DOI: https://doi.org/10.71317/kjard.2.10.2026.911

Kashmir Journal of Academic Research and Development

Journal homepage: https://rjsaonline.org/index.php/KJARD

Transformational Leadership and Perceived Organizational Performance in SMEs in Sindh, Pakistan: The Indirect Association through Organizational Justice

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ARTICLE INFO

Received:
September 11, 2026
Revised:
October 08, 2026
Accepted:
October 15, 2026
Available Online:
October 24, 2026

Keywords:
Transformational leadership; organizational justice; perceived organizational performance; small and medium-sized enterprises; Sindh; Pakistan; PLS-SEM.

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ABSTRACT

The study focused on the relationship between transformational leadership and perceived organizational performance of small and medium sized enterprise (SMEs) owners and managers in Sindh, Pakistan, considering organizational justice as a possible intervening variable. In this cross-sectional study 400 questionnaires were collected with the help of purposive recruitment from Karachi, Hyderabad, Sukkur and Larkana of which 400 were usable. Focal estimates are from a reported partial least-squares structural equation model which included other organizational constructs. Transformational leadership was positively associated with organizational justice ($\beta = 0.613$, $t = 18.702$, $p < 0.001$); and organizational justice was positively associated with perceived organizational performance ($\beta = 0.185$, $t = 2.392$, $p = 0.017$). The direct leadership–performance association was not statistically significant ($\beta = -0.052$, $t = 0.887$, $p = 0.375$). Specific indirect association through justice was reported and was positive ($\beta = 0.113$, $t = 2.385$, $p = 0.017$). The reported results are in line with the positive specific indirect relationship via organizational justice, with the caveat that the original estimation and resampling procedures need to be verified in order to conclude a causal mediation effect. The sample is also a nonprobability sample, and the respondent sample is also common, as well as insufficient documentation of the overall fitted model, which is limiting interpretation. The results give context-specific evidence that managerial perceptions of leadership and organizational fairness are linked to perceived performance in the SMEs they work in.

Introduction

Transformational leadership is about the abilities to inspire people to pursue a common course; to encourage them to think in a new way; to provide a role model and to pay attention to their growth [1]. The behaviour have been linked to work attitudes and performance in meta-analytic research and there are significant differences between leadership measures and outcomes [2–3]. Leaders' processes to link leadership ratings and organizational outcomes need to be considered separately. This is especially true for small and medium sized enterprises (SMEs) where managerial method and human-resource practices might vary from large enterprises [4].

Organizational justice is defined as judgments about fairness in the distribution of resources, processes, interpersonal treatment and information that is provided to members of the organization [5,6]. Justice perceptions have been shown to be correlated with work attitudes and behaviour through meta-analytic evidence [7]. Previous studies also link transformational leadership with justice perceptions [8] and there exists evidence that justice may be manifested relationally and affectively [9]. This

suggests that organizational justice is a reasonable mechanism that can be correlated between leadership and performance evaluations, and not that justice is the only mechanism.

In the context of ongoing relationships, social exchange theory can explain how treatment can be related to reciprocated work behaviour [10]. Equity theory refers to inputs and outcomes that are perceived to be proportional [11]. Both frameworks fail to specify that a leader's behaviour leads to the changes in organization level performance. The present article therefore only considers statistical associations, not a causal process.

The study was based on owner and manager's report of SMEs of Karachi, Hyderabad, Sukkur and Larkana. It explores if the positive relationship between transformational leadership and perceived performance exists statistically via organizational justice. The focal results are not estimates from an independently refitted three-constructs model, but come from a more general estimated model.

Theoretical Background and Hypotheses

Transformational leadership and perceived performance

The transformational leadership model typically recognizes four components: idealized influence, inspirational motivation, intellectual stimulation and individualized consideration [1,12]. Such behaviour can foster initiative and coordination but, the instrument of leadership can vary in the dimensions represented. The general expectation is that if a person is a transformational leader he will have a positive effect on performance [2,3] and performance is also based on market conditions, resources and managerial skills. Other intervening mechanisms, such as job characteristics and motivation have been reported in the leadership literature. Therefore, the relation to perceived performance of the organization is a testable proposition and not an inevitable consequence of the theory.

