

Shkoler, Or; Tziner, Aharon; Vasiliu, Cristinel; Ghinea, Claudiu-Nicolae

Article

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ARE POSITIVE AND NEGATIVE OUTCOMES OF ORGANIZATIONAL JUSTICE CONDITIONED BY LEADER–MEMBER EXCHANGE?

Or Shkoler^{1*}, Aharon Tziner^{2,3}, Cristinel Vasiliu⁴
and Claudiu-Nicolae Ghinea⁵

¹⁾Independent researcher, Israel

²⁾Peres Academic Center, Rehovot, Israel

³⁾Netanya Academic College, Netanya, Israel

⁴⁾University of Economic Studies, Bucharest, Romania

⁵⁾S.C. Therme Nord București SRL, Otopeni, Romania

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Abstract

The workplace is complex, comprising many entities (abstract and tangible) – affective states, attitudes, and perceptions, but also workers and managers themselves and their behaviors. Understanding the link between them is vital for organizational prosperity. In the current paper, the perceptions of organizational justice are investigated as a precursor to two important outcomes – organizational citizenship behavior and counterproductive work behavior. To that end, a two-step research study was conducted to test a moderated-mediation model. First, a pilot study of 93 Romanian employees was undertaken, followed by a larger study consisting of 3293 Romanian workers. There were distinct differences between the two studies. Implications, limitations, and suggestions for future research are discussed.

Keywords: counterproductive work behavior (CWB), leader–member exchange (LMX), moderated-mediation, organizational citizenship behavior (OCB), organizational justice, work motivation.

JEL Classification: D23, M54, O15

* Corresponding author, Or Shkoler – e-mail: or.shkoler@gmail.com

Introduction

When managers are learning about employees, they need to understand what types of perceptions, feelings, and reactions they should elicit from personnel under their direction.

In the research presented in this paper, we focus on connections between a delimited, parsimonious set of attitudes – perceptions of organizational justice and organizational citizenship behavior – in conjunction with the dynamic personal states of leader-member exchange (LMX), motivation, and workplace misbehavior. These attitudes and personal states have consistently been shown to explain great variability in critical outcomes such as turnover (Bernierth and Walker, 2012), work performance (Wang, et al., 2010), and burnout (Faragher, Cass and Cooper, 2013). The model we tested in this research is thus articulated in Figure no. 1 and includes two central attitudes – organizational justice (comprising procedural, interactional, and distributive justice) and organizational citizenship behavior (OCB) – and three critical personal states of LMX, work motivation, and workplace misbehavior (counterproductive work behavior - CWB).

Contribution and Focus of the Current Research

The main goal of the current research is to examine all associations between the variables displayed in Figure 1. Indeed, most of the dyadic relationships between the variables in Figure 1 (e.g., organizational justice and OCB; work motivation and OCB or CWB, etc.) have been studied in the past (e.g., Eskew, 1993; Karriker and Williams, 2009; Al-A'wasa, 2018; Ugaddan and Park, 2019). However, to the best of our knowledge, no study has scrutinized the network of interrelationships between the variables as comprised by the model in Figure 1 using a *moderated-mediation approach*.

Furthermore, most of these associations were studied in Western countries such as the USA, Australia, Canada, the UK, and to a (very) lesser extent, in Eastern countries or post-communist countries. As such, we chose to conduct the current research in Romania. We identified Romania as a relatively virgin (and fertile) field of research on human resources management (Buzea, 2014). As an ex-communist country (in Central and Eastern Europe; CEE), Romania joined the European Union only in 2007. "The greater explanatory power of the contextual paradigm in such cases (namely CEE) at least is manifest; the poverty of attempts to explain developments there by contrasting them with the universalistic conception of HRM is clear" (Mayrhofer, Brewster and Morley, 2000, p. 12). Thus, as implied by the contingency perspective, human resource strategies and managerial practices will be more or less effective according to critical contingencies in the environment (Delery and Doty, 1996), such as the Romanian culture.

We now proceed with a review of the literature in support of our model in Figure 1.

1. Perceived Organizational Justice

An important antecedent variable within this analysis is perceived organizational justice – that is, the degree to which employees think or feel they are provided with apposite, just and considerate treatment, accurate and sufficient information, and rewards and resources (Cohen-Charash and Spector, 2001; Colquitt, et al., 2001; Ambrose and Schminke, 2009). These perceptions are a product of overall impressions based on the consequences of arbitrary organizational events and employees' own assessments of specific components of

the organization, including managers and work colleagues (Hollensbe, Khazanchi and Masterson, 2008).

