

Moderating effects of work environment on the leadership–organisational commitment relationship

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ABSTRACT

Objective: The objective of this article is to identify the moderating role of the company industry, company size, the company department, and employees' work position in the relationship between leadership style and organisational commitment. The article fills a gap in the literature on the relationship between leadership style and organisational commitment. Although there are many studies on this topic, the literature has not yet examined this relationship in terms of its moderation by characteristics of work and position.

Research Design & Methods: This article is based on an empirical study conducted on a sample of professionally active Poles. We analysed the obtained data using structural equation modelling (SEM).

Findings: The main findings show that transactional leadership strongly affects organisational commitment among employees of larger organisations in the engineering, technology, and information technology (IT) industries.

Implications & Recommendations: Transactional leaders most strongly influence organisational commitment among lower-level employees. In contrast, transformational leaders most strongly influence organisational commitment among higher-level employees. These results have practical implications for organisations, which allows them to increase organisational commitment and thus improve their outcomes.

Contribution & Value Added: Transformational leadership most substantially affects organisational commitment among employees working in smaller organisations and organisations in the services and medicine industries. Furthermore, the study also proved that workplace characteristics are essential for this relationship. Therefore, employees in administration and support departments show greater organisational commitment when a transformational leader manages them, while employees in operations and logistics departments show greater commitment when a transactional leader manages them.

Article type: research article

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INTRODUCTION

For years, academic research has focused on leadership style and organisational commitment (Sosik *et al.*, 1997; Eagly & Johnson, 1990; Devlin, 1978; Jamal, 1974). The growth of these areas means they continue to be the most popular research topics (Fernandes *et al.*, 2025; Riadi *et al.*, 2025; Saripudin & Perkasa, 2024; Milhem *et al.*, 2024).

In recent years, the importance of managerial attitudes and the broadly defined quality of human capital was occasionally questioned in light of rapid and fundamental technological changes associated with the proliferation of artificial intelligence (AI). The initial wave of AI-driven business expansion appeared to focus primarily on technological advancement, with expectations that it

could reduce the importance of human capital engagement (Lazaroiu *et al.*, 2025; Balcerzak *et al.*, 2025a; Balcerzak & Valaskova, 2024).

Studies addressing the organisational and human resource management challenges arising from the expansion of AI in business contexts point to significant structural and operational transformations (see Balcerzak *et al.*, 2025b; 2026b). However, the most recent empirical research examining the key determinants of successful AI implementation, particularly in terms of enhancing organisational effectiveness and productivity growth, continues to emphasise the critical role of human capital (Yu & Qi, 2025; Yu, 2025; Balcerzak *et al.*, 2026a). Therefore, despite the challenges posed by profound technological transformation, human resources remain the most valuable asset within the firm. Within this context, hiring a new employee includes both financial and non-financial costs for the employer. Thus, caring for current employees and reducing turnover has become a priority (Nalla, 2025; Holúbek *et al.*, 2025; Eger & Žižka, 2024). The subject concepts link these two approaches. Caring for employees is leaders' responsibility (Huang *et al.*, 2021) and organisational commitment links the employees with the organisation (Benkarim & Imbeau, 2021).

The success of the entire organisation depends on the leadership style, and, in particular, employee satisfaction (Skopak & Hadzaihmetovic, 2022), their engagement (Thanh & Quang, 2022), brand growth (Binu Raj, 2022), and final financial results (Le *et al.*, 2023). On the one hand, a leader who makes conscious decisions in human resource management contributes significantly to the organisation's success (Kessi *et al.*, 2025). On the other hand, using the wrong tools can lead to employee retention (Asianab, 2023), decline in the quality of the organisation's performance (Bayati *et al.*, 2025), and cost increases (Dur *et al.*, 2021).

Despite a wide range of studies on both leadership style and organisational commitment (Yahaya *et al.*, 2016; Donkor *et al.*, 2021; Oyewobi, 2024; Waseel *et al.*, 2025), we still lack investigations into the work environment context in this relationship. Specifically, when it comes to the company industry, company size, company department, and the employees' work position. However, these variables can significantly moderate the relationship between leadership style and organisational commitment. For example, company industry and company size naturally determine communication within the organisation and the type of tasks performed (Tkalac Verčič *et al.*, 2024; Barnes *et al.*, 2023). Furthermore, small organisations achieve better results through decentralised communication, while large organisations achieve better results through centralised communication (Ding *et al.*, 2023).

As an active participant in the communication process between the employee and the organisation, the leader can, through their actions, improve or deteriorate the organisation's results (Li *et al.*, 2023). Employees' perception of internal communication also depends on their department. Communication practices should be adapted to the specific organisational unit (Fuciu & Serban, 2024). Moreover, looking even more closely, even to the individual employee, the position an employee occupies determines what kind of leader they may need. For example, a transformational leader can effectively mitigate the negative effects of task ambiguity on job satisfaction, but only for employees who hold formal management positions. Other employees are not susceptible to this effect (Nielsen *et al.*, 2022).

Nevertheless, despite the extensive literature, to the best of our knowledge, especially regarding Central European institutional and managerial environment, no study has thus far examined variables related to organisational characteristics and work position characteristics as moderators of the relationship between leadership style and organisational commitment. Some articles address these variables individually, but not as moderators of the aforementioned relationship (Tkalac Verčič *et al.*, 2024; Nielsen *et al.*, 2022).

