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#### **Abstract**

The present paper is an exploratory study examining the implications of transformational leadership and ambiguity tolerance on job performance. It aims to provide an in-depth understanding of how various aspects of transformational leadership and employees' tolerance for ambiguity influence organizational outcomes. The study seeks to evaluate the assumption that employee performance varies as a function of ambiguity tolerance and the different dimensions of transformational leadership. Data were collected from 119 Romanian employees using a set of standardized questionnaires assessing transformational leadership, ambiguity tolerance, and work performance.

The findings support the premise that transformational leadership and a high tolerance for uncertainty positively affect employee performance. Performance is notably enhanced by a strong vision, motivating communication, intellectual stimulation, supportive leadership, and direct recognition from leaders. Overall, the results provide evidence for the value of transformational leadership in improving organizational performance and effectively managing uncertainty.

Keywords: leadership; job performance; job satisfaction; ambiguity tolerance;

## 1. TRANSFORMATIONAL LEADERSHIP AND THE TOLERANCE OF UNCERTAINTY: INSIGHTS FROM ACADEMIC LITERATURE REVIEW

According to Northouse (2022), a leader is defined as an individual inspiring others to achieve several objectives and engaging in various activities. Leadership style is crucial for the success of any organization. Several authors have pointed out that an efficient execution of leadership across all levels is a pivotal factor in determining any organization's success or failure due to the fact that it influences significantly organizational performance(Bass & Avolio, 1994; Yukl, 2012; Northouse, 2022; Judge, Piccolo, & Ilies, 2004; Harter, Schmidt, & Hayes, 2002). Similarly, Duckett and Macflaranne (2003) showed that a leader's style influences the attitudes, connections, and abilities of team members in achieving their organizational goals. After reviewing relevant studies and theories, we chose to concentrate on transformational leadership, which has been one of the most prevalent and effective approaches to enhancing the performance of subordinate employees. For example, in a study, Bass (1994) compared transformational and transactional leadership. Specifically, transformational leadership entails individual influence, spiritual encouragement and intellectual stimulation of employees. In contrast, transactional leadership focuses on fundamental aspects, with relationships between upper and lower management grounded in traditional frameworks, and leader-subordinate interactions based on formal working relationships (Bass, 1994). The transformational leadership style also emphasizes the development of individuals and addresses their needs (Bass, 1999). Transformational leaders inspire team members and support the evolution of their values. Bass and Avolio (1993) mention that the transformational leadership style is relevant when leaders adopt a more open and supportive approach towards the interests of their employees. Bass and Avolio (1993) concluded that transformational leadership enhances awareness and acceptance of shared aims and group attributions, ensuring that commitment to collective goals supersedes individual ambitions.

The predominant leadership model was developed by Bass and Avolio (1993), and it incorporates the elements of laissez-faire, transactional, and transformational leadership. Also, transformational leaders have an impact on the values, attitudes, ethics, and emotions of their subordinate employees (Gill, 2011). The model, while popular among researchers, poses several theoretical and empirical issues. The primary concerns involve the difficulties in distinguishing the sub-dimensions and the lack of empirical evidence supporting the major factor's structure, together with the validity of its essential components.

In economic instability times, the capacity to cope with uncertainty is essential for supporting human development and individual effectiveness. This involves the ability to navigate ambiguity and intricacy, as well as the ability to persevere through complexity. McLain (1993) defines uncertainty as the ability of an individual to act constructively in ambiguous situations, and as a series of reactions to inputs perceived as unknown, complex, uncertain, or subject to multiple interpretations. The degree of ambiguity tolerance is contingent upon any individual's perception, understanding, reaction, and adjustment to ambiguous situations. So, ambiguity tolerance is typically evaluated using a unidimensional scale. Reduced tolerance for ambiguity can result in heightened stress, impulsive reactions, and avoidance of unclear situations (Kirton, 1981). Furthermore, research suggests that ambiguity negatively affects work performance and motivation by making tasks seem uncontrollable, unfinished, or unimportant (Hartmann, 2000). Moreover, change inherently involves uncertainty. and it is proposed that this affects employees' views of organizational support, which in turn influences their job satisfaction and performance. In this context, comprehending individual responses to change becomes essential. A poll among human resource experts indicated that adaptability is highly valued as a key ability for both entry-level and experienced employees (Society for Human Resources, 2008). Finally, the effectiveness of organizational change and subsequent employee performance is influenced by individual differences in perceptions and organizational actions.