Typically, organizational justice comprises procedural, interactional, and distributive justice (for further reading, see Niehoff and Moorman, 1993; Cohen-Charash and Spector, 2001; Colquitt, et al., 2001). Organizational justice has been researched extensively in the past, but most studies have emphasized its role as a *predictor* of work outcomes and not as a possible *outcome* in its own right (e.g., Brienza and Bobocel, 2017; Shkoler and Tziner, 2017).

2. Work Motivation

Work motivation is another variable we investigated with regard to the relationship between predictors and outcomes. Work motivation may be understood as the psychological dynamism that engenders complex cycles of thoughts and behavior directed towards a goal (Tziner, Fein and Oren, 2012). Motivation is what energizes us to persevere until goals are attained. Scholars of work motivation try to ascertain the processes by which an individual's internal, psychological forces – combined with external, environmental forces – influence the persistence, direction, and intensity of an individual's behavior aimed at reaching that goal (Kanfer, Frese and Johnson, 2017). However, Pinder (2014, p. 11) provides another, and currently the most accepted, working definition of work motivation: “Work motivation is a set of energetic forces that originate both within individuals, as well as beyond an individual's being, to initiate work-related behavior and to determine its form, direction, intensity, and duration.” In that vein, work motivation emanates from the interaction between the external organizational and societal environments and a person's characteristics (Latham and Pinder, 2005). In sum, motivation may be regarded as the impetus that drives one to participate in an activity, and we consider the perceptions of organizational justice as an individual antecedent to motivation in the present model.

Organizational Justice and Work Motivation

Organizational justice (distributive, procedural, interactional), that is, employee perceptions of fairness in the workplace, may have an impact on the employees' drive to work. For example, a worker who perceives that he or she is being treated fairly (e.g., reward/bonus distribution, the fairness of managerial decisions – the manner in which they were reached and how the immediate manager has proceeded in this regard, etc.), he or she would feel obliged to reciprocate the fair treatment received (Gouldner, 1960; Blau, 1964). Hence, the balance between an employee's input at work (e.g., expertise, knowledge, effort invested) and what he or she receives in return (e.g., monetary compensation, good working conditions, job prestige, challenging work) will be (e.g., Adams, 1965) maintained. Thus, we hypothesize that:

H1: Organizational justice perceptions (distributive, procedural, interactional) positively correlate with work motivation.

3. Organizational Citizenship Behavior

Researchers argue that organizations benefit from employees who are prepared to contribute beyond their formal job duties (Organ, Podsakoff and MacKenzie, 2006) – in

other words, when they demonstrate organizational citizenship behavior (OCB). OCB is individual behavior that is discretionary, not overtly acknowledged by the formal reward system, and that promotes the effective performance of an organization (Organ, Podsakoff and MacKenzie, 2006). In today's increasingly dynamic and competitive organizational environment, OCB is a greatly valued contribution. It is therefore no surprise that attention to OCB has been increasing, with Podsakoff et al.'s (2009) meta-analysis noting the publication of more than 400 articles on OCB and related constructs since 2000.

Organizational Justice and OCB

As stated in section 2.3, positive perceptions of fairness may induce greater work drive. However, this is mostly an attitudinal outcome aspect of such perceptions. The different perceptions of justice in the workplace (distributive, procedural, interactional) may also promote de facto action by the employee. As mentioned, positive perceptions are likely to be reciprocated by positive action (Gouldner, 1960; Blau, 1964), and that means that the worker would put extra in extra effort at work to "compensate" the good treatment he or she perceives. Hence, we hypothesize:

H2: Organizational justice perceptions (distributive, procedural, interactional) positively correlate with OCB.

4. Workplace Misbehavior

In recent years, counterproductive work behavior (Cohen-Charash and Mueller, 2007) and workplace misbehavior (Cohen-Charash and Mueller, 2007; Dilchert, et al., 2007; Bodankin and Tziner, 2009) have received considerable attention from researchers, as these manifestations have significant psychological, sociological, and economic implications for the working environment (Aubé, et al., 2009; Bodankin and Tziner, 2009). Counterproductive behavior and misbehavior might be directed towards the organization or its workers and management, and hence are costly for both the organization and the individual (Bennett and Robinson, 2003). These behaviors almost always infringe upon important organizational norms and cause damage to an organization's objectives, procedures, productivity, profitability, and employees themselves (Vardi and Weitz, 2002; Spector, et al., 2006; Aubé, et al., 2009). Work misbehavior includes employees' reducing or withdrawing their input to balance the social exchange process (Greenberg and Scott, 1996); feeling negatively towards the organization; feeling less motivated; exhibiting distrust (toward to the manager and/or the organization); and even retaliating against the organization (Skarlicki and Folger, 1997), which might manifest as harassment, theft or sabotage (Bennett and Robinson, 2000; Spector, et al., 2006). Hence, work misbehavior is hypothesized as negatively associated with job satisfaction.

