareed, M. M. S. (2022). Transformational leadership and project success: The mediating role of trust and job satisfaction. Frontiers in Psychology, 13, 954052. doi:10.3389/fpsyg.2022.954052.

[15] Huang, Z., Sindakis, S., Aggarwal, S., & Thomas, L. (2022). The role of leadership in collective creativity and innovation: Examining academic research and development environments. Frontiers in Psychology, 13, 1060412. doi:10.3389/fpsyg.2022.1060412.

[16] Nguyen, T. P. L., Nguyen, T. T., Duong, C. D., & Doan, X. H. (2022). The effects of transformational leadership on employee creativity in Vietnam telecommunications enterprises. Management Decision, 60(3), 837–857. doi:10.1108/MD-07-2020-0882.

[17] Maria, A. D., Yulianto, H., Palupiningtyas, D., & Usodo, H. (2022). Relationship between transformational leadership, proactive personality, creative self-efficacy and employee creativity at food processing SMEs in Indonesia. Evidence-Based HRM, 10(3), 257–274. doi:10.1108/EBHRM-03-2021-0033.

[18] Tan, A. B. C., van Dun, D. H., & Wilderom, C. P. M. (2023). Lean innovation training and transformational leadership for employee creative role identity and innovative work behavior in a public service organization. International Journal of Lean Six Sigma, 15(8), 1–31. doi:10.1108/IJLSS-06-2022-0126.

[19] Shila, J. M., & Sevilla, A. V. (2015). The impact of the principals' leadership style on teachers' job satisfaction and organizational commitment- An Indian perspective. International Journal of Education & Management, 5(1), 1–7.

[20] Sihombing, M. (2020). The Effect of Transformational Leadership, Work Discipline, and Satisdaction on Lecturers' Performance at the Tarbiyah and Teaching Faculty of UIN Antasari Banjarmasin. Journal of K6 Education and Management, 3(2), 100–108. doi:10.11594/jk6em.03.02.01.

[21] Pongpearchan, P. (2016). Effect of transformational leadership and high-performance work system on job motivation and task performance: Empirical evidence from business schools of Thailand universities. Journal of Business and Retail Management Research, 10(3), 93–105. doi:10.24052/JBRMR.

[22] Owusu-Agyeman, Y. (2021). Transformational leadership and innovation in higher education: a participative process approach. International Journal of Leadership in Education, 24(5), 694–716. doi:10.1080/13603124.2019.1623919.

[23] De Jong, S. B., & Bruch, H. (2013). The importance of a homogeneous transformational leadership climate for organizational performance. International Journal of Leadership Studies, 8(1), 1-18.

[24] Sunaengsih, C., Komariah, A., Kurniady, D. A., Suharto, N., Tamam, B., & Julia, J. (2021). Transformational Leadership Survey. Elementary School Forum (Mimbar Sekolah Dasar), 8(1), 41–54. doi:10.53400/mimbar-sd.v8i1.30468.

[25] Zhang, X., Zhang, Y., Sun, Y., Lytras, M., Ordonez de Pablos, P., & He, W. (2018). Exploring the effect of transformational leadership on individual creativity in e-learning: a perspective of social exchange theory. Studies in Higher Education, 43(11), 1964–1978. doi:10.1080/03075079.2017.1296824.

[26] Al-husseini, S., & Elbeltagi, I. (2018). Evaluating the effect of transformational leadership on knowledge sharing using structural equation modelling: the case of Iraqi higher education. International Journal of Leadership in Education, 21(4), 506–517. doi:10.1080/13603124.2016.1142119.

[27] Nguyen, N. T., Hooi, L. W., & Avvari, M. V. (2023). Leadership styles and organisational innovation in Vietnam: does employee creativity matter? International Journal of Productivity and Performance Management, 72(2), 331–360. doi:10.1108/IJPPM-10-2020-0563.

[28] Shafi, M., Zoya, Lei, Z., Song, X., & Sarker, M. N. I. (2020). The effects of transformational leadership on employee creativity: Moderating role of intrinsic motivation. Asia Pacific Management Review, 25(3), 166–176. doi:10.1016/j.apmrv.2019.12.002.

[29] McCauley, C. D., Kanaga, K., & Lafferty, K. (2010). Leader development systems. The Center for Creative Leadership handbook of leadership development, 3, 29-62, John Wiley & Sons, Hoboken, United States.

[30] Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: a look at the process by which authentic leaders' impact follower attitudes and behaviors. The Leadership Quarterly, 15(6), 801–823. doi:10.1016/j.leaqua.2004.09.003.