H1. When organizational justice is included in the structural model as a modeled pathway, as well as other predictors of perceived organizational performance, a positive relationship exists between the two variables.

Transformational leadership and organizational justice

There are a number of distinct aspects of fairness perception. Distributive justice deals with fairness of outcomes, procedural justice with what is done during the process of decision-making, interpersonal justice with dignity and respect; and informational justice with the quality and sufficiency of explanations given [5,6]. Leadership behaviors that include clear communication and equal treatment and opportunities for involvement might therefore be associated with more positive fairness ratings. The empirical relationship identified by Cho and Dansereau suggests a possibility of investigating this correlation, but may not be the same as those used in the present study [8].

H2. There is a positive relationship between organizational justice and transformational leadership.

Organizational justice and perceived organizational performance

Research syntheses link up organizational justice to work related behaviors and attitudes, though the strength of the relationship is dependent on the dimension of justice and criterion [7,9,13]. However, overall justice judgments should be recognized as a potentially valuable overall assessment of treatment in an organization [14] but should not be assumed to represent all the aspects of a multidimensional instrument. In terms of social exchange, good treatment can be related to cooperation and involvement, both of which can be relevant to organizational outcomes [10].

Perceived organizational performance differs from audited financial/operational performance. Research in strategy and organizational studies has explored the usefulness and drawbacks of managerial performance judgments in situations where there are no objective data [15-17]. In this study, outcomes are reported as perceptions, rather than objective firm-level indicators, as only a few of the latter are available and would not necessarily correspond to perceptions.

H3. The effect of organizational justice on perceived organizational performance is positive at the other modeled influences.

The indirect association

The indirect relationship is symbolized by the product of the transformational leadership to justice and justice to performance coefficients. A nonsignificant direct association does not rule-out a positive specific indirect estimate [18,19]. Despite this, mediation has time and causal implications that have not been determined by a cross-sectional design [20]. When evaluating uncertainty in indirect effects it is generally preferable to use resampling-based confidence intervals, particularly since the sampling distribution of a product may be asymmetric [21,22]. In this case, the reported statistics allow judging the direction and significance of the association, but not its uncertainty interval independently.

H4. There is a positive specific indirect relationship between transformational leadership and perceived organizational performance in terms of organizational justice.

Materials and Methods

Study design and setting

The study was quantitative, cross-sectional questionnaire, conducted in four cities of Sindh, Pakistan; Karachi, Hyderabad, Sukkur and Larkana. Businesses involved were said to be involved in manufacturing, services, retail and trading. The unit of observation for the analysis for this report is the completed owner/mgr. questionnaire. Study documentation shows no indication how many different firms participated and how many questionnaires were from the same firm.

Sampling and survey administration

Purposive sampling involved SME owners and managers who were thought to know the practices of their SMEs. Questionnaires were disseminated via a process of SME networks, direct visits and referrals. The final analytic sample reported was 400 usable responses. The survey was said to be voluntary, and information provided about the academic nature of the survey and confidentiality. Since the denominator for recruitment was not recorded, a response rate is not computed. The operational threshold determining a business to be an SME in terms of the available account is not specified. Adequacy of the sample size for a specific structural path depends not only on a large-population survey benchmark but also on model-specific considerations [23].

Construct measurement

Five-point Likert-type items were used for the questionnaire. The three focal constructs were transformational leadership (eight items), organizational justice (six items) and perceived organizational performance (six items). Although the original analysis modeled the constructs reflectively, the level of appropriateness of this specification cannot be independently evaluated without item wording and indicator level estimates. Transformational leadership is explained in the context of Bass-Avolio's theory [1,12] and organizational justice is explained in the context of distributive, procedural, interpersonal and informational justice [5,6]. The conceptual underpinning of these references is provided, although not necessarily the same published scales were used without modification. Not all the questionnaire, scale sources, response anchors, coding and recoding procedures, item adaptations and of course the referent of leadership and justice ratings can be determined from the available documents. Thus, it is unclear if the owners assessed themselves, a different leader or organizational practices, if the managers assessed the same or a different, if six justice items were sufficient to capture the theorized dimensions of fairness, and if the same or a different referent was used. Perceived organizational performance is the respondent's viewpoint as measured by the questionnaire and not actual financial or operational results.