The literature reveals a gap in considerations of the relationship between leadership style and organisational commitment moderated by the work environment. Thus, we focused on this relationship. Despite a wide range of studies, our study is the first to show that the work environment constitutes an essential factor, indicating that a properly selected leadership style guarantees high organisational commitment. The application of the guidelines noted in the article by organisations will lead to increased organisational commitment and, ultimately, to improved outcomes.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Leadership Styles Theory

Leadership style is an important research topic and frequently features in organisational structure studies. Some of the most popular styles are transformational leadership and transactional leadership, which are contrast with each other. Nevertheless, both a transformational leader and a transactional leader can exhibit transformational behaviours, and a transactional leader can exhibit transactional behaviours, adapting to the situation (*e.g.*, a combination of transactional rewarding and transformational motivating) (Wojciechowska-Dzięcielak & Szumowski, 2021).

Many consider a transactional leader to be someone who manages a team by using a system of rewards and punishments. In this case, relationships with employees are based on an exchange of benefits – a reward for a task. Such leaders often appear authoritarian, task-oriented, and lacking empathy and flexibility. They strictly supervise and manage the team's tasks (Dong, 2023). A transactional leader is essential in formalised structures where a traditional, hierarchical management style prevails. Transactional leadership enables error control and ensures task predictability, which can be a key factor in achieving success in traditional organisations (Garzón Lasso *et al.*, 2024). Moreover, a transactional leader shows a strong correlation with task performance effectiveness and works well in the implementation of specific, measurable tasks (Gemeda & Lee, 2020).

On the contrary, a transformational leader is someone who focuses on the needs and motivations of team members. They approach them individually, not using a system of rewards and punishments to motivate them, but through personal influence, charisma, and by example. They build emotional bonds with the team, offering employees autonomy and self-fulfilment (Dong, 2023). Transformational leaders are well-suited to organisations implementing innovations. Their ability to stimulate creative and innovative thinking in the team allows for the development of innovative solutions (Rashwan & Ghaly, 2022; Le, 2020).

The transactional style maintains knowledge within an organisation through a system of rewards and structured processes. Meanwhile, the transformational style more positively affects knowledge creation and sharing (Eniola & Adeola, 2025). However, both leadership styles positively affect employee performance (Yapa *et al.*, 2024; Qalati *et al.*, 2022).

Thus far, researchers investigated the links between leadership style and work system, showing that transformational leadership affects the organisational commitment of on-site employees more substantially. In contrast, transactional leadership affects the organisational commitment of remote employees more significantly (Łucjan *et al.*, 2023). Other studies revealed that transformational leadership is the most preferred style of team management due to its positive impact on employee motivation, trust, and organisational commitment (Alshammari & Yambao, 2025). However, the area of moderating the relationship between leadership and organisational commitment by company industry, company size, company department, and employees' work position remains underexplored. Existing studies often treat these variables as additions rather than as key moderators. Furthermore, research in this area remains limited. However, there are indications that these are areas that should be considered when selecting a leadership style in an organisation (Garzón Lasso *et al.*, 2024; Dong, 2023; Garzón Lasso *et al.*, 2020).

According to the above-mentioned theory, transactional leadership may be necessary in traditional, hierarchical structures, but it will not support innovation in organisations (Garzón Lasso *et al.*, 2024; Rashwan & Ghaly, 2022). Leaders who use transactional behaviour can be successful in organisations that deal with technology and IT-related areas. This is due to the monitoring, control, and evaluation of activities occurring in such organisations. Moreover, the rewarding style used by transactional leaders positively affects the motivation of IT employees, who then feel understood and recognised (Wang *et al.*, 2021). Transformational leadership most strongly affects knowledge creation in the technology and healthcare sectors. Meanwhile, transactional leadership is best at retaining this

knowledge in the technology and finance sectors. Leadership style has proven key to knowledge management within the company. This allows organisations to consciously influence the process of knowledge creation and improvement (Eniola & Adeola, 2025).

The characteristics of the company industry may determine which leadership style will be most effective. The manufacturing industry appears more likely to achieve its goals when a democratic style is used instead of an autocratic, paternalistic, or laissez-faire style (Wei & Vasudevan, 2022). The transformational style is significant for the hotel industry during a crisis. It supports the development of innovation, commitment, and a culture of learning (Burton & Dickinger, 2025). Ethical leadership, which has common elements with transformational leadership (*e.g.*, caring for others and morale), directly influences the job satisfaction of restaurant employees and also reduces their stress levels (Yasir & Javed, 2024).

Company Size

Another factor determining the need for a specific leadership style is the company size. According to the results of a 2024 study, each leadership style has particular effects. In small and medium-sized enterprises, the transformational style motivates employees. The transformational style translates into employee job satisfaction, while the transactional style focuses on increasing productivity, but with the side effect of stress and burnout. The transactional style ignores employee needs, emotions, and well-being, which may even lead to lower morale among employees of small and medium-sized enterprises (Karácsony & Czibula, 2020; Berisha *et al.*, 2024). However, these findings are contradicted by an article suggesting that both transactional and transformational styles are better accepted and more effective in small enterprises, where community values, close relationships, and mutual support dominate. However, the transformational style shows a slightly stronger correlation with the effects of such an organisation (Cantermi & Lizote, 2022).

Large organisations differ from small organisations in terms of structure. Above all, the projects' complexity and an extensive hierarchy require carefully planned management. In large organisations, a transactional style can be successfully applied, which supports clear expectations, a top-down reward system, and necessary monitoring. However, the effect of transactional leadership may also depend on other factors, such as the project type or the organisation's cultural context (Abbas & Ali, 2023). Interestingly, a slightly older study shows that the larger the organisation, the lower the propensity to take risks, the more conservative the behaviour, and the lower the tendency to strengthen employee autonomy within the organisation. It is due to the difficulty of controlling such a large structure and the need to maintain a wide span of control. The importance of a directive style, which allows for control over the organisation, increases, while the significance of employee-oriented leadership decreases (Marx, 2017).

