



Effect of Transformational Leadership and Organizational Citizenship Behavior: Determining the Roles of Supervisor Identification, and Self-determination in the Automobile Industry

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ABSTRACT

Background and Purpose: The present study analyses the impact of transformational (TL), transactional (TRL) and laissez-faire styles (LSF) of leadership on Organizational Citizenship Behavior (OCB) of employees in the context of the automobile industry. Moreover, the study also focuses on the mediating effect of self-determination (SDE) and the moderating role of supervisor identification (SD) on the proposed correlation. **Method:** The primary data for the study was collected by designing a survey questionnaire. The questionnaires were distributed among the employees from the automobile industry and a final sample of 312 responses was utilized. The data was analyzed through the application of PLS-SEM. **Findings:** The study validated a positive and significant relationship between LSF and OCB. Similarly, TRL and OCB were positively and significantly related. Notably, TL was an insignificant predictor of OCB. SD exerted a significant moderating role in the association between TRL and SDE only. The evaluation of the mediating role of SDE in the association between leadership styles and OCB revealed that SDE significantly mediated the association between TL and OCB, and TRL and OCB. Nevertheless, SDE was an insignificant mediator in the association between LSF and OCB. **Conclusion and Implications:** Thus, the findings of the present study hold significance for leaders from automobile industry leaders and offer guidance to design strategies for enhancing the OCB and workplace engagement through effective leadership strategies.

Keywords: Transformational leadership, Organizational citizenship behavior, Leadership styles, Supervisor identification, Self-determination

1. INTRODUCTION

The increasing globalization in contemporary times is replete of challenges for organizations of multiple sectors that have to efficiently compete in this global competition. This efficient competition can be accomplished by managing the organizational behavior in companies (Ridwan et al., 2020). Organizational Citizenship Behavior (OCB), in this accordance, is introduced 30 years ago which is defined as individual behavior that promotes the efficient functioning of an organization (de Geus et al., 2020). The importance of OCB is a multidimensional concept that encourages the organizations to use citizenship behavior to enhance organizational performance. In this accordance, OCB is an essential aspect of organizational performance as it encourage the employees of company to perform efficiently. Soelton (2023) states that OCB is a priority concern for organizations in present times as it is an effective response to intense competition and dynamic challenges. Because of the significant implication of OCB in organizational performance it remains one of the most discussed aspects in literature.

The automobile industry is an important industrial sector in the world that has potential to generate efficient revenue for a country. Sathasivam et al. (2021) indicate that automobile industry is a capital and knowledge intensive industry which shapes the economy and growth of a country. Figure 1 illustrates the graph of growth of automobile sector globally which highlights its significance in the contemporary world. The importance of the respective industry highlights the need of the efficient performance and citizenship behavior of employees thus, it is extensively crucial to improve the individual performance in this industry (Esmaeili et al., 2019). Moreover, the existing studies on this topic has highlighted the issue of employee performance in the automobile industry which significantly influence the performance of respective industry and thereby cause adverse economic impacts (Badrianto & Ekhsan, 2020; Purwanto, 2020). In this accordance, it is the dire need of time to investigate which aspects can have significant impact on OCB and improve citizenship behavior of employees in automobile sector.

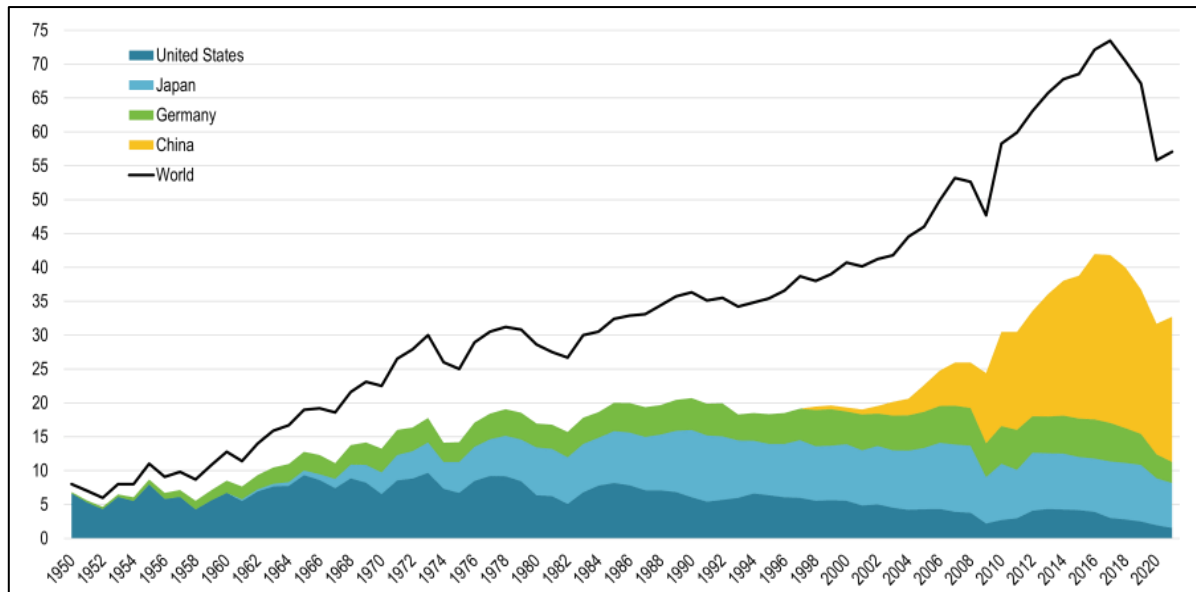


Figure 1: Growth of the Automobile Sector (1950-2020)

Source: (Transport Geography, 2022)

Transformational leadership is one of the noteworthy aspect that can be associated with OCB as leader presenting transformational attitude empower the employees and assist them to excel in their work with this particular behavior (Lee et al., 2023). Guided by transformational leadership, the citizenship behavior of employees comes from sense of obligation when they are well and effectively treated by their leaders. Qalati et al. (2022) also state that leadership significantly impacts the behavior and attitude of employees which impact individual and organizational outcomes. Likewise, other types of leadership like transactional leadership and laissez-faire leadership also have significant association with OCB of employees. In addition to it, supervisor identification and support also enhance the performance of employees and plays an important role in development of OCB (Kaur & Randhawa, 2021).

Many existing studies have explored the impact of leadership and supervisor support in development of OCB (Lee et al., 2018; Purwanto, 2022; Thompson et al., 2020; Yadav & Rangnekar, 2015), however, they had generated mixed results. Accordingly, it is significant to explore the impact of these aspects on OCB to formulate authentic and reliable results. Furthermore, the OCB in different industrial sectors have been explored by existing research scholars, nevertheless, there is scarcity of such studies within the context of automobile industry. To fill these gaps, this study aims to explore the impact of leadership (transformational, transactional, and laissez-faire leadership) on OCB. In addition, this study

also tends to explore the mediating impact of self-determination and supervisor support on the association with leadership and OCB.