Statistical analysis

A seven-construct model of transformational leadership, transactional leadership, organizational justice, knowledge sharing, organizational learning, job satisfaction and organizational performance was presented in the original study and analyzed using partial least squares structural equation modeling (PLS-SEM). The focal coefficient for the transformational leadership Organizational justice relationship, the Organizational justice Perceived organizational performance relationship, the Transformational leadership Perceived organizational performance relationship and the specific indirect pathway through justice are presented. The rest of the estimated paths and complete model diagram were not provided. Therefore, the coefficients should not be interpreted as estimates from a new three-construct model that has been fitted [19,24]. The focal indirect estimate is not a part of any model-wide total indirect or total effect.

The outputs that are made available include standardized focal path coefficients, t statistics and p values, selected R^2 and f2 values, construct level Cronbach's alpha and average variance extracted (AVE). There is no documentation of the statistical software/version, PLS algorithm settings, handling of missing responses, number of resampling iterations, random seed, and test sidedness and confidence-interval method. Especially, no bootstrap confidence intervals nor any reported but not included coefficients were reconstructed. Indicator loadings, properly estimated reliability parameters (such as ρA and ρC), evidence of discriminant validity (e.g., HTMT) and appropriate variance inflation factors [24–26] would be needed for measurement-model evaluation. A comparison of owners and managers ratings would also necessitate evidence of the measurement invariance [27]. Since the related outputs are not available, this report makes no claim to the validity of measurements independently verified or to the precision of inferences or to predictive performance out of sample.

Results

Respondent profile and descriptive statistics

A total of 400 questionnaires were usable (366 were from males and 34 from females). 27% of the respondents were owners of the source account, and 73% were managers. All of these figures refer to the participating sample only and are not representative of the population. Data on the obtained construct means and standard deviations are presented in Table 1.

Table 1. Descriptive statistics for focal constructs

Construct	n	Mean	Standard deviation
Transformational leadership	400	4.1809	0.61022
Organizational justice	400	4.0678	0.72284
Perceived organizational performance	400	3.7667	0.93025

The means are presented as scale-score summaries. As the original response anchors and item coding are unavailable, they are not interpreted as demonstrating a defined level of leadership, fairness or business success.

Reported measurement summaries

The original Cronbach's α and AVE values for the three focal constructs are reported in table 2. These are only partial measurement summaries, with each reported $\alpha > 0.70$ and each AVE > 0.50; however, these are not necessarily sufficient evidence of construct validity. Original column 'combined reliability' was discarded because the available text does not clearly specify whether this is the estimator ρA or the estimator ρC. The indicator loadings and correct identification of reliability estimates are not reported from the construct-level summaries [24-26] nor is the HTMT matrix.

Table 2. Reported reliability and convergent-validity summaries

Construct	Items	Cronbach's α	AVE
Transformational leadership	8	0.851	0.628
Organizational justice	6	0.808	0.522
Perceived organizational performance	6	0.892	0.654

The reported values were not recalculated from item-level responses. Reliability and convergent-validity results for the other four constructs in the fitted model are unavailable, as are the model-wide discriminant-validity and collinearity diagnostics. Without questionnaire items, the substantive coverage and dimensionality of the six-item organizational justice measure also remain uncertain.

Hypothesis tests and specific indirect association

The direct path of transformational leadership to performance was not significant ($\beta = -0.052$, $t = 0.887$, $p = 0.375$), as was reported, so there was no evidence supporting H1. The reported transformational leadership-to-justice path was positive ($\beta = 0.613$, $t = 18.702$, $p < 0.001$), as was the justice-to-performance path ($\beta = 0.185$, $t = 2.392$, $p = 0.017$). The specific indirect estimate through justice was also positive ($\beta = 0.113$, $t = 2.385$, $p = 0.017$). Conditional on being able to verify the original resampling results, H2, H3 and H4 are statistically consistent with the reported coefficients and p values. No bootstrap confidence intervals were available for independent examination, and the method for obtaining the significance statistics reported wasn't (Table 3).