Company Department

Regardless of its size, every organisation has departments (formalised or informal) that differ in terms of their scope of tasks and the qualifications required of their employees. On the one hand, an organisation may run a strictly task-oriented department, characterised by repetitive tasks and requiring precise supervision, for which a transactional leader would be an excellent management solution. On the other hand, there are also departments where autonomy, innovation, and creativity are essential in everyday activities. These departments will then be better supervised by a transformational leader (Sunarsi *et al.*, 2021; Wang *et al.*, 2021; Garzón Lasso *et al.*, 2024).

However, there are situations in which a particular department requires different behaviours from a single leader, like in the sales department, where people-oriented leadership can increase loyalty and sales results. In contrast, task-oriented leadership can effectively resolve customer issues by establishing and following effective procedures (Kulat *et al.*, 2023).

Although few recent studies discuss the importance of departments for leader-employee relationships, a survey of university departments found that departments involved in development, teaching, research, and knowledge transfer are more likely to use elements of transformational leadership. On the other hand, administrative departments employ the transactional style (Chin *et al.*, 2024). Another, slightly older study showed that departments such as medical, fleet management, activities, and office

management, where cooperation and communication are essential, prefer the democratic leadership style. The operational departments that perform specific tasks, such as supply or finance, tend to favour the autocratic style. They need quick action and a clearly defined direction (Bhargavi & Yaseen, 2016).

Employee Work Position

Employee preferences regarding leadership style also affect the employee's work position. It turns out that the transformational style can boost job satisfaction for employees who formally act as leaders. In people without a formal leadership position, the effect of the transformational style was significantly weaker (Nielsen *et al.*, 2022). Meanwhile, a position with a clearly defined description and well-defined tasks responds best to transactional leadership (Al Rawas & Jantan, 2023).

The employee's work position in the organisational hierarchy also has a significant impact. A study in nursing departments showed that the higher the position in the hierarchy, the stronger the influence of transformational leadership on the department's perceived effectiveness. Thus, the level of hierarchy moderates the impact of leadership style on work performance. The effectiveness of leadership style does not depend only on the leader but also on the employee's work position (Stordeur *et al.*, 2000). A more recent article (Aras & Jufri, 2022) claims that there are no significant differences in preferred leadership styles across hierarchical levels. Despite this, the influence of transformational leaders on job satisfaction and organisational citizenship behaviour (OCB) was greater in groups of leaders than in groups of line employees.

Organisational Commitment in Different Work Environments

Organisations aspire to achieve competitive advantage, which depends partly on the commitment of the entire team to the organisation's results (Szostek *et al.*, 2020, 2025; Parmar *et al.*, 2022). On the one hand, committed employees are more loyal and productive, and the customer service they provide is of a higher standard. On the other hand, uncommitted employees deteriorate the organisation's performance (Canavesi & Minelli, 2022; Szostek *et al.*, 2023; 2022a; 2022b). One of the most popular typologies of organisational commitment is the division into affective commitment (AC), which refers to employees who are emotionally attached to their organisation, continuance commitment (CC), which characterises employees who continue to work out of fear of the potential costs of leaving and therefore treat remaining in the organisation as a duty, and normative commitment (NC), which refers to employees who feel a specific obligation to continue working in the organisation (Meyer & Allen, 1991).

Employee-supervisor relationships inform every working day. The leader can significantly affect employee commitment and the results of their work. Moreover, empirical research has shown that leadership style affects the type of employees' organisational commitment (Łucjan *et al.*, 2023; Najafabadi *et al.*, 2025). Factors such as work-related stress will harm organisational commitment. It is the leader who can contribute to its reduction if they adopt the right strategy, take the right actions, and behave in an appropriate way (Wojtczuk-Turek, 2024; Yasir & Javed, 2024).

Studies show that the division between public and private enterprises is significant for employee commitment. Public employees show higher continuance commitment, while private sector employees show higher levels of affective and normative commitment (Todorović *et al.*, 2024; Łucjan *et al.*, 2023; Nguyen & Nguyen, 2021). It is worth exploring this division by examining specific industries in terms of commitment and how the leadership style used affects it. Thus far, we know that for the IT industry the most important predictors of employee organisational commitment are issues related to work environment and support from supervisors (Nguyen *et al.*, 2024). On the other hand, effective organisational communication, training, rewards, and recognition can help build organisational commitment in a manufacturing company. However, the leadership style, which naturally influences other issues of importance to employees, turns out to be crucial. Ultimately, leadership style positively impacts all commitment types (AC, CC, NC) (Sampe *et al.*, 2023; Pham, 2022). These are issues worth developing and exploring in greater depth.

There are also studies that, taken together, allow us to deduce conclusions regarding the distinction between commitment and the size of the organisation and the work position. For example, in small and medium-sized enterprises, external rewards influence all three types of commitment (AC,

NC, CC), while team support most influences NC, and working conditions only influence AC and NC. In turn, CC is more strongly associated with job involvement and the constraints' perception. By continuously monitoring influencing factors, an organisation can consciously manage employees' commitment (Hadziahmetovic & Pozega, 2024; Shankar *et al.*, 2015). In large companies, high-performance HR practices (HPHRPs) positively impact all three types of commitment. The HPHRPs are high-quality HR practices based on the belief that properly treated employees will be key to organisational competitive advantage. Related high-commitment HR practices (HCHRP) that strongly support commitment affect employees' emotional bond with the organisation. This effect grows rather among key specialists than among other employees, which means that leaders are more likely to identify with the organisation when HCHRP are applied to them (Kwon *et al.*, 2010; Yang & Mostafa, 2024).