Organizational Justice and CWB

Just as positive perceptions of fairness may promote increased citizenship behavior (section 2.5), the opposite is also true. In other words, should an employee perceive that the distributive, procedural, and/or interactional aspects of justice at his or her workplace are negative, this might prompt the worker to engage in negative behaviors. The worker would do so in order to resume a balance between what he or she receives from the organization and what he or she gives in return (Gouldner, 1960; Blau, 1964; Adams, 1965), and this

may manifest in reducing his or her work output and performance, and even in destructive behavior. Consequently, we hypothesize that:

H3: Organizational justice perceptions (distributive, procedural, interactional) negatively correlate with CWB.

Organizational Justice, Work Motivation, OCB and CWB

As previously articulated, organizational justice perceptions may induce increased work motivation, but also can promote positive/negative behaviors (OCB and CWB, respectively). This leads us to predict that work motivation acts as a mediational mechanism in our model, meaning that justice perceptions may affect the worker's motivation to work, which in turn may elicit (increased) positive or negative behaviors at work, regardless of the direct effect justice may have on said outcomes. As such, we hypothesize the following:

H4: Work motivation mediates the relationships between organizational justice perceptions (distributive, procedural, interactional) and CWB.

H5: Work motivation mediates the relationships between organizational justice perceptions (distributive, procedural, interactional) and OCB.

5. Buffering Effect – Leader–Member Exchange (LMX)

The theory of leader–member exchange argues that in dyadic relationships, managers tend to use different approaches for each of their employees (Graen and Uhl-Bien, 1995). In turn, each relationship or management style provokes different attitudes in subordinates, which drives the latter to behave differently from each other (Ilies, Nahrgang and Morgeson, 2007). Capitalizing on SET (Blau, 1964) and reciprocity theory (Gouldner, 1960), subordinates in good/bad relations with their supervisor or manager (that is, high/low LMX) feel obligated/reluctant to reciprocate (Adams, 1965).

Thus, LMX is one of the pivotal constituents of the workplace social network (Cole, Schaninger Jr. and Harris, 2002), and underlines the essential role that managers play in influencing their employees' performance by providing them with support and other resources (Hobfoll, 1989; Zagenczyk, et al., 2015), which ultimately reduces their physical and emotional exhaustion – the core elements of work burnout (e.g., Huang, et al., 2010).

In spite of a plethora of research on LMX, to the best of our knowledge, less is known about the effects of individuals' dispositional differences (e.g., Maslyn, Schyns and Farmer, 2017) and the effects of cultural and demographic parameters on leader–member interrelations (Zagenczyk, et al., 2015).

This intimate nature of LMX may have a more profound impact on the daily work routines of employees. The dyadic relationship between a worker and his or her manager may have various effects (e.g., increasing/decreasing organizational support, rewards, commitment, and so on). These can, to a certain extent, affect previously conceived associations. For example, a good relationship with the manager (i.e., high LMX) is conducive to positive perceptions of justice and, thus, given a situation where the employee already has good relations with the manager, this may enhance the positive effect that justice perceptions have on work motivation. As another example, good relations with the manager may act as

a buffer, or as a kind of *shock absorber*, which will mitigate the negative effect that justice perceptions have on CWB. As such, we hypothesize:

H6: LMX moderates the relationships in the model, as a general conditional factor.

6. Hypotheses Summary and Research Model

To conclude, the model in Figure 1 summarizes all the predicted relationships between the variables of investigation articulated so far.

As was elaborated earlier, the literature review has led us to conceive the following hypotheses in a comprehensive moderated-mediation model:

H1: Organizational justice perceptions (distributive, procedural, interactional) positively correlate with work motivation.

H2: Organizational justice perceptions (distributive, procedural, interactional) positively correlate with OCB.

H3: Organizational justice perceptions (distributive, procedural, interactional) negatively correlate with CWB.

H4: Work motivation mediates the relationships between organizational justice perceptions (distributive, procedural, interactional) and CWB.