Considering the significant association among these variables, this study clearly depicts the importance of OCB in the automobile industry. The findings of the study, therefore, have several implications for research scholars, practitioners of automobile sector and policymakers as it highlights important aspects that can enhance OCB in the automobile firms and improves organizational performance. The rest of paper is structured as follows; section 2 discussed literature review in which investigation of the past studies of the topic will be indicated, section 3 discusses the methodology that is employed to collect and analyze data, and section 4 highlights the results. In the end, section 5 of this paper discusses the results, formulate conclusion, bring forth implications of study and highlight limitations observed in this paper which can pave path for future researchers to further explore the respective topic.

2. LITERATURE REVIEW

2.1. Transactional leadership theory

Transactional leadership theory was first developed by Max Weber in 1947. According to this theory the transactional leadership styles are the methods adopted by the leaders that bring out the desired outcomes from the subordinates based on rewards and punishment (Stevens, 2022). Weber postulated that the behavior of reward and punishment from the leader motivates the followers to achieve the task assigned to them more effectively. According to transactional leadership theory there is exchange or transaction of knowledge, skills, efforts, and resources from the leader to the subordinates as rewards. When there is transaction of rewards to the followers it helps it motivates them to achieve the optimum results and to focus on the goals. Transactional leadership is very important in management abilities. It is mostly adopted by the managers in the organizations to develop in the employees a self-motivation behavior with the result oriented approach (Kabiru & Bula, 2020). The reward driving behavior by the leaders towards the employees helps them to develop self-determination which causes them to work more effectively and efficiently to achieve the desired outcome. Organizational citizenship behavior which is the positive atmosphere created inside an organization by the interaction among the employees and the interactions between the leaders and the employees is supported by the transactional leadership style (Lauck, 2019). Organizational citizenship behavior is not only impacted by transactional leadership styles but also many other leadership styles such as transformational leadership and laissez-faire leadership style. All these leadership styles tend

to develop in the employees a sense of self-determination which helps in the effective accomplishment of their goals. Moreover, a sense of supervisor identification also paves the way for organizational citizenship behavior (Lauck, 2019).

Table 1: *Definition of variables*

Variables	Definitions
Transformational leadership	Transformational leadership can be defined as the leadership approach that brings about change in the followers and in the social systems by the use of technology and support, guidance and motivating the individuals to foster the change (Kotamena et al., 2020).
Transactional leadership	Transactional leadership is a leadership style that refers to the exchange or transaction of skill, knowledge and resources and the use of extrinsic motivation to bring about the optimal performance from the followers (Jensen et al., 2019).
laissez-faire leadership	Laissez-faire leadership style refers to the leadership in which leader trust their followers and give them autonomy to handle their task on their own provided the basic needed guidance (Lundmark et al., 2022).
Organizational citizenship behavior	Organizational citizenship behavior is the positive and constructive behavior of employee towards the organization where the employee voluntarily do positive actions for the organization that are not part of his or her job contract (de Geus et al., 2020).
Self determination	Self-determination can be defined as the legal and fundamental right of people to decide their own fate, actions and orientations (Vasconcellos et al., 2020).
Supervisor identification	Supervisor identification refers to the sense of oneness of follower with the supervisor that is the respect of follower for one's supervisor and considering their success as one's own success (Johnson & Umphress, 2019).

2.2. Transformational leadership style and organizational citizenship behavior

Transformational leadership styles refer to the methodologies of leadership that transform the followers into leaders. Transformational leadership is the leadership that foster change among the employees (Purwanto, 2022). According to the study of Purwanto et al. (2021) transformational leadership bring about innovation, creativity and the power to achieve goal by intellectual stimulation. It not only stimulates intellectually but also considers each individual employee and inspires them to bring optimism, productivity, and the vision to achieve the best results. Transformational leadership therefore brings change through support, guidance and shared vision which develop in the employees a sense of inspiration towards their leader causing them to develop the attributes of a leader. Organizational citizenship behavior

on the other hand is the positive commitment of the employees towards their organization on their own will, which is not a part of their formal job contract (Purwanto, 2022). According to the study of Budur and Poturak (2021) the impact of transformational leadership on the organizational citizenship behavior is significant and positive. Transformational leadership styles directly correlate with the organizational citizenship behavior as it develops in the employees a behavior of sportsmanship, altruism and courtesy through the continued support and guidance from the leader towards the employees.

H1: The impact of Transformational leadership style on organizational citizenship behavior is significant.

2.3. Transactional leadership style and organizational citizenship behavior

Transactional leadership style relies mostly on the extrinsic motivation to bring about quality performance. It focuses on the achievement of goals by developing reward and punishment-based behavior among employees. Transactional leadership develop the voluntary work intention among the employees as they know to get incentives on their work (Dartey-Baah et al., 2021). It develops a positive work environment with employees being satisfied by their leaders and bringing quality to their work. Transactional leadership basically motivates the employees to achieve the desired outcome by the exchange of knowledge, skills and resources between leaders and subordinates. Organizational citizenship behavior is strongly impacted by the transactional leadership styles (Dartey-Baah et al., 2021). According to the study of Nugraha (2021) transactional leadership significantly and positively impact the organizational citizenship behavior. The reward giving behavior adopted in transactional leadership develops in the employees the attribute such as volunteering for extra work, cooperative behavior with other employees and sharing of ideas. These attributes are the key factors driving organizational citizenship behavior. Thus, transactional leadership significantly impacts organizational citizenship behavior.

H2: The impact of Transactional leadership style on organizational citizenship behavior is significant.

2.4. Laissez-faire leadership style and organizational citizenship behavior

Laissez-faire leadership style refers to the leadership that gives the employees a sense of freedom to make their decisions on their own. This leadership style gives the employees support and guidance and builds trust in them to handle their tasks on their own. Laissez-faire

leadership encourage the risk taking behavior and creativity in the employees (Masood et al., 2020). It fosters the development of a welcoming work environment that is found satisfactory by the employees, and they tend to perform well when they are given freedom to handle every task and solve every problem on their own. When employees realize the reliance of the organization on them with the build in trust of organization in the employees, it gives the employees a sense of more responsibility towards their work and thus bring productivity. Organizational citizenship behavior is strongly influenced by the Laissez-faire leadership (Saez, 2020). According to the study of Khan et al. (2020) Laissez-faire leadership strongly and positively impact the organizational citizenship behavior. As Laissez-faire leadership style has trust in employees and gives them freedom it develops in the employees the attributes of civic virtue, courtesy, and sportsmanship. These virtues are the key points for organizational citizenship behavior, where employees tend to have a positive and constructive behavior towards their organization. Thus, Laissez-faire leadership significantly impacts organizational citizenship behavior.

H3: The impact of Laissez-faire leadership style on organizational citizenship behavior is significant.