Table 3. Focal coefficients reported from the broader PLS-SEM model

Hypothesis / path	β	t statistic	p value	Finding
H1 TFL → POP	−0.052	0.887	0.375	Not supported

H2 TFL → OJ	0.613	18.702	<0.001	Provisionally consistent
H3 OJ → POP	0.185	2.392	0.017	Provisionally consistent
H4 TFL → OJ → POP	0.113	2.385	0.017	Provisionally consistent

TFL, transformational leadership; OJ, organizational justice; POP, perceived organizational performance. Coefficients and significance statistics are reproduced from the broader fitted model. Findings for H2–H4 are provisional because the original bootstrap settings and confidence intervals were not supplied.

When the constituent coefficients in the formula are rounded, 0.613 × 0.185 = 0.113405, which is close to the reported specific indirect coefficient of 0.113. This arithmetic does not confirm the corresponding t statistics or p value. In the original study, the results showed that R2 = 0.375 for organizational justice, f2 = 0.601 for the path of transformational leadership to organizational justice and R2 = 0.315 for perceived organizational performance. These values have not been independently re-calculated. Specifically, the performance R^2 is for the whole model and not just the three focal constructs. Other indirect routes and the overall effect for the model are not possible without the complete structural specification and output. Complete mediation or out-of-sample prediction claims are not made.

Discussion

Results were of a positive relationship between transformational leadership and the organizational justice ratings of the SME owners and managers surveyed, and a lesser positive relationship between organizational justice and perceived organizational performance. The direct coefficient is not significant but there is a positive specific indirect association that has been reported. The overall mediation pattern is not, however, definitively classified due to lack of specification of the overall structural model. These associations do not prove that the effect of the leadership is transmitted causally through these associations, and other pathways may not be ruled out.

The leadership–justice relationship agrees with previous studies relating to transformational leadership and fairness [8]. Additionally, the positive correlation between justice and performance is consistent with the meta-analytic findings indicating that justice ratings are associated with work attitudes and behaviors [7,9,13] in a positive direction. However, the present measures represent managerial assessments. The study did not independently verify the fairness the employees felt but it also did not test the reciprocal behaviours or the order of behaviours as suggested by social exchange theory [10].

The not statistically significant direct association between leadership and performance cannot be interpreted as proof that the transformational type of leadership is not effective. Performance is a more distal outcome than the reported leadership behaviours, and constructs other than the ones included in the fitted model may have shared variance in the model. Previous studies have shown that leadership can relate to work outcomes in ways other than justice [28]. Similarly, a positive indirect estimate is no sufficient evidence for a claim that interventions with fairness orientation will necessarily lead to better objective performance of the firm.

This outcome adds to the locally generated evidence of four commercial centers of Sindh. What is of specific importance is the difference between justice ratings, perceived organizational performance and independently measured business performance. Studies on subjective performance measures suggest that subjective measures can be useful, but their relationship to objective measures is not necessarily obvious [15-17].

Managerial implications

Transparent allocation criteria, consistent treatment and opportunities for input and clear explanation are reasonable areas in which managerial attention can be focused for SMEs that want to review internal management practices. These practices are in line with the existing justice practices [5,6] and not interventions which were tested in the present sample. Owners and managers can apply such principles as a practical review criterion and assess employee experiences and actual operational results separately.

Limitations and future research

It is a cross-sectional design and, therefore, it does not allow for temporal inferences. The numerical pathways may be identical in the cross-sectional indirect estimation but may not be the same in the longitudinal mediation processes [20]. Common-source measurement biases are a possibility as the same respondents were used for leadership, justice and performance; their presence or magnitude cannot be assumed without further evidence [29–31]. The use of purposeful sampling and the sex distribution observed in the study limits generalization outside of those who participated in the study, namely the owners and managers.

The survey account does not allow an assessment of respondent clustering as the number of different firms and the number of respondents from a firm are not reported. Perceptions of the owner and manager may also be different in terms of referent or interpretation. Comparisons across roles at this stage of the analysis are premature if there is no evidence of measurement invariance [27]. The lack of item-level scales, model-wide coefficient table, retained loadings, HTMT statistics and resampling settings limit the extent to which the model can be reproducible and evaluated formally for construct validity. These limitations are appropriate to the strength of the results that can be inferred but not the basis for inferring values that were not observed.