According to Nica and Nestian (2024), performance is assessed on the basis of the outcomes achieved by an individual, a team, a department, or an organization. These outcomes are articulated through the products' added value, the supplementary value attributed to existing services, or the enhancement of climate-related actions. Nevertheless, analyzing the results without considering the resources allocated to recruiting and training personnel is futile and may result in misguided conclusions. It has been widely acknowledged that employees experiencing ambiguity will endure psychological effects, regardless of whether they are part of organizations marked by minimal or frequent change (Ashford, 1988; Bordia, Hobman, Jones, Gallois, & Callan, 2004). Despite academic interest, a rather unexpected study conducted by Covaleski et al. (2003) looked into employee attitudes and performance concerning adaptation to change and uncertainty. The model indicated that workers' dispositional tendencies and evaluations of the workplace influence their assessment of organizational actions, subsequently impacting their job satisfaction and productivity. This study found that employee performance and satisfaction may be strongly influenced by two antecedents: adaptability and the sense of uncertainty regarding workplace changes.

#### 2. DESIGN OF THE RESEARCH

Understanding employees' experiences and responses to changes in their work environment requires identifying a mechanism that links their perceptions of change-related uncertainty to their adaptability (Kristin et al., 2014). The proposed research hypothesizes that both the dimensions of transformational leadership and a high level of ambiguity tolerance have a positive effect on employee performance.

To analyze the relationships described, the following six hypotheses were formulated:

- H1. High uncertainty tolerance has a positive effect on employee performance.
- H2. Through vision, transformational leaders positively influence employee performance.
- H3. Through inspirational communication, transformational leaders positively influence employee performance.
- H4. Transformational leaders have a good impact on worker performance by providing intellectual stimulation to their workforce.

H5. Transformational leaders have a favorable impact on employee performance by motivating their staff.

H6. Transformational leaders have a favorable impact on staff performance by individually acknowledging each employee's abilities.

The data collected were analyzed utilizing the Statistical Package for the Social Sciences (SPSS). The first step involved conducting descriptive statistics to assess the distribution, central tendency, and variability of responses across the evaluated variables. The internal consistency of each scale was evaluated by computing Cronbach's alpha coefficients, demonstrating satisfactory reliability for both instruments. Independent Samples T-tests were conducted to ascertain mean differences between groups based on demographic variables, including gender and education level. Additionally, correlational analyses were performed to examine the links between transformational leadership, tolerance of uncertainty, and self-reported work performance. These approaches facilitated a thorough comprehension of the data structure and bolstered the inferential analysis of the outcomes. All analyses were conducted at a 95% confidence level, with statistical significance established at p < 0.05.

Overall, 119 individuals took part in this study. The study participants were required to have a minimum of six months of work experience to be eligible for being involved in the study. The study included seventy-eight female and forty-one male participants, aged between twenty to fifty-four, with an average age of thirty-one. Most of them completed higher education, 59% having a Bachelor's Degree, 17% a Master's Degree, 16% having just high school education, and only 8% holding a PhD. When compared to the average period spent in the organization, it was, in the case of M = 8.5 years, the average period spent by the participants in the current organization, being M = 3.5 years.

#### 2.1. Research methodology

The participation of individuals in the study was entirely voluntary. The confidentiality of the identity and responses of the participants was maintained due to the fact that the questionnaire was applied online. It comprised three standardized measures along with demographic information, not disclosing the identities of the participants, not including any names, nicknames, addresses, or other similar identifiers. The participants in the study were instructed to respond to the questions with the highest level of honesty and to fill out the questionnaire immediately after reading the prompt.

Transformational leadership was assessed with Transformational Leadership Questionnaire as developed by Rafferty and Griffin (2004). The questionnaire consists of 15 items systematically arranged into 5 distinct dimensions, where participants provided their responses to each statement using a Likert scale ranging from 1 to 5, where the numbers stood, as follows: 1. Not at all; 2. Once in a while, 3. Sometimes. 4-Fairly Often and 5-frequently, if not always. The respondents were asked to reply to the Transformational Leadership Questionnaire, taking into account the influence of their immediate leader or manager.

The Cronbach's Alpha coefficient, which serves as an indicator of the overall reliability of the measurement pertaining to transformational leadership, was 0.936. The coefficients corresponding to each dimension are described as follows: the value of Vision  $\alpha$  is 0.745. The reliability coefficient for Inspirational Communication is  $\alpha$  = 0.768. The measure of intellectual stimulation is represented by a coefficient of  $\alpha$  = 0.695. The coefficient for encouraging leadership stood at 0.883. The coefficient of personal recognition was  $\alpha$  = 0.919.