As discussed in this chapter, theory and available research findings suggest that the company industry, company size, the company department, and the employee's work position constitute important factors influencing the relationship between leadership style and organisational commitment. Hence, we proposed four hypotheses:

- H1:** The industry of the company moderates the relationship between leadership style and organisational commitment.
- H2:** The size of the company moderates the relationship between leadership style and organisational commitment.
- H3:** The company department moderates the relationship between leadership style and organisational commitment.
- H4:** The employee's work position moderates the relationship between leadership style and organisational commitment.

Figure 1 presents the framework of the hypotheses in the our investigation.

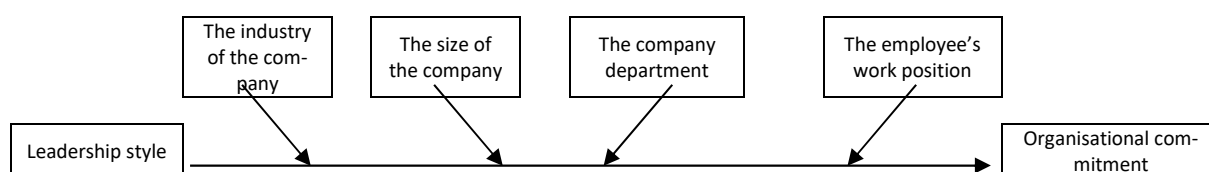


Figure 1. Visualisation of hypotheses

Source: own elaboration.

RESEARCH METHODOLOGY

Sampling Methods and Participant Characteristics

We collected the data in the form of 259 correctly completed questionnaires in February and March 2025 via an internet survey. We used nonprobability sampling, supported by a snowball technique. We posted the questionnaire on social media (Facebook) in groups that bring together professionals and

Table 1. Demographic profile of the test sample

Sex	F	162	62.5%
	M	97	37.5%
Age	18-25	59	22.8%
	26-33	115	44.4%
	34-65	85	32.8%
Work position	Assistant/Junior Specialist	27	10.42%
	Expert	21	8.11%
	Specialist	145	55.98%
	Manager	55	21.24%
	Owner	9	3.47%
	Other	2	0.77%

Source: own study.

people active in the labour market. Although access to the survey was open, the inclusion criterion for the analysis was the respondent's current professional activity. This yielded data from people with real-world experience. Table 1 presents the short demographic profile of the test sample.

Measurement Scales and Analysis Strategy

We used the model by Meyer and Allen (1991) to collect data on organisational commitment presented on the scale operationalised by Lee *et al.* (2001). (See Appendix A.) The scale presented items AC1-AC6, which defined affective commitment, items CC1-CC6, which described continuance commitment, and items NC1-NC6, which related to normative commitment. We measured employees' perspective of leadership style using the scale presented in Appendix B, composed by Jensen *et al.* (2019). The scale included items TFL1-TFL7, which represent the perception of transformational leadership, and items TCL1-TCL12, which represent the perception of transactional leadership. On both scales, inverted values are underlined in the appendices. The five-point Likert-type scale measured all items (1=strongly disagree, 5=strongly agree).

We processed the collected data using SEM. This method is widely used in management due to its suitability for measuring latent phenomena. This method considers multiple dependent variables, allowing for the control of error measurements and the assessment of both direct and indirect relationships, thus providing a complete and accurate overview of the analysed relationships. The method also provides greater flexibility than standard regression analysis (Balcerzak & Pietrzak, 2016; Chang & Ku, 2023; Anthonius *et al.*, 2025; Wach *et al.*, 2023; Waqas *et al.*, 2025; Teng & Wu, 2025).

RESULTS AND DISCUSSION

Model Verification

We analysed the collected data using IBM SPSS Statistics and IBM SPSS Amos v. 29. The confirmatory factor analysis allowed for selecting variables with the highest factor loadings. It proved vital for subsequent SEM calculations. Table 2 presents latent variables and their observable variables with Cronbach's alpha statistics and average variance extracted (AVE).

Table 2. Cronbach's alpha and AVE statistics of variables

Latent variables	Measurable variables (Components)	Cronbach's alpha internal consistency	AVE convergent validity
Affective commitment (AC)	AC2, AC3, AC4, AC5	0.867	0.755
Continuance commitment (CC)	CC1, CC2, CC3, CC5	0.775	0.746
Normative commitment (NC)	NC2, NC3, NC4, NC5	0.827	0.877
Transformational leadership (TFL)	TFL1, TFL2, TFL3, TFL6	0.923	0.502
Transactional leadership (TCL)	TCL1, TCL2, TCL4, TCL6	0.925	0.504

Source: own study.

We used the heterotrait-monotrait ratio of correlations (HTMT) to calculate discriminant validity. Table 3 presents the results of those calculations.

Table 3. Heterotrait-monotrait ratio of correlations (HTMT)

Variable	TCL	TFL	CC	NC	AC
TCL	–	–	–	–	–
TFL	0.630	–	–	–	–
CC	0.266	0.234	–	–	–
NC	0.346	0.335	0.113	–	–
AC	0.368	0.331	0.118	0.158	–

Source: own study.

Cronbach's alpha above 0.7 appeared for most of the variables, indicating that the questionnaire was reliable and accurately explored the phenomena in question. An AVE greater than 0.5 ensured relevance and that the tool used diagnosed the specified criterion well, and only this criterion. In addition, as we can see in Table 3, all HTMT values were less than 0.9, so there were no discriminant validity problems. Thus, the observable variables measured the corresponding latent variables.