2.5. The mediating role of self-determination

Self-determination means the right of people to decide their own lives, destiny, or fate. Self-determination according to Gilal et al. (2019) is the motivation of that one gets from one's own perception and not from the external sources. According to the self-determination theory as well the self-determination means the people have autonomy that is the power or capacity to handle the work, risks etc. on their own and endorsing one's own behavior. Self-determination gives people a sense of competence and motivation that is derived from one's own choices and not external influences. Self-determination is found to be strongly influencing the organizational citizenship behavior by being mediated by transformational leadership, transactional leadership and Laissez-faire leadership styles (Gilal et al., 2019).

Transformational leadership style brings about positive change, innovation, and creativity in the employees by using technology or emotional support and guidance. Self-determination, which is the motivation that one has on its own enhances the impact of transformational leadership on organizational citizenship behavior. When one have enough self-determination he or she is more able to adapt the change brought about by the transformational leadership

and is willing to transform to a leader, is more likely to contribute voluntarily and positively towards the organization thus impacting organizational citizenship behavior (Kim et al., 2020).

Transactional leadership style's impact on organizational citizenship behavior is also impacted by the self-determination. Self-determination develops the inspiration for work when there is known incentive and reward for that work. Transactional leadership motivates the employee to bring quality and efficient work by giving them rewards and incentive in return. Thus, the self-determination glorifies the transactional leadership style and so is its impact on the organizational citizenship behavior (Nugraha, 2021).

Laissez-faire leadership style is another leadership style impacting organizational citizenship behavior via self-determination. Laissez-faire leadership show the reliance of organization on the employees with trust in them thus helping them with their self-determination and thus impacting the organizational citizenship behavior significantly (Naz et al., 2021).

H4: The mediating role of self-determination between transformational leadership style and organizational citizenship behavior is significant.

H5: The mediating role of self-determination between transactional leadership style and organizational citizenship behavior is significant.

H6: The mediating role of self-determination between Laissez-faire leadership style and organizational citizenship behavior is significant.

2.6. The moderating role of supervisor identification

Supervisor identification is the identification of the supervisor that the employees get via communication and development and have oneness with the supervisor considering his success as their own success. Supervisor identification develops in the employees a pride in their supervisor which causes them to work honestly and efficiently under his or her supervision considering the success of the supervisor as their own success. Supervisor identification strongly impact the organizational citizenship behavior by impacting transformational leadership, transactional leadership and Laissez-faire leadership styles (Marstand et al., 2021).

Transformational leadership style's impact on the organizational citizenship behavior is glorified by the supervisor identification. Transformational leadership brings about change by support and guidance transforming followers into leaders that fosters the supervisor identification, thus significantly impacting the organizational citizenship behavior (Ahmad Bodla et al., 2019).

Transactional leadership style promotes effective working by reward and incentive production. When the leader motivates and inspires the employees by giving them incentives and reward on their work it makes the employees the develop the supervisor identification, that is the respect for their leader developed through the strong bind of communication and interaction between the employee and the leader. Therefore, supervisor identification significantly impact the organizational citizenship behavior by transactional leadership style (Hameed Al-ali et al., 2019).

Laissez-faire leadership style fosters the development of effective work orientation in the employees by the building of trust in them. They have a sense of reliance that causes the employees to work more effectively and productively. Actually, this is moderated by the supervisor identification. Laissez-faire leadership provides the way for supervisor identification due to the trust of the supervisor in the employees thus impacting the organizational citizenship behavior (Banwo & Du, 2020).

H7: The moderating role of supervisor identification between transformational leadership and organizational citizenship behavior is significant.

H8: The moderating role of supervisor identification between transactional leadership and organizational citizenship behavior is significant.

H9: The moderating role of supervisor identification between Laissez-faire leadership and organizational citizenship behavior is significant.

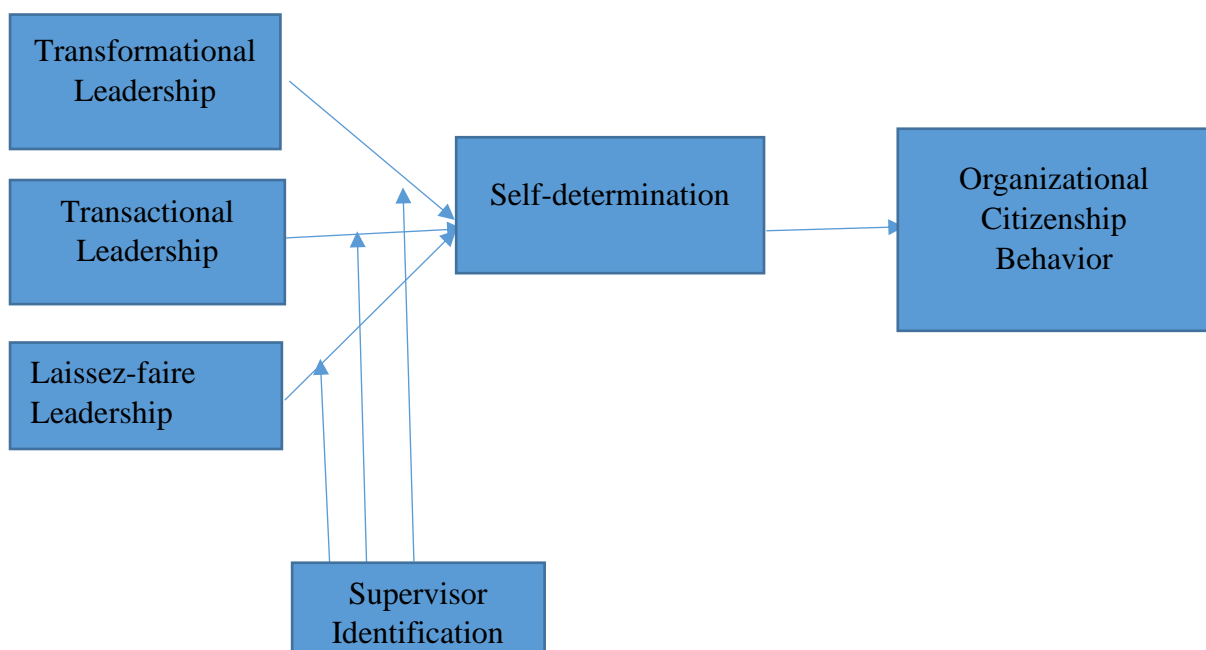


Figure 2: Research Model

3. METHODOLOGY

3.1. Participants and Procedure

This study is grounded in a positive paradigm which laid the basis for a quantitative methodology for investigating the proposed hypotheses. The primary data in this data was collected using a survey method within a cross-sectional design. The selection of the survey strategy was in line with the research goals and aided in the collection of data from a sufficient sample size. The target sector of the present study was the automobile industry. Hence, questionnaires were the primary tool to collect data from employees in the automobile industry. Using a convenience sampling technique, online social media platforms were utilized for the distribution of questionnaires. A voluntary participation approach was adhered to during the data collection, implying that the respondents were under no pressure to take part in the survey and informed consent was taken. Of the 329 questionnaires received, 17 were excluded due to incomplete responses, leading to a final set of 312 responses.