As indicated by McLain (1993), the Multiple Stimulus Types Ambiguity Tolerance Scale-II (MSTAT-II) was used to assess uncertainty tolerance. The instrument consists of 13 items, each assessed using a Likert scale ranging from 1 to 5 in relation to the formulated statements. The potential responses to the inquiry include items one, two, three, four, and five, as well as the option of neither agreeing nor disagreeing. The tool utilized for assessing ambiguity tolerance came up with a Cronbach's Alpha coefficient of 0.838. The Performance Scale, as developed by Williams and Anderson (1991), was used to measure performance. The 21-item scale employs a Likert scale that ranges from 1 to 5 to capture responses for each statement. The potential responses to the inquiry include the following options: one, two, three, four, five, as well as the option of neither agreeing nor disagreeing. The Cronbach's Alpha coefficient for the instrument utilized in the assessment of employee

performance was  $\alpha$  = 0.820. A demographic questionnaire was utilized to collect descriptive data on the participants taking part in this research study. The study requested such information on the participants as gender, age, educational qualifications, job title, length of service in the current organization, and overall employment duration.

#### 2.2. Results and discussions

To reach the study goals and test the hypotheses, an empirical research design was needed by utilizing a non-experimental approach.

Hypothesis 1 (H1) predicted that personnel exhibiting elevated levels of uncertainty tolerance would achieve much superior performance relative to those with decreased uncertainty tolerance. The Independent Samples t-test results corroborated this assumption, revealing substantial performance variations contingent upon uncertainty tolerance, t(117) = -3.80, p < .001. Employees exhibiting high uncertainty tolerance (M = 91.11) demonstrated a significantly superior mean performance compared to those with poor uncertainty tolerance (M = 85.23), thus substantiating the hypothesis.

TABLE 1 - STATISTICAL ANALYSIS FOR HYPOTHESIS 1

Variable	n	M	SD	t	df	р
Performance				-3,80	117	,000
Low tolerance for uncertainty	60	85,23	8,10			
High tolerance for uncertainty	59	91,11	8,76			

The second hypothesis (H2) anticipated that employees who see their supervisors as possessing a strong vision for their job will show enhanced performance, based on the expectation that the independent variable of transformational leadership vision will influence the dependent variable of performance. The independent samples t-test results indicated significant differences in the transformational leadership dimension of performance, t(117) = -3.67, p < 0.001. Employees who perceive their managers as possessing a high vision of their work (M = 91.18) illustrate a markedly higher mean than those with a low vision (M = 85.46). The data indicate that hypothesis number 2 has been validated.

TABLE 2 - STATISTICAL ANALYSIS FOR HYPOTHESIS 2

Variable	N	M	SD	t	df	р
Performance				-3,67	117	,000
Transformațional Leadership – low level of vision	63	85,46	8,85			
Transformational Leadership – high level of vision	56	91,18	8,00			

In the third hypothesis (H3), we anticipated that the independent variable, inspirational communication, to exert an influence. A component of transformational leadership, the dependent variable performance, indicates that employees who perceive their supervisors as possessing a high degree of inspirational communication will show enhanced performance. The Independent Samples T-test results indicate significant differences in the inspirational communication dimension of transformational leadership concerning performance, t(117) = -3.23, p = 0.002. Employees who perceive their managers as possessing a high level of inspirational communication (M = 91.30) demonstrate a markedly higher mean than those with a low level (M = 86.10). Based on these results, we observe that the hypothesis has been validated.

TABLE 3 - STATISTICAL ANALYSIS FOR HYPOTHESIS 3

Variable			n	M	SD	t	df	Р
Performance						-3,23	117	,002
Transformațional Leadership communication_low level	-	inspirational	72	86,10	8,85			
Transformațional Leadership communication_high level	_	inspirational	47	91,30	8,10			

In the fourth hypothesis (H4), we anticipated that the independent variable, intellectual stimulation, an aspect of transformational leadership, would affect the dependent variable, performance, so that the employees who perceive their managers with a high degree of intellectual stimulation will demonstrate superior performance. The Independent Samples t-test results indicated significant differences in the dimension of intellectual stimulation of transformational leadership on performance, t(117) = -2.50, p = 0.014. Employees who perceive their managers as having a high level of intellectual stimulation (M = 90.42) show a markedly higher mean than those who perceive a low level (M = 86.39). Considering these results, we observe that the hypothesis has been confirmed.