[31] Morgeson, F. P., DeRue, D. S., & Karam, E. P. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. Journal of Management, 36(1), 5–39. doi:10.1177/0149206309347376.

[32] Waldman, D. A., Ramirez, G. G., House, R. J., & Puranam, P. (2001). Does Leadership Matter? CEO Leadership Attributes and Profitability under Conditions of Perceived Environmental Uncertainty. Academy of Management Journal, 44(1), 134–143. doi:10.5465/3069341.

[33] Gao, A., Zhao, K., & Qu, Q. (2020). Linking person–organization adhocracy value congruence to creativity. Journal of Managerial Psychology, 35(7–8), 603–615. doi:10.1108/JMP-08-2019-0448.

[34] Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. The Leadership Quarterly, 6(2), 199–218. doi:10.1016/1048-9843(95)90035-7.

[35] Yukl, G. (2006). Leadership in Organizations. Pearson Education India, Noida, India.

[36] Farahnak, L. R., Ehrhart, M. G., Torres, E. M., & Aarons, G. A. (2020). The Influence of Transformational Leadership and Leader Attitudes on Subordinate Attitudes and Implementation Success. Journal of Leadership and Organizational Studies, 27(1), 98–111. doi:10.1177/1548051818824529.

[37] Day, D. V., & Dragoni, L. (2015). Leadership Development: An Outcome-Oriented Review Based on Time and Levels of Analyses. Annual Review of Organizational Psychology and Organizational Behavior, 2(1), 133–156. doi:10.1146/annurev-orgpsych-032414-111328.

[38] Nasir, J., Ibrahim, R. M., Sarwar, M. A., Sarwar, B., Al-Rahmi, W. M., Alturise, F., Samed Al-Adwan, A., & Uddin, M. (2022). The Effects of Transformational Leadership, Organizational Innovation, Work Stressors, and Creativity on Employee Performance in SMEs. Frontiers in Psychology, 13, 772104. doi:10.3389/fpsyg.2022.772104.

[39] Subramaniam, R., Nakkeeran, S., & Mohapatra, S. (2021). Evolution of Creativity. Team Work Quality, 13–15, Emerald Publishing Limited, Bingley, United Kingdom. doi:10.1108/978-1-80117-262-220211003.

[40] Greenberg, J. (2013). Organizational Behavior. Routledge, New York, United States. doi:10.4324/9780203763209.

[41] Gong, Y., Huang, J. C., & 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), 765–778. doi:10.5465/AMJ.2009.43670890.

[42] Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the Work Environment for Creativity. Academy of Management Journal, 39(5), 1154–1184. doi:10.5465/256995.

[43] Ryan, R. M., & Deci, E. L. (2017). Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness. Guilford Press, New York, United States. doi:10.1521/978.14625/28806.

[44] Jung, D. I., & Sosik, J. J. (2002). Transformational leadership in work groups: The role of empowerment, cohesiveness, and collective-efficacy on perceived group performance. Small Group Research, 33(3), 313–336. doi:10.1177/10496402033003002.

[45] Bastari, A., Eliyana, A., & Wijayanti, T. W. (2020). Effects of transformational leadership styles on job performance with job motivation as mediation: A study in a state-owned enterprise. Management Science Letters, 10(12), 2883–2888. doi:10.5267/j.msl.2020.4.019.

[46] Elkins, T., & Keller, R. T. (2003). Leadership in research and development organizations: A literature review and conceptual framework. Leadership Quarterly, 14(4–5), 587–606. doi:10.1016/S1048-9843(03)00053-5.

[47] Lodders, N., & Meijers, F. (2017). Collective learning, transformational leadership and new forms of careers guidance in universities. British Journal of Guidance & Counselling, 45(5), 532–546. doi:10.1080/03069885.2016.1271864.

[48] Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. Canadian Psychology, 49(3), 182–185. doi:10.1037/a0012801.

[49] Birdi, K., Leach, D., & Magadley, W. (2016). The Relationship of Individual Capabilities and Environmental Support with Different Facets of Designers' Innovative Behavior. Journal of Product Innovation Management, 33(1), 19–35. doi:10.1111/jpim.12250.

[50] Amabile, T. (2011). Componential theory of creativity. Harvard Business School, Boston, United States.

[51] Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. (2009). Work Extrinsic and Intrinsic Motivation scale: its value for organizational psychology research. Canadian Journal of Behavioural Science, 41(4), 213–226. doi:10.1037/a0015167.

[52] Hennessey, B., Moran, S., Altringer, B., & Amabile, T. M. (2015). Extrinsic and Intrinsic Motivation. Wiley Encyclopedia of Management, 1-4.