H5: Work motivation mediates the relationships between organizational justice perceptions (distributive, procedural, interactional) and OCB.

H6: LMX moderates the relationships in the model, as a general conditional factor.

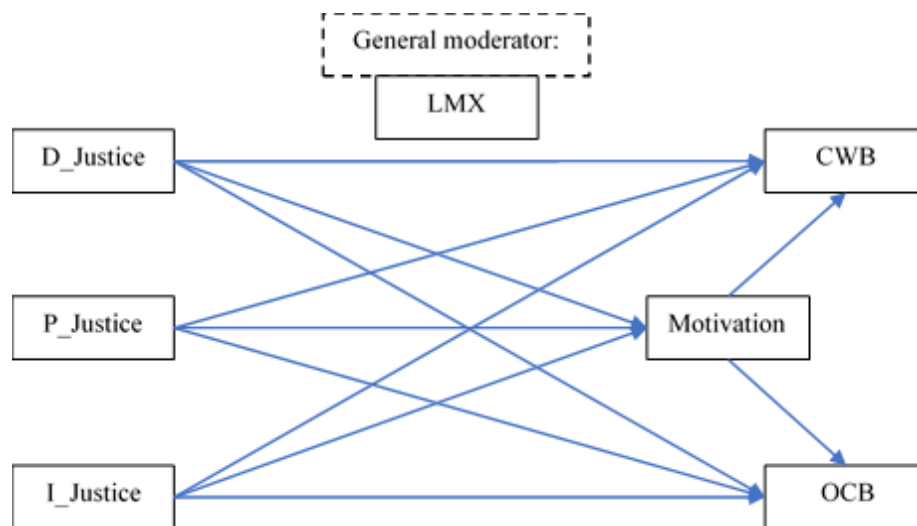


Figure no. 1. Model for the current research

Note: D_Justice = distributive justice. P_Justice = procedural justice. I_Justice = interactional justice. LMX = leader-member exchange. CWB = counterproductive work behavior. OCB = organizational citizenship behavior.

Study 1

Method

This study was a *pilot* to test the model presented above on a small-scale sample in order to obtain a first estimation of the relationships depicted in our model.

Participants

There were 93 subjects in the study, 41.9% males and 58.1% females aged 19–57 years ($M = 33.44$, $SD = 9.52$).

Measures

To ensure quality control of the questionnaires, the measures were translated into Romanian and then translated (a completed translation) back into the original language (i.e., English). The new translation was then compared with the original text, reconciling any meaningful differences between the two.

Organizational justice was measured using Niehoff and Moorman's (1993) Justice Scale, comprising 20 Likert-type items between 1 (completely disagree) and 6 (completely agree). The measure is divided into three different perceptions of justice: (1) *Distributive*: for instance, "I consider my work load to be quite fair" ($\alpha = .74$, $M = 3.92$, $SD = 0.87$); (2) *Procedural*: for instance, "All job decisions are applied consistently across all affected employees" ($\alpha = .92$, $M = 3.78$, $SD = 1.15$); and (3) *Interactional*: for instance, "When decisions are made about my job, the general manager treats me with respect and dignity" ($\alpha = .96$, $M = 4.54$, $SD = 1.06$).

Work motivation was gauged using the Work Extrinsic and Intrinsic Motivation Scale (WEIMS; Tremblay et al., 2009), comprising 18 Likert-type items ranging from 1 (does not correspond at all) to 6 (corresponds exactly): for instance, "The reason for being involved in my job is the satisfaction I experience when I am successful at doing difficult tasks" ($\alpha = .86$, $M = 4.36$, $SD = 0.68$).

Leader–member exchange was gauged using the Leader–Member Exchange Multi-Dimensional Measure (LMX-MDM; Liden and Maslyn, 1998), which includes 12 Likert-type items between 1 (strongly disagree) and 6 (strongly agree): for instance, "My supervisor would defend me to another in the organization if I made an honest mistake" ($\alpha = .78$, $M = 4.49$, $SD = 0.68$).

Counterproductive work behavior was gauged with Bennett and Robinson's (2000) Interpersonal and Organizational Deviance Scale (IODS), comprising 19 Likert-type items between 1 (never) and 6 (every day): for example, "I deliberately worked slower than I could" ($\alpha = .93$, $M = 2.50$, $SD = 1.11$).