Hypothesis Testing

Table 4 presents the results of the SEM factor analysis of the external model. All measurable variables describing latent variables had statistically significant factor loadings. We put '-' for items for which the p-value could not be verified.

Table 4. External SEM model estimation results

Relationship	Parameter	Evaluation of parameter	P
TCL6 ← Transactional leadership	α_1	0.788	0.000
TCL4 ← Transactional leadership	α_2	0.869	0.000
TCL2 ← Transactional leadership	α_3	0.916	0.000
TCL1 ← Transactional leadership	α_4	0.898	-
TFL6 ← Transformational leadership	α_5	0.756	0.000
TFL3 ← Transformational leadership	α_6	0.757	-
TFL2 ← Transformational leadership	α_7	0.962	0.000
TFL1 ← Transformational leadership	α_8	0.957	0.000
AC2 ← Affective commitment	α_9	1.073	0.000
AC3 ← Affective commitment	α_{10}	0.914	-
AC4 ← Affective commitment	α_{11}	0.932	0.000
AC5 ← Affective commitment	α_{12}	0.808	0.000
NC2 ← Normative commitment	α_{13}	0.588	0.000
NC3 ← Normative commitment	α_{14}	0.654	0.000
NC4 ← Normative commitment	α_{15}	0.795	-
NC5 ← Normative commitment	α_{16}	0.777	0.000
CC2 ← Continuance commitment	α_{17}	0.858	-
CC1 ← Continuance commitment	α_{18}	0.522	0.000
CC3 ← Continuance commitment	α_{19}	0.792	0.000
CC5 ← Continuance commitment	α_{20}	0.618	0.000

Source: own study.

The following tables present further results. Tables that contain information on the relationships between variables also have some bolded rows, which mark the statistical significance of the relationship based on the calculated p-values (assuming $p \leq 0.05$).

Concerning the hypothesis **H1** (The industry of the company moderates the relationship between leadership style and organisational commitment), Table 5 shows the results of the moderation hypothesised in H1. As we may see from the obtained results, most β parameters were statistically significant in all subgroups. The exceptions were the TCL→AC relationship in production, service, and medical organisations, the TCL→NC relationship in marketing and production organisations, and the TCL→CC relationship in service and medical organisations. In marketing and production organisations, TFL has the most substantial impact on AC and NC, and TCL on CC. In sales organisations, TCL had the strongest impact on AC, and TFL on NC and CC. Among service and medical organisations, TFL had a strong impact on all commitment types. Notably, in the production and sales groups, the model was not the best fit ($RMSEA > 0.1$), likely due to the small size of these subgroups, hence, the results for these organisations should be treated with caution. In summary, the impact of TCL on organisational commitment was most dominant in organisations related to engineering, technology, and IT, while TFL had the most substantial impact on services and medicine.

Table 5. Results of internal SEM model estimation in subgroups by the industry of the company

Relationship	Parameter	Engineering, technology, IT			Marketing			Production			Sales			Services and medicine		
		Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.
TCL → AC	β1	0.418	0.015	0.210	0.747	0.000	0.165	0.354	0.115	0.290	0.569	0.005	0.216	0.353	0.060	0.208
TCL → CC	β2	0.310	0.048	0.202	0.159	0.228	0.132	0.437	0.086	0.342	0.595	0.006	0.239	0.474	0.017	0.235
TCL → NC	β3	0.555	0.002	0.244	0.932	0.000	0.198	0.662	0.022	0.467	0.739	0.000	0.268	0.373	0.058	0.220
TFL → AC	β4	0.112	0.000	0.111	0.865	0.000	0.085	0.738	0.000	0.269	0.547	0.000	0.178	0.780	0.000	0.163
TFL → CC	β5	0.211	0.002	0.067	0.505	0.000	0.085	0.532	0.000	0.159	0.779	0.000	0.138	0.610	0.000	0.078
TFL → NC	β6	0.378	0.000	0.085	0.633	0.000	0.132	0.646	0.000	.0185	0.767	0.000	0.135	0.750	0.000	0.129
Measures of model fit		IFI = 0.906			IFI = 0.956			IFI = 0.782			IFI = 0.831			IFI = 0.933		
		RMSEA = 0.095			RMSEA = 0.063			RMSEA = 0.188			RMSEA = 0.167			RMSEA = 0.085		

Source: own study.

Concerning the hypothesis **H2** (The size of the company moderates the relationship between leadership style and organisational commitment), Table 6 below shows that parameters β_4 - β_6 were statistically significant in each subgroup. Parameter β_1 was significant only for organisations with 2-50 and 251-499 employees, and β_2 and β_3 for organisations with 2-50 and 500+ employees. In the smallest organisations, TCL has the strongest impact on NC, and TFL on AC and CC. In medium-sized organisations (51-499), TFL has a strong impact on commitment. In the largest organisations (500+), TCL dominates, but TFL has a significant impact on AC. The results indicate that in organisations with up to 499 employees, TFL has a more substantial impact on organisational commitment, while TCL has a stronger impact on commitment in the largest organisations.