[53] Bass, B. M. (1985). Leadership: Good, better, best. Organizational Dynamics, 13(3), 26–40. doi:10.1016/0090-2616(85)90028-2.

[54] Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. California Management Review, 40(1), 39–58. doi:10.2307/41165921.

[55] Deci, E. L., & Ryan, R. M. (2013). Intrinsic motivation and self-determination in human behavior. Springer Science & Business Media, Berlin, Germany.

[56] Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? Journal of Management, 30(6), 933–958. doi:10.1016/j.jm.2004.06.007.

[57] Chen, T., Li, F., & Leung, K. (2016). When Does Supervisor Support Encourage Innovative Behavior? Opposite Moderating Effects of General Self-efficacy and Internal Locus of Control. Personnel Psychology, 69(1), 123–158. doi:10.1111/peps.12104.

[58] Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. Journal of Management, 40(5), 1297–1333. doi:10.1177/0149206314527128.

[59] Park, S. M., Miao, Q., & Kim, M. Y. (2015). The role of leadership behaviors for enhancing organizational effectiveness in the Chinese public sector. International Review of Public Administration, 20(2), 153–176. doi:10.1080/12294659.2015.1040204.

[60] Chua, R. Y. J., Ingram, P., & Morris, M. W. (2008). From the head and the heart: Locating cognition- and affect-based trust in managers' professional networks. Academy of Management Journal, 51(3), 436–452. doi:10.5465/AMJ.2008.32625956.

[61] Tanghe, J., Wisse, B., & van der Flier, H. (2010). The role of group member affect in the relationship between trust and cooperation. British Journal of Management, 21(2), 359–374. doi:10.1111/j.1467-8551.2009.00643.x.

[62] Blau, P. M. (2018). Social Exchange. Exchange and Power in Social Life, 7(4), 88–114. doi:10.4324/9780203792643-4.

[63] Riggle, R. J., Edmondson, D. R., & Hansen, J. D. (2009). A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. Journal of Business Research, 62(10), 1027–1030. doi:10.1016/j.jbusres.2008.05.003.

[64] Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. Academy of Management Annals, 11(1), 479–516. doi:10.5465/annals.2015.0099.

[65] Meyer, J. P., & Allen, N. J. (1997). Commitment in the Workplace: Theory, Research, and Application (Advanced Topics in Organizational Behaviour). Sage Publications, Thousand Oaks, United States.

[66] Kirkpatrick, S. A., & Locke, E. A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. Journal of Applied Psychology, 81(1), 36–51. doi:10.1037/0021-9010.81.1.36.

[67] Yuan, Y., Kong, H., Baum, T., Liu, Y., Liu, C., Bu, N., Wang, K., & Yin, Z. (2022). Transformational leadership and trust in leadership impacts on employee commitment. Tourism Review, 77(5), 1385–1399. doi:10.1108/TR-10-2020-0477.

[68] Ritz, A., Giauque, D., Varone, F., & Anderfuhren-Biget, S. (2014). From Leadership to Citizenship Behavior in Public Organizations: When Values Matter. Review of Public Personnel Administration, 34(2), 128–152. doi:10.1177/0734371X14521456.

[69] Campbell, J. W., Lee, H., & Im, T. (2016). At the Expense of others: Altruistic helping behaviour, performance management and transformational leadership. Public Management Review, 18(6), 795–818. doi:10.1080/14719037.2015.1045018.

[70] Kuvaas, B., & Dysvik, A. (2009). Perceived investment in employee development, intrinsic motivation and work performance. Human Resource Management Journal, 19(3), 217–236. doi:10.1111/j.1748-8583.2009.00103.x.

[71] Kuvaas, B., Buch, R., Weibel, A., Dysvik, A., & Nerstad, C. G. L. (2017). Do intrinsic and extrinsic motivation relate differently to employee outcomes? Journal of Economic Psychology, 61, 244–258. doi:10.1016/j.joep.2017.05.004.

[72] Soda, G., Stea, D., & Pedersen, T. (2019). Network Structure, Collaborative Context, and Individual Creativity. Journal of Management, 45(4), 1739–1765. doi:10.1177/0149206317724509.

[73] Houghton, J. D., & DiLiello, T. C. (2010). Leadership development: The key to unlocking individual creativity in organizations. Leadership & Organization Development Journal, 31(3), 230–245. doi:10.1108/01437731011039343.