Organizational citizenship behavior was gauged with a scale derived from the work of Williams and Anderson (1991), comprising 14 Likert-type items between 1 (strongly disagree) and 6 (strongly agree): for instance, "I help others who have been absent" ($\alpha = .75$, $M = 4.36$, $SD = 0.69$).

Procedure

The items of the questionnaire were initially written in English and then translated into Romanian, utilizing the back-translation procedure (Brislin, 1980). Amendments to items were made if needed to ensure semantic equivalence. Only then was the questionnaire administered to participants.

The field research was based on the administration of the translated questionnaires by students who participated as research assistants. The participation of the respondents in the questionnaire was voluntary (i.e., informed consent). In the questionnaire, the participants were assured of our respect for the principle of data confidentiality and anonymity throughout the entire collection, processing, storage, dissemination, and archiving flow. Thus, it is impossible to identify the respondents whatsoever. There are no questions in the survey regarding the names, e-mail addresses, telephone numbers or other personal data of the respondents. In this way, the information was treated responsibly according to European Union legislation in the field of personal data and ethical standards.

Results

Common-method bias (CMB). To evaluate the extent to which variable intercorrelations might be an artifact of common method variance (CMV), as suggested by Podsakoff et al. (2003) we utilized two methods: (a) Harman's single-factor model (where all items are loaded into one common/marker factor); and (b) a common latent factor (CLF) model (where all items are loaded into both their expected factors and one latent common method factor).

Harman's single-factor method accounted for only 22.64% of the explained variance: $\chi^2(3,070) = 7,771.49$, $p = .000$, $\chi^2/df = 2.53$, CFI = .55, NFI = .61, GFI = .24, SRMR = .19, RMSEA (90% CI) = .29 (.11-.35), $p\text{-close} = .000$. Furthermore, the CLF method of analysis produced 20.39% of the explained variance: $\chi^2(2,990) = 6,758.87$, $p = .000$, $\chi^2/df = 2.26$, CFI = .63, NFI = .71, GFI = .28, SRMR = .16, RMSEA (90% CI) = .18 (.10-.27), $p\text{-close} = .000$. Although the results do not completely exclude the possibility of same-source bias (CMV), according to Podsakoff et al. (2003), less than 50% ($R^2 < .50$) of the explained variance accounted for by the first emerging factor indicates that CMB is an improbable explanation of our findings, in conjunction with the bad model fit for each analysis.

Table 1 displays the between-variable zero-order correlational relationships in the research.

Table no. 1. Pearson correlation matrix

	1	2	3	4	5	6
D_Justice						
P_Justice	.56***					
I_Justice	.27**	.73***				
Motivation	.23*	.13	.29**			
LMX	.33**	.55***	.60***	.42***		
CWB	.38***	.37***	.12	.02	.11	
OCB	-.16	.002	.09	.37*	.19*	-.35***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. D_Justice = distributive justice; P_Justice = procedural justice; I_Justice = interactional justice; LMX = leader-member exchange; CWB = counterproductive work behavior; OCB = organizational citizenship behavior.

To test the model, an SEM (structural equation modeling) analysis with multiple-group analysis was employed using the IBM AMOS (v. 23) software package. The model did not have a good fit: $\chi^2(df) = 59.51(13)$, $p = .000$, $\chi^2/df = 4.58$, SRMR = .15, GFI = 0.87, CFI = .74, NFI = .71, NNFI = .39, RMSEA (90% CI) = .19 (.15-.25), $p\text{-close} = .000$. Table 2 displays the results from the path analysis, while LMX is a moderator (“*Low LMX*” = data *below or equal* to the LMX’s median, while “*High LMX*” = data *above* the LMX’s median), and Z-tests in order to discern whether the differences in estimators between the two LMX groups are statistically significant. Table 3 depicts the indirect effects analysis for the mediation effects, as per the hypotheses. Figure 2 portrays the results in Table 2 on a path diagram.

Table no. 2. SEM path results with standardized regression coefficients and difference tests

			<i>Low LMX</i>		<i>High LMX</i>		Difference Test
Path			β	<i>Sig.</i>	β	<i>Sig.</i>	Z-score
D_Justice	→	Motivation	.46	.000	.18	.233	−2.59***
P_Justice	→	Motivation	−.22	.235	−.63	.000	−0.90
I_Justice	→	Motivation	−.01	.949	.82	.000	3.65***
Motivation	→	CWB	−.08	.608	.15	.396	0.95
Motivation	→	OCB	.51	.000	.82	.000	3.48***
D_Justice	→	CWB	.18	.263	.16	.387	0.11
D_Justice	→	OCB	−.47	.001	−.22	.171	1.37
P_Justice	→	CWB	.36	.075	.47	.044	1.18
P_Justice	→	OCB	.32	.080	.22	.271	−0.03
I_Justice	→	CWB	−.27	.179	−.19	.363	−0.49
I_Justice	→	OCB	.01	.944	−.64	.000	−3.24***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. D_Justice = distributive justice; P_Justice = procedural justice; I_Justice = interactional justice; LMX = leader–member exchange; CWB = counterproductive work behavior; OCB = organizational citizenship behavior.