Table 6. Results of internal SEM model estimation in subgroups by the size of the company

Relationship	Parameter	Number of employees in the organisation											
		2-50			51-250			251-499			500+		
		Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.
TCL → AC	β1	0.447	0.000	0.146	0.019	0.989	0.854	0.695	0.000	0.306	0.078	0.903	0.561
TCL → CC	β2	0.497	0.000	0.200	0.232	0.467	0.183	0.043	0.879	0.324	0.405	0.023	0.106
TCL → NC	β3	0.760	0.000	0.145	0.650	0.355	0.515	0.325	0.370	0.319	0.594	0.000	0.106
TFL → AC	β4	0.812	0.000	0.132	0.739	0.000	0.183	0.746	0.000	0.236	0.759	0.000	0.132
TFL → CC	β5	0.549	0.000	0.116	0.492	0.000	0.106	0.330	0.000	0.085	0.343	0.000	0.063
TFL → NC	β6	0.721	0.000	0.124	0.618	0.000	0.125	0.481	0.000	0.113	0.573	0.000	0.090
Measures of model fit	IFI = 0.928			IFI = 0.982			IFI = 0.912			IFI = 0.915			
	RMSEA = 0.098			RMSEA = 0.043			RMSEA = 0.095			RMSEA = 0.099			

Source: own study.

Concerning the hypothesis **H3** (The company department moderates the relationship between leadership style and organisational commitment), Table 7 shows the results of the moderation from hypothesis 3. As we can see from the bolded rows, the impact of TFL on each type of organisational commitment was significant in all subgroups. In the case of the relationship between TCL and organisational commitment, it achieved statistical significance only for parameter 3 in operations, logistics, and production departments. Moreover, TCL had the strongest impact on the departments of operations and logistics, leading to NC. Transformational leadership had the strongest impact on AC in production departments, and on both CC and NC in administration and support departments. Overall, the transactional leader has the strongest impact on operational and logistics departments, while the transformational leader has the strongest impact on administrative and support departments. However, the results in the operations and support departments should be considered with caution due to $RMSEA > 0.100$, which is most likely due to the small sample size in this subgroup.

Concerning the hypothesis **H4** (The employee's work position moderates the relationship between leadership style and organisational commitment), Table 8 shows the the results of the calculations within H4. As we can see, only parameter β_1 did not achieve statistical significance for the subgroups: specialist, manager/management, and expert, and parameter β_2 for the subgroups: manager/management and expert. The remaining parameters are statistically significant. TCL has the greatest impact on organisational commitment among employees with the lowest position – assistant/junior specialist – with the greatest impact on AC. Transformational leadership has the strongest impact on AC in the manager/management group and, subsequently, on CC and NC in the expert group. Looking at the results for hypoth-

esis 4 in general, we may conclude that transactional leadership works better among employees with lower positions, while transformational leadership works better for higher-level employees.

Table 7. Results of internal SEM model estimation in subgroups by the company department

Relationship	Parameter	Administration and support			Operations and logistics			Production			Marketing and sales		
		Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.
TCL → AC	β1	-0.116	0.995	0.985	0.091	0.987	0.969	0.014	0.989	0.854	-0.003	0.056	0.715
TCL → CC	β2	0.714	0.168	0.405	0.272	0.584	0.468	0.733	0.110	0.303	0.287	0.133	0.169
TCL → NC	β3	0.493	0.114	0.556	0.740	0.000	0.223	0.664	0.003	0.275	0.762	0.859	0.889
TFL → AC	β4	0.785	0.000	0.175	0.789	0.000	0.225	0.800	0.000	0.206	0.773	0.000	0.102
TFL → CC	β5	0.733	0.000	0.064	0.569	0.000	0.123	0.729	0.000	0.104	0.562	0.000	0.053
TFL → NC	β6	0.840	0.000	0.125	0.722	0.000	0.166	0.777	0.000	0.148	0.762	0.000	0.069
Measures of model fit	IFI = 0.918			IFI = 0.795			IFI = 0.910			IFI = 0.969			
	RMSEA = 0.097			RMSEA = 0.169			RMSEA = 0.098			RMSEA = 0.060			

Source: own study.

Table 8. Results of internal SEM model estimation in subgroups by the work position

Table of Results of Internal SEM Model Estimation in Subgroups by the Work Position													
Relationship	Parameter	Specialist			Manager / management			Assistant / Junior Specialist			Expert		
		Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.	Evaluation of standardised parameter	P	S.E.
TCL → AC	β1	0.358	0.151	0.246	0.073	0.899	0.496	0.969	0.000	0.266	-0.983	0.473	0.929
TCL → CC	β2	0.505	0.008	0.191	0.763	0.519	0.335	0.859	0.000	0.184	0.799	0.531	0.396
TCL → NC	β3	0.753	0.000	0.110	0.668	0.003	0.253	0.802	0.000	0.142	0.826	0.000	0.214
TFL → AC	β4	0.744	0.000	0.095	0.786	0.000	0.151	0.731	0.000	0.246	0.695	0.000	0.192
TFL → CC	β5	0.381	0.000	0.049	0.384	0.000	0.066	0.379	0.001	0.120	0.765	0.000	0.144
TFL → NC	β6	0.541	0.000	0.064	0.632	0.000	0.099	0.553	0.000	0.156	0.793	0.000	0.151
Measures of model fit	IFI = 0.953			IFI = 0.926			IFI = 0.923			IFI = 0.949			
	RMSEA = 0.069			RMSEA = 0.093			RMSEA = 0.098			RMSEA = 0.094			

Source: own study.

Although it is valuable to conduct another investigation with a larger sample, considering the above results, we present the hypotheses summary in Table 9 below.

Table 9. Hypotheses summary

Hypothesis	Decision
1	Confirmed
2	Confirmed
3	Confirmed
4	Confirmed

Source: own study.

Discussion

Theoretical Implications

We examined the role of moderators, *i.e.*, the industry of the company, the size of the company, the company department, and the employee's work position, in the relationship between leadership style and organisational commitment. Previous studies showed the existence of relationships between leadership style and organisational commitment (Łucjan *et al.*, 2023) and this study filled the gap in research on the role of the mentioned variables.