3.2. Measures

The questionnaire comprised items selected from existing scales to ensure the rigor of the study as the existing scales are widely used and validated in previous research. The validity of the constructs was also established using an expert panel of academics and practitioners. The questionnaire also consisted of demographic information such as the age, gender, and position of respondent. Items for the variables were rated using a Likert scale from 1 to 5. Leadership styles are measured using the adapted version of the widely known “Multifactor Leadership Questionnaire” (MLQ) by Bass and Avolio (1996). Therefore, in this study, the work of Moors (2012) was used to adopt items for transformational, transactional and laissez-faire leadership styles. Six items were used for transformational leadership and an item example is “To me, my direct supervisor is a symbol of success and expertise.” Five items each measured transactional and laissez-faire leaderships (Moors, 2012). Sample item for transactional leadership include “My direct supervisor tells me what I need to do to be rewarded for my efforts” and for LF, the item example is “My direct supervisor only takes action when things go wrong.” For supervisor identification, ten items were adopted from Walumbwa and Hartnell (2011) and sample item is “I have a sense of partnership with my supervisor.” Self-determination is frequently operationalized using feelings of autonomy and competence, and in this regard, five items were adopted from Bauer and Mulder (2006) from the autonomy scale to gauge self-determination. An example of item includes “I am satisfied with my possibilities for co-determination.”. Using

the work of Lee and Allen (2002), eight items were used to gauge OCB and a sample item is given as “I assist others with their duties.”

3.3. Analytical Procedure

The analysis of the data was performed through the use of statistical software SmartPLS. In the initial part of the analysis, the techniques to assess measurement model included testing for internal consistency, reliability, and validity. This involved the application of indicators such as Cronbach’s alpha, composite reliability (CR) and average variance extracted (AVE) (Aburumman et al., 2022). In the second part of the analysis, the fitness of the model was analyzed and lastly, the proposed relationships in the study were evaluated using structural equation modelling (SEM). PLS-SEM offers several benefits such as the evaluation of the measurement model while simultaneously establishing the structural model (Aburumman et al., 2022; Hair et al., 2019) with high predictive power of PLS-SEM compared to Covariance-based SEM (Hair et al., 2019). Hence, this technique provides researchers with the capability to analyze latent constructs and supports the testing of indirect variables. Notably, PLS-SEM has been used in several leadership-based studies as observed in the prior research works (Aboramadan & Kundi, 2020; Amankwaa et al., 2019).

4. FINDINGS

Following the suggestion by scholars (Hair et al., 2021), the outer loadings of the indicators were judged against the criteria of 0.7 with items below the threshold were excluded. Table 2 confirmed that all the outer loadings of each item of the constructs were greater than 0.7.

Table 2: *Outer Loadings*

	LSF	OCB	SD	SDE	TL	TRL
LSF1	0.847					
LSF2	0.835					
LSF3	0.813					
LSF4	0.624					
OCB1		0.821				
OCB2		0.851				
OCB3		0.843				
OCB4		0.849				
OCB5		0.853				
OCB6		0.839				
OCB7		0.845				
SD1			0.823			
SD10			0.898			

SD2	0.808			
SD3	0.936			
SD4	0.922			
SD5	0.908			
SD6	0.933			
SD7	0.894			
SD8	0.91			
SD9	0.926			
SDE1		0.813		
SDE2		0.798		
SDE3		0.849		
SDE4		0.885		
SDE5		0.85		
TL1			0.802	
TL2			0.835	
TL3			0.835	
TL4			0.846	
TL5			0.837	
TL6			0.85	
TRL1				0.846
TRL2				0.871
TRL3				0.832
TRL4				0.834
TRL5				0.874

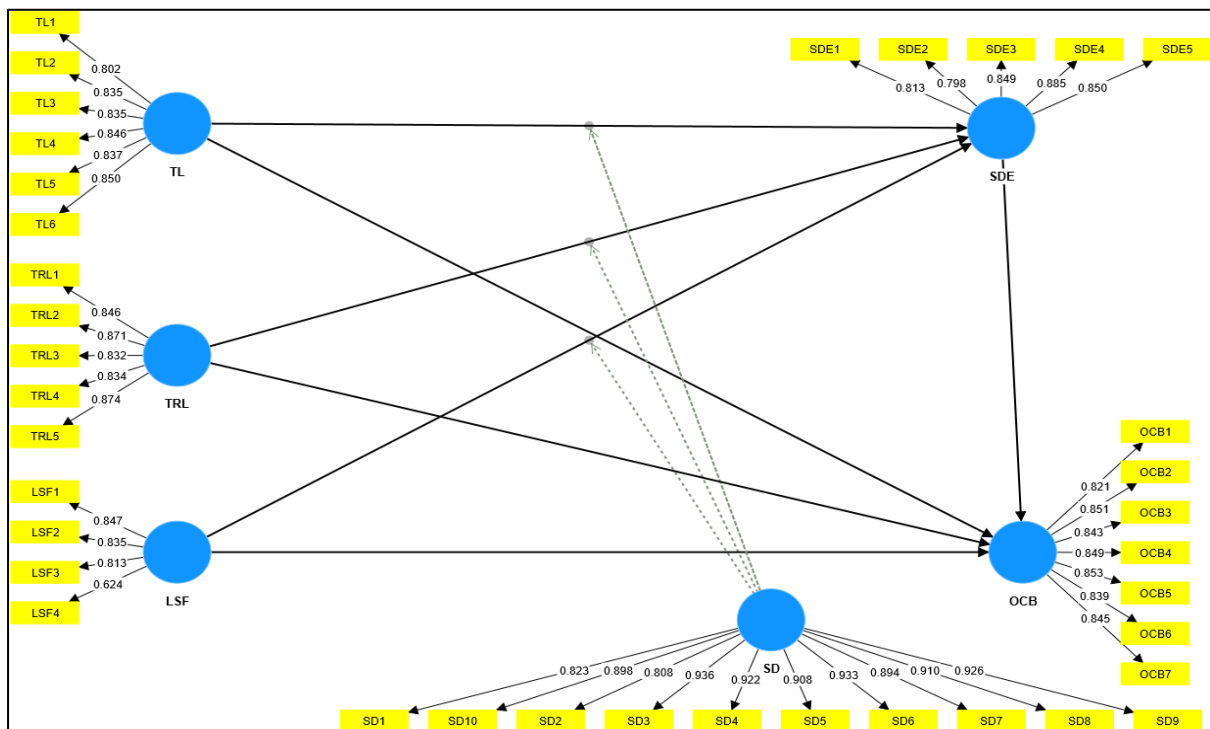


Figure 3: Outer Loadings

Using Cronbach's alpha, the internal consistency of the items was validated, as shown in Table 3. Values above 0.6 are regarded reliable (Chien et al., 2021). Similarly, reliability was further ensured using composite reliability where values greater than 0.7 were deemed acceptable (Hair et al., 2021). In terms of the convergent validity, the criterion of > 0.5 was used and Table 3 verified that the AVE values for all the constructs surpassed the threshold. Therefore, no issue of convergent validity was found (Shrestha, 2021).