Future research could differentiate between employees, managers and owners; employ explicitly anchored scales that are separately validated; assess leadership, justice and outcomes at multiple time points; and include objective measures of firm performance. The identification of firms would facilitate the appropriate treatment of within-firm dependence. Out-of-sample claims would also need to be assessed on their own merits with their own predictive assessment since predictive accuracy is an empirical issue and may not be uniformly captured in a simple R^2 measure [32].

Conclusion

In a cross-sectional sample of 400 SME owners and managers from four Sindh cities, the reported PLS-SEM coefficients indicate a positive specific indirect association between transformational leadership and perceived organizational performance through organizational justice. The focal direct leadership–performance coefficient was not statistically significant. The interpretation is conditional on verification of the original fitted model and inference procedure. Neither causal ordering nor employee-level fairness perceptions and objective firm performance were established.

Author Contributions

Mashooque Ali: conceptualization, investigation, formal analysis and writing of the original manuscript. Raheem Bux Soomro: doctoral supervision, methodological guidance, critical review and manuscript editing. Both authors reviewed and approved the final manuscript.

References

1. Bass BM. Two decades of research and development in transformational leadership. European Journal of Work and Organizational Psychology. 1999;8(1):9–32. https://doi.org/10.1080/135943299398410
2. Judge TA, Piccolo RF. Transformational and transactional leadership: a meta-analytic test of their relative validity. Journal of Applied Psychology. 2004;89(5):755–768. https://doi.org/10.1037/0021-9010.89.5.755
3. Wang G, Oh IS, Courtright SH, Colbert AE. Transformational leadership and performance across criteria and levels: a meta-analytic review of 25 years of research. Group & Organization Management. 2011;36(2):223–270. https://doi.org/10.1177/1059601111401017
4. Harney B, Alkhalaf H. A quarter-century review of HRM in small and medium-sized enterprises: capturing what we know, exploring where we need to go. Human Resource Management. 2021;60(1):5–29. https://doi.org/10.1002/hrm.22010
5. Greenberg J. Organizational justice: yesterday, today, and tomorrow. Journal of Management. 1990;16(2):399–432. https://doi.org/10.1177/014920639001600208
6. Colquitt JA. On the dimensionality of organizational justice: a construct validation of a measure. Journal of Applied Psychology. 2001;86(3):386–400. https://doi.org/10.1037/0021-9010.86.3.386
7. Colquitt JA, Conlon DE, Wesson MJ, Porter COLH, Ng KY. Justice at the millennium: a meta-analytic review of 25 years of organizational justice research. Journal of Applied Psychology. 2001;86(3):425–445. https://doi.org/10.1037/0021-9010.86.3.425
8. Cho J, Dansereau F. Are transformational leaders fair? A multi-level study of transformational leadership, justice perceptions, and organizational citizenship behaviors. The Leadership Quarterly. 2010;21(3):409–421. https://doi.org/10.1016/j.leaqua.2010.03.006