All hypotheses were confirmed. According to hypothesis 1, the company industry moderates the relationship between leadership style and organisational commitment. As it turns out, transactional leaders strongly influence organisational commitment among employees in engineering, technology, and IT organisations. This result confirms the conclusions of previous studies that employees in the technical and IT sectors feel understood and motivated by transactional leadership (Eniola & Adeola, 2025; Wang *et al.*, 2021). The results of H1 also show that transformational leaders had the strongest influence on services and medicine. This is consistent with the claim that transformational leaders have the greatest influence on knowledge creation in the technology and health sectors (Eniola & Adeola, 2025).

According to hypothesis 2, the size of the company shapes the relationship between leadership style and organisational commitment. As it turns out, in smaller organisations (up to 499 employees), commitment is most strongly influenced by a transformational leader, while in organisations with 500+ employees, a transactional leader dominates. This may be based on the theory that larger organisations require greater formalisation of communication, supervision, and control, which allows for effective resource management (Abbas & Ali, 2023). Meanwhile, a transformational leader can effectively motivate employees in smaller organisations by considering their needs, emotions, and well-being (Karácsony & Czibula, 2020; Berisha *et al.*, 2024).

When considering hypothesis 3, as well as the moderating role of departments within an organisation, we can observe that transformational leaders have the strongest influence on administrative and support departments. In contrast, transactional leaders have the strongest influence on operational and logistics departments. Sunarsi *et al.* (2021), Wang *et al.* (2021), Chin *et al.* (2024), and Garzón Lasso *et al.* (2024) also support these results. Transformational leadership offers employees autonomy, innovation, and creativity, while TCL offers precise supervision that guarantees the perfect execution of repetitive tasks. It is the operational departments that conduct the day-to-day activities of the organisation, which usually do not differ significantly from each other. These are certain algorithms and patterns that streamline its main operation, and whose supervision by a transactional leader can contribute to increased commitment. On the other hand, in administrative and support departments, autonomy in everyday life may be necessary, as such employees deal with various issues and are responsible for resolving specific situations correctly. Although this conclusion contradicts the conclusion of an earlier study, according to which transactional behaviours work better in administrative departments (Chin *et al.*, 2024), a transformational leader can provide the necessary support and atmosphere to increase commitment.

Not only the industry, the size, the department of the company, but also the hierarchy of the work position in the organisation is important for the preferred leadership style, as confirmed by hypothesis 4. A transactional leader can achieve the best results among assistants and juniors, and a transformational leader among higher-level employees such as managers, board members, or experts. This result

confirms that employees who formally hold leadership roles prefer their superiors to be transformational leaders who give them autonomy and care about their sense of importance, understanding, trust, and empathy (Nielsen *et al.*, 2022). On the other hand, among lower-level employees, where positions are rather clearly described and tasks to be performed are clearly defined, a transactional leader who controls the performance of these tasks will work better (Al Rawas & Jantan, 2023).

Considering the results of this and previous studies, organisations should pay particular attention to the relationship between leaders and employees. As it turns out, the industry of the company itself determines which leadership style will make employees more committed, which will translate into better results for the organisation. Organisations with up to 499 employees and traditional, hierarchical organisations should focus on a transactional leadership style, while larger organisations and those that focus on innovation and creativity should focus on a transformational style. Moreover, a division within the organisation can be applied. Among autonomous departments that require creative thinking and solving a variety of tasks, a transformational leader will work better, while departments with an orderly, repetitive list of tasks will achieve greater organisational commitment with a transactional leader. The most detailed division is the employee's work positions. As it turns out, lower-level employees will require a transactional leader to achieve better organisational commitment, while higher-level employees will require a transformational leader. Bearing in mind the essence of these distinctions, an organisation can relatively quickly increase commitment among its employees.

Managerial Implications

In view of our study results and those of previous studies, organisations should pay particular attention to the quality of the relationship between leaders and employees, as it constitutes a key mechanism shaping organisational commitment and, consequently, the overall performance. Importantly, the findings indicate that there is no universally optimal leadership style; instead, its effectiveness depends on contextual factors such as industry, organisational size, departmental specificity, and employee position. Therefore, managers should adopt a contingent approach to leadership, consciously adjusting their behaviours to the characteristics of the work environment.

From a practical perspective, organisations should implement differentiated leadership strategies at multiple levels. At the macro level, industry conditions should guide leadership development programmes. For example, in engineering, technology, and IT sectors, greater emphasis should be placed on transactional mechanisms such as clear goal-setting, performance monitoring, and reward systems, whereas in service- and knowledge-intensive contexts, organisations should invest in developing transformational competencies, including vision-building, empowerment, and inspiration. Similarly, organisational size should inform leadership structures: smaller and medium-sized firms benefit from relational and motivational approaches, while large, complex organisations require more formalised and control-oriented leadership practices.

At the meso level, HR policies should reflect intra-organisational diversity. Introducing differentiated leadership standards across departments can significantly enhance effectiveness. Operational and logistics units, characterised by routine and standardisation, should be managed through transactional leadership, ensuring efficiency and predictability. In contrast, administrative, support, and innovation-oriented units should be led by transformational leaders who foster autonomy and creativity.

Finally, at the micro level, leadership should be aligned with employees' hierarchical position. Lower-level employees benefit from structured guidance and clear expectations typical of transactional leadership, whereas higher-level employees, such as experts and managers, require greater autonomy, trust, and developmental support provided by transformational leaders. Implementing such a multi-level, adaptive leadership approach enables organisations to more precisely manage employee commitment and achieve sustainable improvements in performance.