Table no. 3. Mediation (indirect) effects analyses

					<i>Low LMX</i>			<i>High LMX</i>		
Paths					LL	UL	<i>Sig.</i>	LL	UL	<i>Sig.</i>
D_Justice	→	Motivation	→	OCB	−0.25	0.23	.890	0.28	1.23	.001
D_Justice	→	Motivation	→	CWB	−0.08	0.09	.756	−0.14	0.48	.229
P_Justice	→	Motivation	→	OCB	−0.47	0.10	.249	−1.23	−0.22	.001
P_Justice	→	Motivation	→	CWB	−0.04	0.28	.508	−0.31	0.15	.256
I_Justice	→	Motivation	→	OCB	−0.01	0.56	.051	−0.10	0.70	.274
I_Justice	→	Motivation	→	CWB	−0.25	0.10	.631	−0.02	0.19	.214

Note: Analyses used bootstrapping (95% bias-corrected, 5000 resamples). LL = lower limit of the CI; UL = upper limit of the CI; D_Justice = distributive justice; P_Justice = procedural justice; I_Justice = interactional justice; LMX = leader–member exchange; CWB = counterproductive work behavior; OCB = organizational citizenship behavior.

As can be seen in Table 2, taking into account the group comparison (Low LMX vs. High LMX), there several differences in the correlational relationships between the variables.

Combined with the Z-tests for the differences, this indicates that LMX is indeed a moderator in this context. However, we can also see some counterintuitive associations (e.g., negative links between distributive justice and OCB, or a positive link between procedural justice and CWB). In addition, Table 3 has shown that motivation is indeed a mediator, but *only* between distributive and procedural justice perceptions and OCB (for the High LMX group only).

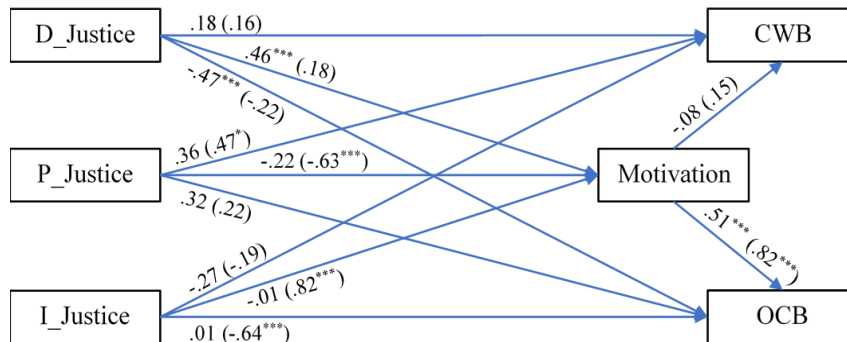


Figure no. 2. Path diagram with SEM results (Study 1)

Note: Data outside parenthesis = Low LMX group. Data inside parenthesis = High LMX group. D_Justice = distributive justice. P_Justice = procedural justice. I_Justice = interactional justice. LMX = leader-member exchange. CWB = counterproductive work behaviors. OCB = organizational citizenship behaviors.

The information gathered from these analyses (i.e., low model fit, peculiar correlations, insignificant mediation effects) made it necessary to replicate the study with a larger sample size.

Study 2

Method

Participants

There were 3293 subjects in the study, 40% males and 60% females between the ages of: 18-25 (53.6%), 26-35 (23.2%), 36-45 (12.3%), 46-55 (9.1%), 56-65 (1.6%), and 65+ (0.2%). The participants had either completed high school education (31.2%), tertiary/post-secondary studies (7.7%), holding/studying for a bachelor's degree (41.4%), holding/studying for a master's degree (19.4%), or holding/studying for a PhD (0.3%).

Regarding their work, most were in a managerial position (83.4%), which included: head of office/team (15.7%), head of department (6.8%), or director/executive manager (3.4%) while the rest in this managerial group (74.2%) were not responsible for the work of other people. The tenure ranged between: 0-5 years (66.1%), 6-10 (14.5%), 11-15 (7.5%), 16-20 (4.6%), 21-25 (2.8%), and 25+ (4.4%).