TABLE 4. STATISTICAL ANALYSIS FOR HYPOTHESIS 4

Variable	n	M	SD	t	df	Р
Performance				-2,50	117	,014
Transformational Leadership – inspirational intellectual stimulation_low level	67	86,39	8,97			
Transformational Leadership – inspirational intellectual stimulation_high level	52	90,42	8,36			

In the fifth hypothesis (H5), we anticipated that the independent variable, supportive leadership – an element of transformational leadership - would impact the dependent variable, performance, so that the employees who perceive their managers as having high levels of supportive leadership will demonstrate superior performance. The Independent Samples T-test results indicated significant differences in the dimension of transformational leadership, specifically encouraging leadership in what regards performance, t(117) = -2.80, p < 0.006. Employees who perceive their managers as exhibiting a high level of encouraging leadership (M = 90.59) demonstrate a markedly higher mean than those who perceive a low level (M = 86.12). In line with the result, we note that the hypothesis has also been confirmed.

TABLE 5. STATISTICAL ANALYSIS FOR THE HYPOTHESIS 5

Variable	n	М	SD	t	df	р
Performance				-2,80	117	,006
Transformational Leadership – encouragin leadership_low level	g 63	86,12	8,30			
Transformational Leadership – encouragin leadership_low level	<sup>9</sup> 56	90,59	9,06			

In the final hypothesis (H6), we predicted an effect arising from the independent variable, *i.e.* personal recognition. A feature of transformational leadership related to the dependent variable performance indicates that the employees who see their leaders as providing substantial personal recognition will show higher performance. The Independent Samples T-test results indicate significant differences in the dimension of personal recognition of transformational leadership regarding performance, t(117) = -3.82, p < 0.000. Employees perceiving their managers as having a high level of personal recognition (M = 91.81) demonstrate a markedly higher mean than those perceiving a low level (M = 85.76). The results show that the hypothesis has been validated.

TABLE 6. STATISTICAL ANALYSIS FOR THE HYPOTHESIS 6

Variable	n	M	SD	t	df	р
Performance				-3,82	117	,000
Transformational Leadership – personal recognition_low level		85,76	8,83			
Transformational Leadership – personal recognition_high level	47	91,81	7,73			

The first limitation of this study is that it is based on a single cross-sectional design. Therefore, a longitudinal study could offer valuable insights into the impact of leadership and uncertainty tolerance on employee performance across various contexts in which ambiguity arises. Therefore, a longer-term study may provide more compelling reasons than those put forward by this study, despite the fact that our research provided evidence showing the existence of implicit causal links. This study contained no manipulation of objective variables associated with employee performance. Instead, the data collected consisted of employees' self-assessment of their performance at work.

Another limitation concerns the method in which the data were collected. The employees may have responded to the questions under the effect of what had occurred in their general life, and not just at times of uncertainty. In order to gain a deeper comprehension of the studied phenomenon among workers, a qualitative study might be beneficial. In light of this, a further study should use additional data sources, such as financial records and interviews with managers conducted in person, that may facilitate a more in-depth investigation of this issue.

#### 3. CONCLUSIONS

Research findings demonstrate that a high tolerance for ambiguity during periods of uncertainty and change in organizations enables individuals to assess their performance more favorably than those with low tolerance levels. In contexts characterized by rapid change and unpredictability, such as the onset of a pandemic or other crises, transformational leadership plays a vital role in influencing subordinates' organizational performance. Transformational leaders articulate a compelling vision while providing support to each employee through training, mentoring, and promoting innovation and innovative thinking within the organization by seeking to mitigate employee uncertainty and by cultivating feelings of trust and community.

Our findings indicated that the elements of transformational leadership positively influence employees' self-reported performance. The research demonstrates that transformative leaders enhance employee engagement and successful completion of tasks, thus improving subordinate performance. It has been achieved by fostering optimism and giving individual support while encouraging employees to adopt innovative approaches to problem-solving. Also, the positive impact of transformative leadership characteristics on employee performance has been corroborated with the existing literature in the field, as follows: Howell and Avolio (1993); Nemanich and Keller(2007); Rafferty and Griffin(2004), our research outcomes being aligned with their findings.

This study aimed to streamline the growing significance of transformational leadership in response to the swift changes in the business environment. Our conclusions are linked to the importance of employees' perceptions of their leaders in a highly volatile business context.

Furthermore, we found that transformational leadership positively influences employee performance emotionally and professionally by fostering growth, purpose, and resilience, which helps them adapt to challenges and uncertainty. By inspiring employees to develop their capabilities through a focus on a shared vision, inspiration, and individualized support, transformational leadership creates more engaged and capable employees. We anticipate that businesses in the future will show greater awareness of the role managers undertake in ambiguous business contexts while striving to protect or expand their organizations.

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