9. Colquitt JA, Scott BA, Rodell JB, Long DM, Zapata CP, Conlon DE, Wesson MJ. Justice at the millennium, a decade later: a meta-analytic test of social exchange and affect-based perspectives. Journal of Applied Psychology. 2013;98(2):199–236. https://doi.org/10.1037/a0031757
10. Cropanzano R, Mitchell MS. Social exchange theory: an interdisciplinary review. Journal of Management. 2005;31(6):874–900. https://doi.org/10.1177/0149206305279602
11. Adams JS. Inequity in social exchange. In: Berkowitz L, editor. Advances in Experimental Social Psychology. Vol. 2. Academic Press; 1965. p. 267–299. https://doi.org/10.1016/S0065-2601(08)60108-2
12. Avolio BJ, Bass BM, Jung DI. Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. Journal of Occupational and Organizational Psychology. 1999;72(4):441–462. https://doi.org/10.1348/096317999166789
13. Cohen-Charash Y, Spector PE. The role of justice in organizations: a meta-analysis. Organizational Behavior and Human Decision Processes. 2001;86(2):278–321. https://doi.org/10.1006/obhd.2001.2958
14. Ambrose ML, Schminke M. The role of overall justice judgments in organizational justice research: a test of mediation. Journal of Applied Psychology. 2009;94(2):491–500. https://doi.org/10.1037/a0013203
15. Dess GG, Robinson RB Jr. Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit. Strategic Management Journal. 1984;5(3):265–273. https://doi.org/10.1002/smj.4250050306
16. Wall TD, Michie J, Patterson M, Wood SJ, Sheehan M, Clegg CW, West M. On the validity of subjective measures of company performance. Personnel Psychology. 2004;57(1):95–118. https://doi.org/10.1111/j.1744-6570.2004.tb02485.x
17. Venkatraman N, Ramanujam V. Measurement of business performance in strategy research: a comparison of approaches. Academy of Management Review. 1986;11(4):801–814. https://doi.org/10.5465/amr.1986.4283976
18. Zhao X, Lynch JG Jr, Chen Q. Reconsidering Baron and Kenny: myths and truths about mediation analysis. Journal of Consumer Research. 2010;37(2):197–206. https://doi.org/10.1086/651257
19. Sarstedt M, Hair JF Jr, Nitzl C, Ringle CM, Howard MC. Beyond a tandem analysis of SEM and PROCESS: use of PLS-SEM for mediation analyses! International Journal of Market Research. 2020;62(3):288–299. https://doi.org/10.1177/1470785320915686
20. Maxwell SE, Cole DA. Bias in cross-sectional analyses of longitudinal mediation. Psychological Methods. 2007;12(1):23–44. https://doi.org/10.1037/1082-989X.12.1.23
21. Preacher KJ, Hayes AF. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior Research Methods. 2008;40(3):879–891. https://doi.org/10.3758/BRM.40.3.879
22. MacKinnon DP, Lockwood CM, Williams J. Confidence limits for the indirect effect: distribution of the product and resampling methods. Multivariate Behavioral Research. 2004;39(1):99–128. https://doi.org/10.1207/s15327906mbr3901_4
23. Kock N, Hadaya P. Minimum sample size estimation in PLS-SEM: the inverse square root and gamma-exponential methods. Information Systems Journal. 2018;28(1):227–261. https://doi.org/10.1111/isj.12131
24. Hair JF, Risher JJ, Sarstedt M, Ringle CM. When to use and how to report the results of PLS-SEM. European Business Review. 2019;31(1):2–24. https://doi.org/10.1108/EBR-11-2018-0203
25. Fornell C, Larcker DF. Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research. 1981;18(1):39–50. https://doi.org/10.1177/002224378101800104
26. Henseler J, Ringle CM, Sarstedt M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science. 2015;43(1):115–135. https://doi.org/10.1007/s11747-014-0403-8
27. Henseler J, Ringle CM, Sarstedt M. Testing measurement invariance of composites using partial least squares. International Marketing Review. 2016;33(3):405–431. https://doi.org/10.1108/IMR-09-2014-0304
28. Piccolo RF, Colquitt JA. Transformational leadership and job behaviors: the mediating role of core job characteristics. Academy of Management Journal. 2006;49(2):327–340. https://doi.org/10.5465/AMJ.2006.20786079
29. Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP. Common method biases in behavioral research: a critical review of the literature and recommended remedies. Journal of Applied Psychology. 2003;88(5):879–903. https://doi.org/10.1037/0021-9010.88.5.879
30. Podsakoff PM, MacKenzie SB, Podsakoff NP. Sources of method bias in social science research and recommendations on how to control it. Annual Review of Psychology. 2012;63:539–569. https://doi.org/10.1146/annurev-psych-120710-100452
31. Spector PE. Method variance in organizational research: truth or urban legend? Organizational Research Methods. 2006;9(2):221–232. https://doi.org/10.1177/1094428105284955

32. Shmueli G, Sarstedt M, Hair JF, Cheah JH, Ting H, Vaithilingam S, Ringle CM. Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. European Journal of Marketing. 2019;53(11):2322–2347. https://doi.org/10.1108/EJM-02-2019-0189



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