CONCLUSIONS

The study filled the gap in detailed empirical research on the relationship between leadership style and organisational commitment. The main purpose of this article was to investigate the moderating

role of the company industry, company size, company department, and employees' work position in the relationship between leadership style and organisational commitment. The study showed that leadership style should be selected individually in each organisation, because its characteristics and the employee's work position determine the most effective leadership style for achieving a specific level of commitment among employees. A transformational leader will work better in creative, innovative organisations with up to 499 employees. More specifically, based on this study, we know that departments in an organisation that are autonomous and require a creative approach (e.g., administration) will achieve better organisational commitment thanks to a transformational leader, while departments with clearly defined, repetitive tasks (e.g., departments of operations or departments of logistics) will achieve better organisational commitment thanks to a transactional leader. The final division in the moderation was the employee's work position. Employees who work at lower levels, such as juniors or assistants, should be managed by a transactional leader, while a transformational leader should manage higher-level employees (experts, managers, and executives). In conclusion, this study provided very important and specific guidelines for the development of quality and management science, as well as practical implications for organisations operating in Central and Eastern Europe.

Limitations

There are some limitations to the described study. The first is the relatively limited subgroup size, which was reflected in high RMSEA in some models. Further research should be conducted on larger groups.

The sampling was non-random, so it cannot be representative and the results cannot be generalised. However, the diversity of the sample in terms of demographics and employment characteristics undoubtedly contributed to the increased value of the survey. Nevertheless, further studies should include a larger sample.

The final limitation is the subjectivity that respondents may have had in answering the questionnaires. Perhaps some valuable variables might have been omitted, but this approach allowed for the use of the structural equation model.

However, despite the limitations discussed above, the authors remain assured of the value the study provides for science. The study brings very valuable findings that can also be successfully applied to HR practice among organisations.

Future Studies

Future research, including the study of the scope of leadership style and organisational commitment, should primarily include a larger sample to improve the model's quality. Moreover, future research could examine other types of leadership styles, absent from this study, such as participative, charismatic, servant, or authoritarian. The inclusion of other leadership styles could shed new light on the perception of a leader's impact on organisational outcomes. Furthermore, future research could investigate latent employee traits such as submissiveness, self-confidence, or openness to interpersonal relationships. Such an advanced study would provide a new perspective to the management of organisations by showing how interactions between employee personality traits and leadership style affect the level of organisational commitment and long-term organisational results.

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Appendix A: Scale of the three-component model of organisational commitment

		1	2	3	4	5
AC1	I would be very happy to spend the rest of my career with this organisation.					
AC2	I really feel as if this organisation's problems are my own.					
AC3	I do not feel a strong sense of belonging to my organisation.					
AC4	I do not feel emotionally attached to this organisation.					
AC5	I do not feel like part of a family at my organisation.					
AC6	This organisation has a great deal of personal meaning for me.					
CC1	Right now, staying with my organisation is a matter of necessity as much as desire.					
CC2	It would be very hard for me to leave my organisation right now, even if I wanted to.					
CC3	Too much of my life would be disrupted if I decided I wanted to leave my organisation now.					
CC4	I feel that I have too few options to consider leaving this organisation.					
CC5	If I had not already put so much of myself into this organisation, I might consider working elsewhere.					
CC6	One of the few negative consequences of leaving this organisation would be the scarcity of available alternatives.					
NC1	I do not feel any obligation to remain with my current employer.					
NC2	Even if it were to my advantage, I do not feel it would be right to leave my organisation now.					
NC3	I would feel guilty if I left my organisation now.					
NC4	This organisation deserves my loyalty.					
NC5	I would not leave my organisation right now because I have a sense of obligation to the people in it.					
NC6	I owe a great deal to my organisation.					

Source: own elaboration based on Lee *et al.* (2001).

Appendix B: Scale of employees' perception of leadership

		1	2	3	4	5
TFL1	My leader concretises a clear vision for the organisation's future.					
TFL2	My leader communicates a clear vision of the organisation's future.					
TFL3	My leader makes a continuous effort to generate enthusiasm for the organisation's vision.					
TFL4	My leader has a clear sense of where he or she believes our organisation should be in 5 years.					
TFL5	My leader seeks to make employees accept common goals for the organisation.					
TFL6	My leader strives to get the organisation to work together in the direction of the vision.					
TFL7	My leader strives to clarify for the employees how they can contribute to achieving the organisation's goals.					
TCL1	My leader rewards the employees' performance when they live up to the leader's requirements.					
TCL2	My leader rewards the employees depending on how well they perform their jobs.					
TCL3	My leader points out what employees will receive if they do what is required.					
TCL4	My leader lets employees' effort determine the rewards received.					
TCL5	My leader gives individual employees positive feedback when they perform well.					
TCL6	My leader actively shows his or her appreciation of employees who do their jobs better than expected.					
TCL7	My leader generally does not acknowledge individual employees even though they perform as required.					
TCL8	My leader personally compliments employees when they do outstanding work.					
TCL9	My leader gives negative consequences to the employees if they perform worse than their colleagues.					
TCL10	My leader makes sure that there are consequences for employees if they do not consistently perform as required.					
TCL11	My leader takes steps to deal with poor performers who do not improve.					
TCL12	My leader gives negative consequences to his or her employees if they do not perform as the leader requires.					

Source: own elaboration based on Jensen *et al.* (2019).

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The contribution share of authors was as follows: KŁ – 40%, DS – 20%, APB – 20%, ER – 20%.
KŁ – conceptualisation, literature writing, methodology, results, calculations, DS – conceptualisation, discussion, APB – conceptualisation, results, conclusions, discussion, ER – results, conclusions, discussion.

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Use of Artificial Intelligence

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