Measures

All the measures in Study 1 were replicated in this study. Descriptive statistics are included in Table 4.

Procedure

Replication of the procedure employed in Study 1.

Results and Discussion

Common-method bias (CMB). To evaluate the extent to which variable intercorrelations might be an artifact of common method variance (CMV), as suggested by Podsakoff et al. (2003), we utilized two methods: (a) Harman’s single-factor model (where all items are loaded into one common/marker factor); and (b) a common latent factor (CLF) model (where all items are loaded into both their expected factors and one latent common method factor).

Harman’s single-factor method accounted for only 25.49% of the explained variance: $\chi^2(3,070) = 9,433.57$, $p = .000$, $\chi^2/df = 3.07$, CFI = .67, NFI = .66, GFI = .31, SRMR = .15, RMSEA (90% CI) = .24 (.17-.29), $p\text{-close} = .000$. Further, the CLF method of analysis produced 23.17% of the explained variance: $\chi^2(2,990) = 7,115.33$, $p = .000$, $\chi^2/df = 2.38$, CFI = .70, NFI = .69, GFI = .47, SRMR = .12, RMSEA (90% CI) = .14 (.05-.21), $p\text{-close} = .000$. As with the pilot study, while these results do not entirely exclude the possibility of same-source bias (i.e., CMV), according to Podsakoff et al. (2003) less than 50% ($R^2 < 0.50$) of the explained variance accounted for by the first emerging factor indicates that CMB is an improbable explanation of our findings, in conjunction with the bad model fit for each analysis.

Table 4 displays the between-variable bivariate zero-order correlational relationships in the research.

In order to test the model, an SEM with multiple-group analysis was employed using the IBM AMOS (v. 23) software package. The model boasted fit in the absolute sense: $\chi^2(df) = 22.34(11)$, $p = .022$, $\chi^2/df = 2.03$, SRMR = .02, GFI = .99, CFI = .98, NFI = .98, NNFI = .97, RMSEA (90% CI) = .05 (.04-.06), $p\text{-close} = .478$. Table 5 displays the results of the path analysis, while LMX is a moderator (“Low LMX” = data *below or equal* to the LMX’s median, while “High LMX” = data *above* the LMX’s median), and Z-tests in order to discern whether the differences in estimators between the two LMX groups are statistically significant. Table 6 depicts the indirect effects analysis for the mediation effects, as per the hypotheses. Figure 3 portrays the results in Table 5 on a path diagram.

Table no. 4. Pearson correlation matrix

	1	2	3	4	5	6	7	<i>M</i>	<i>SD</i>
D_Justice	(.83)							4.40	0.93
P_Justice	.84	(.88)						4.43	0.97
I_Justice	.87	.88	(.89)					4.27	0.90
Motivation	.53	.56	.54	(.91)				4.04	0.83
LMX	.55	.53	.58	.31	(.85)			4.12	0.91
CWB	-.28	-.27	-.23	-.15	-.12	(.95)		2.10	0.98
OCB	.34	.33	.35	.27	.33	-.15	(.83)	3.72	0.77

Note: All the correlations are significant at $p < .001$. Data in bold and parentheses are the reliability coefficients (Cronbach’s alphas). D_Justice = distributive justice; P_Justice = procedural justice; I_Justice = interactional justice; LMX = leader–member exchange; CWB = counterproductive work behavior; OCB = organizational citizenship behavior.

Table no. 5. SEM path results with standardized regression coefficients and difference tests