[74] Hair, J. F., Babin, B. J., & Krey, N. (2017). Covariance-Based Structural Equation Modeling in the Journal of Advertising: Review and Recommendations. Journal of Advertising, 46(1), 163–177. doi:10.1080/00913367.2017.1281777.

[75] Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) Multivariate Data Analysis (7th Ed.). Pearson, New York, United States.

[76] Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric Theory (3rd Ed.). McGraw-Hill, New York, United States.

[77] Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. Psychological Bulletin, 103(3), 411–423. doi:10.1037/0033-2909.103.3.411.

[78] Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. Psychological Bulletin, 88(3), 588–606. doi:10.1037/0033-2909.88.3.588.

[79] Steenkamp, J. B. E. M., & van Trijp, H. C. M. (1991). The use of lisrel in validating marketing constructs. International Journal of Research in Marketing, 8(4), 283–299. doi:10.1016/0167-8116(91)90027-5.

[80] Jŏreskog, K. G. (1969). Statistical Analysis of Sets of Congeneric Tests*. ETS Research Bulletin Series, 1969(2), 109–133. doi:10.1002/j.2333-8504.1969.tb00777.x.

[81] Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research, 18(1), 39–50. doi:10.1177/002224378101800104.

[82] Bollen, K. A., & Stine, R. (1990). Direct and Indirect Effects: Classical and Bootstrap Estimates of Variability. Sociological Methodology, 20, 115. doi:10.2307/271084.

[83] Dirks, K. T., & Skarlicki, D. P. (2004). Trust in leaders: Existing research and emerging issues. Trust and distrust in organizations: Dilemmas and approaches, 7, 21-40.

[84] Lee, S. J. (2007). The relations between the student-teacher trust relationship and school success in the case of Korean middle schools. Educational Studies, 33(2), 209–216. doi:10.1080/03055690601068477.

[85] Aryee, S., Walumbwa, F. O., Mondejar, R., & Chu, C. W. L. (2015). Accounting for the influence of overall justice on job performance: Integrating self-determination and social exchange theories. Journal of Management Studies, 52(2), 231–252. doi:10.1111/joms.12067.

[86] Cai, J., Zheng, L., Zhuang, F., Yang, S., & Wang, Z. (2023). Trust in Supervisor and Employee Creativity: The Mediating Role of Information Sharing. Psychological Reports, 00332941231191716. doi:10.1177/00332941231191716.

[87] Zander, L., Kang, O., Mockaitis, A. I., & Zettinig, P. (2021). The Dual Role of Trust in Creative Global Virtual Teams: Implications for Leadership in Times of Crisis. Globalization, Political Economy, Business and Society in Pandemic Times, 157–175, Emerald Publishing Limited, Bingley, United Kingdom. doi:10.1108/s1876-066x20220000036014.

[88] Okello, D. R. O., & Gilson, L. (2015). Exploring the influence of trust relationships on motivation in the health sector: A systematic review. Human Resources for Health, 13(1), 16. doi:10.1186/s12960-015-0007-5.

[89] Chen, Y., Yu, C., Yuan, Y., Lu, F., & Shen, W. (2021). The Influence of Trust on Creativity: A Review. Frontiers in Psychology, 12, 706234. doi:10.3389/fpsyg.2021.706234.

[90] Mittal, S., & Dhar, R. L. (2015). Transformational leadership and employee creativity: Mediating role of creative self-efficacy and moderating role of knowledge sharing. Management Decision, 53(5), 894–910. doi:10.1108/MD-07-2014-0464.

[91] Joo, B. K., Yim, J. H., Jin, Y. S., & Han, S. J. (2023). Empowering leadership and employee creativity: the mediating roles of work engagement and knowledge sharing. European Journal of Training and Development, 47(9), 881–899. doi:10.1108/EJTD-02-2022-0016.

[92] Tran, Q. H. N. (2021). Organisational culture, leadership behaviour and job satisfaction in the Vietnam context. International Journal of Organizational Analysis, 29(1), 136–154. doi:10.1108/IJOA-10-2019-1919.

[93] Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. Journal of Business Research, 62(4), 461–473. doi:10.1016/j.jbusres.2007.07.032.

[94] Minh-Duc, L., & Huu-Lam, N. (2019). Transformational leadership, customer citizenship behavior, employee intrinsic motivation, and employee creativity. Journal of Asian Business and Economic Studies, 26(2), 286–300. doi:10.1108/JABES-10-2018-0070.

[95] Majeed, A., & Ghazali, D. S. (2018). The Mediating Role of Intrinsic Motivation between Transformational Leadership and Creativity. Acta Informatica Malaysia, 2(1), 01–03. doi:10.26480/aim.01.2018.01.03.