Table 3: Reliability and Convergent Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
LSF	0.786	0.785	0.864	0.616
OCB	0.932	0.936	0.945	0.711
SD	0.973	0.974	0.976	0.804
SDE	0.895	0.898	0.923	0.705
TL	0.913	0.913	0.932	0.696
TRL	0.905	0.906	0.93	0.725

“Note: LSF= Laissez-faire leadership, TL= Transformational leadership, TRL= Transactional leadership, OCB= Organizational citizenship behavior, SD= Supervisor Identification, SDE= Self-determination”

To assess discriminant validity, two tests were utilized. The Fornell-Larcker criteria is presented in Table 4 while cross-loadings are shown in Table 5. The square root of AVE is shown in the diagonal line in Table 4 which must be greater than the cross-loadings. This criterion holds for all the variables, except LSF and SD where cross-correlation is slightly higher than own correlation of LSF. Nonetheless, a higher correlation does not always signify a discriminant validity problem (Rönkkö & Cho, 2022).

Table 4: Discriminant Validity

	LSF	OCB	SD	SDE	TL	TRL
LSF	0.785					
OCB	0.526	0.843				
SD	0.866	0.488	0.897			
SDE	0.47	0.348	0.417	0.84		
TL	0.616	0.443	0.506	0.579	0.834	
TRL	0.489	0.59	0.469	0.701	0.571	0.852

“Note: LSF= Laissez-faire leadership, TL= Transformational leadership, TRL= Transactional leadership, OCB= Organizational citizenship behavior, SD= Supervisor Identification, SDE= Self-determination”

Additionally, Table 5 demonstrates that every item of each construct displayed a higher loading with its factor compared to cross-loadings. Only one item of LSF showed a slightly higher cross-loading with SD. Hence, discriminant validity was established.

Table 5: *Cross-loadings*

	LSF	OCB	SD	SDE	TL	TRL
LSF1	0.847	0.468	0.761	0.371	0.445	0.42
LSF2	0.835	0.4	0.72	0.341	0.413	0.351
LSF3	0.813	0.343	0.885	0.313	0.413	0.348
LSF4	0.624	0.409	0.373	0.422	0.624	0.391
OCB1	0.495	0.821	0.484	0.343	0.443	0.52
OCB2	0.468	0.851	0.445	0.333	0.429	0.512
OCB3	0.476	0.843	0.451	0.323	0.433	0.498
OCB4	0.446	0.849	0.397	0.298	0.38	0.535
OCB5	0.416	0.853	0.384	0.223	0.293	0.471
OCB6	0.381	0.839	0.334	0.25	0.283	0.44
OCB7	0.395	0.845	0.351	0.251	0.307	0.489
SD1	0.808	0.476	0.823	0.419	0.465	0.437
SD10	0.753	0.416	0.898	0.302	0.41	0.39
SD2	0.804	0.515	0.808	0.394	0.476	0.441
SD3	0.789	0.422	0.936	0.382	0.478	0.416
SD4	0.771	0.389	0.922	0.366	0.43	0.399
SD5	0.772	0.431	0.908	0.372	0.456	0.425
SD6	0.774	0.409	0.933	0.38	0.453	0.408
SD7	0.741	0.448	0.894	0.322	0.445	0.398
SD8	0.763	0.437	0.91	0.388	0.485	0.457
SD9	0.761	0.412	0.926	0.381	0.419	0.412
SDE1	0.388	0.282	0.341	0.813	0.476	0.557
SDE2	0.357	0.27	0.296	0.798	0.472	0.566
SDE3	0.384	0.268	0.363	0.849	0.451	0.574
SDE4	0.425	0.31	0.393	0.885	0.527	0.625
SDE5	0.413	0.325	0.354	0.85	0.502	0.616
TL1	0.606	0.388	0.454	0.492	0.802	0.468
TL2	0.513	0.372	0.421	0.52	0.835	0.488
TL3	0.537	0.359	0.421	0.479	0.835	0.449
TL4	0.478	0.372	0.41	0.471	0.846	0.496
TL5	0.465	0.353	0.395	0.438	0.837	0.481
TL6	0.478	0.371	0.428	0.491	0.85	0.475
TRL1	0.406	0.497	0.395	0.609	0.495	0.846
TRL2	0.418	0.488	0.439	0.616	0.487	0.871
TRL3	0.416	0.481	0.409	0.581	0.493	0.832
TRL4	0.391	0.502	0.348	0.555	0.451	0.834
TRL5	0.45	0.544	0.404	0.621	0.503	0.874

“Note: LSF= Laissez-faire leadership, TL= Transformational leadership, TRL= Transactional leadership, OCB= Organizational citizenship behavior, SD= Supervisor Identification, SDE= Self-determination”

The findings in Table 6 signify the predictive power of the model, indicating that 44% of the variability in OCB is explained by the explanatory factors while the variance in SDE is accounted for by the predictors by 54.1%.

Table 6: Coefficient of Determination

	R-square	R-square adjusted
OCB	0.447	0.44
SDE	0.551	0.541

For model fitness, the cut-off value for SRMR is 0.08; thus, the criterion was met (Tingaz et al., 2023). In addition, the NFI value of 0.802 provided evidence for model fitness as a benchmark of 0.8 has been used by researchers previously (Li et al., 2022).

Table 7: Model Fitness

	Saturated model	Estimated model
SRMR	0.066	0.066
d_ULS	3.074	3.066
d_G	1.462	1.462
Chi-square	2383.044	2380.998
NFI	0.802	0.803

The assessment of the proposed hypotheses was carried out with the results displayed in Table 8. It was observed that LSF positively impacted OCB among employees in the automobile industry. With a p-value of 0.00, the association was significant at a 1% significance level. On the other hand, while TL was positively influenced, the association was regarded statistically insignificant with a p-value of 0.53. TRL also positively impacted OCB and the association was statistically significant at a 1% significance level. In terms of the indirect role of SD, the study outcomes showed that SD was an insignificant moderator in the association between LSF and SDE while it significantly moderated the association between TRL and SDE at a low significance level. SD negatively and insignificantly moderated the association between TL and SDE. Regarding the mediation of SDE, the study validated the role of SDE as a mediator in the association between TL and OCB, and TRL and OCB at a 1% significance level. However, SDE did not exert a significant mediating impact in the association between LSF and OCB.

Table 8: Hypothesis Testing

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
LSF -> OCB	0.326	0.33	0.07	4.682	0
TL -> OCB	0.052	0.05	0.082	0.628	0.53
TRL -> OCB	0.564	0.565	0.062	9.131	0
SD x LSF -> SDE	0.072	0.072	0.059	1.236	0.217
SD x TRL -> SDE	-0.098	-0.098	0.061	1.609	0.108
SD x TL -> SDE	-0.027	-0.027	0.056	0.486	0.627
TL -> SDE -> OCB	-0.058	-0.058	0.021	2.788	0.005
LSF -> SDE -> OCB	-0.013	-0.014	0.022	0.589	0.556
TRL -> SDE -> OCB	-0.122	-0.121	0.033	3.651	0

“Note: LSF= Laissez-faire leadership, TL= Transformational leadership, TRL= Transactional leadership, OCB= Organizational citizenship behavior, SD= Supervisor Identification, SDE= Self-determination”

5. DISCUSSION AND CONCLUSION

The results of the analysis show important things about organizational behavior, particularly about the relationship between leadership styles (TL, TRL, and LSF) and organizational citizenship behavior (OCB), which is mediated by self-determination (SD) and supervisor identification (SDE).

First, a strong positive correlation has been shown between OCB and the Laissez-faire (LSF) leadership style ($p < 0.05$). This suggests that when leaders take a more detached approach, employees are more inclined to take on roles that go beyond what is required of them. This research supports the body of literature that already exists and emphasizes how empowerment and autonomy promote organizational citizenship. Furthermore, at the conventional significance level ($p = 0.53$), there is no significant correlation between Transformational Leadership (TL) and OCB. TL's effect on OCB may not be as strong as anticipated, even though the association seems to be favorable and lacks statistical significance. The subtle relationships between transformative leadership practices and workers' discretionary efforts warrant more investigation in light of this finding.

Thirdly, OCB and Transactional Leadership (TRL) show a robust positive association ($p < 0.05$). This suggests that workers are more likely to display actions that are advantageous to the company when managers use transactional tactics like reward and punishment. The importance of comprehending the transactional components of leadership in fostering good organizational citizenship is shown by this study. As for the mediation analysis, all of the p-values are less than 0.05, indicating that supervisor identification (SDE) does not significantly

mediate the association between any of the leadership styles (LSF, TL, and TRL) and organizational citizenship behavior (OCB). This suggests that the impact of these leadership philosophies on OCB is not mediated by workers' sense of kinship with their managers.

Nonetheless, TL and OCB have a substantial association in which self-determination (SD) acts as a mediator ($p < 0.05$). This research implies that employees' sense of self-determination plays a role in explaining the beneficial effects of transformational leadership on organizational citizenship behavior. This is consistent with the theories of transformational leadership, which highlight the capacity of the leader to uplift and empower subordinates.

The term "organizational citizenship behavior" (OCBE) describes the voluntary actions taken by staff members that go above and beyond the call of duty and benefit the company. Healthy work environments and motivating staff members to participate in OCBE are frequently linked to leadership styles that are accountable, inclusive, genuine, and encouraging (Ullah et al., 2021). According to Ullah et al. (2021) that supports these correlations, employees are more likely to act in ways that advance the performance and general well-being of the company when their leaders model these attributes. By using successful leadership styles, the contributions essentially aim to clarify the relevant behavioral patterns that are essential for establishing Organizational Citizenship Behaviors (OCBE) (Dedic et al., 2022). Specifically designed for the area, the focus lies on carefully addressing the weakest aspects to optimize the effect and coordinating leadership styles with company culture to achieve the best outcomes.

In a study conducted by (Abdullahi et al., 2020), a noteworthy positive correlation was identified between all facets of organizational citizenship behavior and the dimensions of transformational leadership as outlined by Kleine et al. (2019). The research affirmed that transformational leadership behavior consistently maintains a substantial positive association with altruism, courtesy, conscientiousness, sportsmanship, and civic virtue. Another investigation by Nguni et al. (2006) concurred, establishing a positive relationship between all dimensions of transformational leadership and Organizational Citizenship Behavior (OCB). In an additional investigation, (Cansoy, 2019) elaborated that every aspect that makes up the Transformational Leadership dimensions demonstrates a positive and beneficial relationship with Organizational Citizenship Behavior (OCB). This means that all, or at least most, of the components of transformational leadership, positively influence the environment that allows workers to participate in optional, voluntary activities that go above and beyond the responsibilities of their jobs.

To sum up, the findings emphasize how diverse leadership philosophies have an impact on the civic engagement of organizations. Though favorably correlated, transformational leadership requires the mediation of self-determination to have a major impact on OCB. In contrast, laissez-faire and transactional leadership have a favorable impact on OCB. Given that supervisor identity plays a non-significant mediating role in this study, it can be concluded that employee identification with supervisors has no bearing on the relationship between leadership styles and OCB. Different results add to our understanding of leadership in organizational contexts by highlighting the necessity for a sophisticated strategy that considers the leadership style as well as the mediating mechanisms that different styles use to affect employee behaviors. Future studies should examine other mediating variables and go deeper into the particular behaviors connected to each leadership style.

6. Implications: Theoretical and practical

The results of the study have important theoretical and practical Implications for our knowledge of the relationships among supervisor identification, self-determination, leadership styles, and organizational citizenship behavior (OCB). The study advances leadership theory by illuminating complex relationships between OCB and leadership philosophies. Given the favorable link found between OCB and laissez-faire leadership, leaders may be able to encourage employee initiative and engagement by taking a hands-off approach.

The discovery that self-determination functions as a mediator in the connection between OCB and transformative leadership deepens theoretical remarks. This highlights how crucial it is to comprehend how employees' feelings of empowerment and autonomy relate to how transformational leadership affects OCB. Practically speaking, the study provides managers and organizational leaders with useful information. The positive correlation that exists between transactional leadership and organizational citizenship behavior (OCB) highlights the efficacy of reward and punishment schemes in promoting organizationally beneficial behaviors. This shows that incentives and clear expectations can encourage workers to go above and beyond the call of duty.

Given the importance of laissez-faire leadership in fostering OCB, it stands to reason that, in some situations, a less directive style of leadership could inspire staff members to willingly take on more responsibility. In order to improve OCB, transformational leaders should prioritize employee empowerment and autonomy development, as acknowledged by the mediating role of self-determination. Strong supervisor-employee relationships may not be the

main way that leadership styles affect OCB in this situation, as evidenced by the lack of significant mediation by supervisor identification. As a result, in order to promote OCB, organizations should think about a multimodal strategy that goes beyond supervisor identification.

To sum up, the research's implications offer significant perspectives for improving leadership approaches and tactics to augment organizational citizenship behavior, thereby augmenting the continuous conversation on proficient leadership within heterogeneous organizational environments. By examining more mediating factors and going deeper into the particular behaviors connected to various leadership philosophies, future research can expand on these conclusions.

7. Limitations and future research

The study has various limitations that should be taken into consideration, even if it offers insightful information about the connections between supervisor identification, self-determination, leadership styles, and organizational citizenship behavior (OCB). First off, it's unclear how broadly applicable the study's conclusions will be to other organizational environments and cultural contexts. The results may be context specific. To improve the findings' external validity, future research should try to replicate the study across a variety of industries, organizational sizes, and cultural contexts. A more thorough understanding of how these interactions appear in various socio-cultural contexts may be obtained, especially through cross-cultural studies. Furthermore, the study's exclusive emphasis on a particular region may limit how broadly applicable it is. Researchers should investigate potential differences in the links between leadership styles, supervisor identification, self-determination, and OCB by doing comparative analyses across different areas or nations in order to address this restriction. Understanding the universal and context-specific components of these processes would become more sophisticated with the help of this cross-verification.

Extending the temporal span is another important consideration for future research. Researchers could examine how leadership styles and their effects on OCB change over time by using longitudinal studies to capture the dynamics of these interactions. An enhanced comprehension of the causal links among the variables would be possible through this temporal expansion.

In addition, investigating how organizational culture influences leadership styles affect OCB offers a viable direction for further investigation. The degree to which employees engage in

citizenship behaviors can be influenced by the ways in which different organizational cultures interact with particular leadership styles.

In conclusion, future research should address these limitations by conducting cross-cultural studies, extending the temporal scope, and taking organizational culture into consideration in order to advance our understanding of the complex interplay between supervisor identification, self-determination, leadership styles, and OCB. Through these initiatives, a more comprehensive and broadly applicable theoretical framework for successful leadership in a variety of organizational contexts would be developed.

REFERENCES

- Abdullahi, A. Z., Anarfo, E. B., & Anyigba, H. (2020). The impact of leadership style on organizational citizenship behavior: does leaders' emotional intelligence play a moderating role? *Journal of Management Development*, 39(9/10), 963-987.
- Aboramadan, M., & Kundi, Y. M. (2020). Does transformational leadership better predict work-related outcomes than transactional leadership in the NPO context? Evidence from Italy. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 31(6), 1254-1267.
- Aburumman, O. J., Omar, K., Al Shbail, M., & Aldoghan, M. (2022). How to Deal with the Results of PLS-SEM? International Conference on Business and Technology,
- Ahmad Bodla, A., Tang, N., Van Dick, R., & Mir, U. R. (2019). Authoritarian leadership, organizational citizenship behavior, and organizational deviance: Curvilinear relationships. *Leadership & Organization Development Journal*, 40(5), 583-599.
- Amankwaa, A., Gyensare, M. A., & Susomrith, P. (2019). Transformational leadership with innovative behaviour: Examining multiple mediating paths with PLS-SEM. *Leadership & Organization Development Journal*, 40(4), 402-420.
- Badrianto, Y., & Ekhsan, M. (2020). Effect of work environment and job satisfaction on employee performance in pt. Neginak industries. *Journal of Business, Management, & Accounting*, 2(1).
- Banwo, A. O., & Du, J. (2020). When the good outweighs the bad: organizational citizenship behaviour (OCB) in the workplace. *Human Resource Development International*, 23(1), 88-97.
- Bass, B. M., & Avolio, B. J. (1996). Multifactor leadership questionnaire. *Western Journal of Nursing Research*.
- Bauer, J., & Mulder, R. H. (2006). Upward feedback and its contribution to employees' feeling of self-determination. *Journal of Workplace Learning*, 18(7/8), 508-521.
- Budur, T., & Poturak, M. (2021). Transformational leadership and its impact on customer satisfaction. Measuring mediating effects of organisational citizenship behaviours. *Middle East Journal of Management*, 8(1), 67-91.
- Cansoy, R. (2019). The Relationship between School Principals' Leadership Behaviours and Teachers' Job Satisfaction: A Systematic Review. *International Education Studies*, 12(1), 37-52.
- Chien, S.-Y., Yang, A. J.-F., & Huang, Y.-C. (2021). Hotel frontline service employees' creativity and customer-oriented boundary-spanning behaviors: The effects of role stress and proactive personality. *Journal of Hospitality and Tourism Management*, 47, 422-430.
- Dartey-Baah, K., Quartey, S. H., & Adotey, A. (2021). Examining transformational and transactional leadership styles and safety citizenship behaviors in the power distribution sector: evidence from Ghana. *International Journal of Energy Sector Management*, 15(1), 173-194.
- de Geus, C. J., Ingrams, A., Tummers, L., & Pandey, S. K. (2020). Organizational citizenship behavior in the public sector: A systematic literature review and future research agenda. *Public Administration Review*, 80(2), 259-270.
- Dedic, S., Hadzaihmetovic, N., & Mujezinovic, M. (2022). The Role of Leadership Styles in Organizational Citizenship Behavior. *International Journal of Business & Administrative Studies*, 8(4).
- Esmaeili, H. K., Mohammad, J., & Soltani, I. (2019). The relationship between job crafting and job performance: empirical evidence from the automobile industry. *International Journal of Business Innovation and Research*, 19(1), 109-124.

- Gilal, F. G., Zhang, J., Paul, J., & Gilal, N. G. (2019). The role of self-determination theory in marketing science: An integrative review and agenda for research. *European Management Journal*, 37(1), 29-44.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Evaluation of Reflective Measurement Models. In *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook* (pp. 75-90). Springer International Publishing. https://doi.org/10.1007/978-3-030-80519-7_4
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Hameed Al-ali, A., Khalid Qalaja, L., & Abu-Rumman, A. (2019). Justice in organizations and its impact on Organizational Citizenship Behaviors: A multidimensional approach. *Cogent Business & Management*, 6(1), 1698792.
- Jensen, U. T., Andersen, L. B., Bro, L. L., Bøllingtoft, A., Eriksen, T. L. M., Holten, A.-L., Jacobsen, C. B., Ladenburg, J., Nielsen, P. A., & Salomonsen, H. H. (2019). Conceptualizing and measuring transformational and transactional leadership. *Administration & Society*, 51(1), 3-33.
- Johnson, H. H., & Umphress, E. E. (2019). To help my supervisor: Identification, moral identity, and unethical pro-supervisor behavior. *Journal of business ethics*, 159, 519-534.
- Kabiru, G. K., & Bula, H. (2020). Influence of Transactional Leadership Style on Employee Performance at Selected Commercial Banks in Nairobi City County, Kenya. *International Journal of Research and Innovation in Social Science (IJRISS)*, iv (ix), 520-524.
- Kaur, K., & Randhawa, G. (2021). Exploring the influence of supportive supervisors on organisational citizenship behaviours: Linking theory to practice. *IIMB Management Review*, 33(2), 156-165.
- Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The interplay of leadership styles, innovative work behavior, organizational culture, and organizational citizenship behavior. *SAGE Open*, 10(1), 2158244019898264.
- Kim, W. G., McGinley, S., Choi, H.-M., & Agmapisarn, C. (2020). Hotels' environmental leadership and employees' organizational citizenship behavior. *International Journal of Hospitality Management*, 87, 102375.
- Kleine, A. K., Rudolph, C. W., & Zacher, H. (2019). Thriving at work: A meta-analysis. *Journal of Organizational Behavior*, 40(9-10), 973-999.
- Kotamena, F., Senjaya, P., & Prasetya, A. B. (2020). A literature review: Is transformational leadership elitist and antidemocratic? *International Journal of Social, Policy and Law*, 1(1), 36-43.
- Lauck, R. (2019). Indicators for measuring transformational and transactional leadership. *Scientific Programme Committee*, 486.
- Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of applied psychology*, 87(1), 131.
- Lee, M. C. C., Lin, M.-H., Srinivasan, P. M., & Carr, S. C. (2023). Transformational leadership and organizational citizenship behavior: new mediating roles for trustworthiness and trust in team leaders. *Current Psychology*, 1-16.
- Lee, Y. H., Woo, B., & Kim, Y. (2018). Transformational leadership and organizational citizenship behavior: Mediating role of affective commitment. *International Journal of Sports Science & Coaching*, 13(3), 373-382.
- Li, J., Gu, Z., & Dai, Y. (2022). Impact of sports sponsorship motivation on consumer purchase intention: Mediating effect based on consumer attitude. *Sustainability*, 14(22), 15430.

- Lundmark, R., Richter, A., & Tafvelin, S. (2022). Consequences of managers' laissez-faire leadership during organizational restructuring. *Journal of Change Management*, 22(1), 40-58.
- Marstand, A. F., Epitropaki, O., van Knippenberg, D., & Martin, R. (2021). Leader and organizational identification and organizational citizenship behaviors: Examining cross-lagged relationships and the moderating role of collective identity orientation. *Human Relations*, 74(10), 1716-1745.
- Masood, S., Siddiqui, G. K., Lodhi, H., & Shahbaz, S. (2020). Effect of leadership styles on organizational citizenship behavior and employee turnover intention. *Journal of Accounting and Finance in Emerging Economies*, 6(2), 487-495.
- Moors, G. (2012). The effect of response style bias on the measurement of transformational, transactional, and laissez-faire leadership. *European Journal of Work and Organizational Psychology*, 21(2), 271-298.
- Naz, S., Kousir, T., & Khawaja, A. O. (2021). Leadership styles as predictors of employee general health and organizational citizenship behavior. *Asian Social Studies and Applied Research*, 2(3).
- Nugraha, A. P. (2021). The Effect Of Transformational Leadership Style, Transactional Leadership And Charismatic Leadership On Organizational Citizenship Behavior (Ocb) with Working Culture as an Intervening Variable. IAIC International Conference Series,
- Purwanto, A. (2020). The Relationship of Transformational Leadership, Organizational Justice and Organizational Commitment: a Mediation Effect of Job Satisfaction. *Journal of Critical Reviews*.
- Purwanto, A. (2022). The role of transformational leadership and organizational citizenship behavior on SMEs employee performance. *Journal of Industrial Engineering & Management Research*.
- Purwanto, A., Purba, J. T., Bernarto, I., & Sijabat, R. (2021). Effect of transformational leadership, job satisfaction, and organizational commitments on organizational citizenship behavior. *Inovbiz: Jurnal Inovasi Bisnis*, 9, 61-69.
- Qalati, S. A., Zafar, Z., Fan, M., Limón, M. L. S., & Khaskheli, M. B. (2022). Employee performance under transformational leadership and organizational citizenship behavior: A mediated model. *Heliyon*, 8(11).
- Ridwan, M., Mulyani, S. R., & Ali, H. (2020). Improving employee performance through perceived organizational support, organizational commitment and organizational citizenship behavior. *Systematic Reviews in Pharmacy*, 11(12).
- Rönkkö, M., & Cho, E. (2022). An Updated Guideline for Assessing Discriminant Validity. *Organizational Research Methods*, 25(1), 6-14. <https://doi.org/10.1177/1094428120968614>
- Saez, M. (2020). *The relationship between leadership styles, employee engagement, and organizational citizenship behavior within a support services environment* [Capella University].
- Sathasivam, K., Che Hashim, R., & Abu Bakar, R. (2021). Automobile industry managers' views on their roles in environmental sustainability: a qualitative study. *Management of Environmental Quality: An International Journal*, 32(5), 844-862.
- Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, 9(1), 4-11.
- Soelton, M. (2023). Conceptualizing Organizational Citizenship Behavior and Learning Organization in the Labor Sector. *Jurnal Organisasi Dan Manajemen*, 19(1), 239-255.
- Stevens, J. (2022). Transformational and transactional leadership: An analysis of the leader-follower relationship and their influence in the workplace.

- Thompson, P. S., Bergeron, D. M., & Bolino, M. C. (2020). No obligation? How gender influences the relationship between perceived organizational support and organizational citizenship behavior. *Journal of Applied Psychology, 105*(11), 1338.
- Tingaz, E. O., Solmaz, S., Ekiz, M. A., & Atasoy, M. (2023). The relationship between mindfulness and self-rated performance in student-athletes: the mediating role of depression, anxiety and stress. *Sport Sciences for Health, 19*(2), 657-663. <https://doi.org/10.1007/s11332-022-00935-y>
- Transport Geography. (2022). Automobile Production, Selected Countries, 1950-2022. <https://transportgeography.org/contents/chapter1/the-setting-of-global-transportation-systems/automobile-production-world/>
- Ullah, I., Wisetsri, W., Wu, H., Shah, S. M. A., Abbas, A., & Manzoor, S. (2021). Leadership styles and organizational citizenship behavior for the environment: the mediating role of self-efficacy and psychological ownership. *Frontiers in Psychology, 12*, 683101.
- Vasconcellos, D., Parker, P. D., Hilland, T., Cinelli, R., Owen, K. B., Kapsal, N., Lee, J., Antczak, D., Ntoumanis, N., & Ryan, R. M. (2020). Self-determination theory applied to physical education: A systematic review and meta-analysis. *Journal of educational psychology, 112*(7), 1444.
- Walumbwa, F. O., & Hartnell, C. A. (2011). Understanding transformational leadership–employee performance links: The role of relational identification and self-efficacy. *Journal of occupational and organizational psychology, 84*(1), 153-172.
- Yadav, M., & Rangnekar, S. (2015). Supervisory support and organizational citizenship behavior: Mediating role of participation in decision making and job satisfaction. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*,