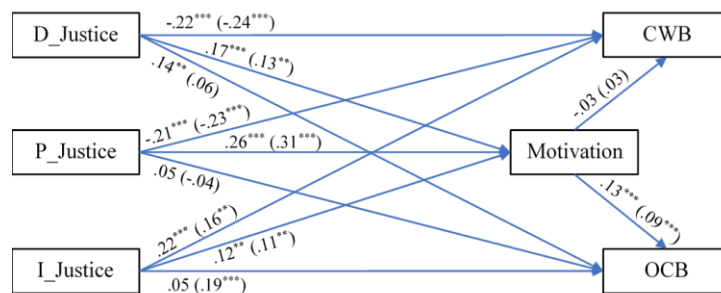
			<i>Low LMX</i>		<i>High LMX</i>		Difference test
Path			β	<i>Sig.</i>	β	<i>Sig.</i>	Z-score
D_Justice	→	Motivation	.17	.000	.13	.001	-0.33
P_Justice	→	Motivation	.28	.000	.31	.000	1.27
I_Justice	→	Motivation	.12	.007	.12	.015	0.13
Motivation	→	CWB	-.03	.311	.03	.206	1.61
Motivation	→	OCB	.13	.000	.09	.000	-0.83
D_Justice	→	CWB	-.22	.000	-.24	.000	-0.68
D_Justice	→	OCB	.14	.002	.06	.193	-0.96
P_Justice	→	CWB	-.22	.000	-.23	.000	-0.69
P_Justice	→	OCB	.05	.311	-.04	.479	-1.20
I_Justice	→	CWB	.22	.000	-.16	.003	-2.49**
I_Justice	→	OCB	.05	.321	.19	.000	2.17*

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. D_Justice = distributive justice; P_Justice = procedural justice; I_Justice = interactional justice; LMX = leader-member exchange; CWB = counterproductive work behavior; OCB = organizational citizenship behavior.

Table no. 6. Mediation (indirect) effects analyses

					<i>Low LMX</i>			<i>High LMX</i>		
Paths					LL	UL	<i>Sig.</i>	LL	UL	<i>Sig.</i>
D_Justice	→	Motivation	→	OCB	0.00	0.04	.005	0.00	0.03	.010
D_Justice	→	Motivation	→	CWB	-0.02	0.00	.234	0.00	0.02	.160
P_Justice	→	Motivation	→	OCB	0.02	0.06	.000	0.01	0.05	.002
P_Justice	→	Motivation	→	CWB	-0.03	0.01	.310	-0.01	0.03	.207
I_Justice	→	Motivation	→	OCB	0.01	0.04	.000	0.00	0.03	.002
I_Justice	→	Motivation	→	CWB	-0.02	0.01	.293	0.00	0.02	.145

Note: Analyses used bootstrapping (95% bias-corrected, 5000 resamples). LL = lower limit of the CI; UL = upper limit of the CI; D_Justice = distributive justice; P_Justice = procedural justice; I_Justice = interactional justice; LMX = leader-member exchange; CWB = counterproductive work behavior; OCB = organizational citizenship behavior.

**Figure no. 3. Path diagram with SEM results (Study 2)**

Note: Data outside parenthesis = Low LMX group. Data inside parenthesis = High LMX group. D_Justice = distributive justice; P_Justice = procedural justice; I_Justice = interactional justice; LMX = leader–member exchange; CWB = counterproductive work behavior; OCB = organizational citizenship behavior.

As can be seen in Table 5, taking into account the group comparison (Low LMX vs. High LMX) there is only one statistically significant difference in the correlational relationships between the variables. This indicates that LMX is *not* actually a moderator, as was previously conceived and in total contrast to Study 1's findings. Noteworthy, the counterintuitive associations in Study 1 (e.g., negative links between distributive justice and OCB, or a positive link between procedural justice and CWB) are now rendered logical, save one (positive link between interactional justice and CWB, only in the Low LMX group).

In addition, Table 6 has shown that motivation is indeed a mediator, but *only* between distributive, procedural, and interactional justice perceptions and OCB (for *both* LMX groups). No mediation effect was found when considering CWB as the criterion.

To conclude the findings, Table 7 presents the summary of results from the analyses made in both Study 1 and Study 2.

Table no. 7. Summary of results from hypotheses testing

				Study 1		Study 2	
Hypothesis/Path				Low-LMX	High-LMX	Low-LMX	High-LMX
D_Justice	→	Motivation		Supported	N.S.	Supported	Supported
P_Justice	→	Motivation		N.S.	Supported	Supported	Supported
I_Justice	→	Motivation		N.S.	Supported	Supported	Supported
D_Justice	→	OCB		Supported	N.S.	Supported	N.S.
P_Justice	→	OCB		N.S.	N.S.	Supported	N.S.
I_Justice	→	OCB		N.S.	Supported	Supported	Supported
D_Justice	→	CWB		N.S.	N.S.	Supported	Supported
P_Justice	→	CWB		N.S.	Supported	Supported	Supported
I_Justice	→	CWB		N.S.	N.S.	Supported	Supported
D_Justice	→	Motivation	→	OCB	N.S.	Supported	Supported
P_Justice	→	Motivation	→	OCB	N.S.	Supported	Supported
I_Justice	→	Motivation	→	OCB	N.S.	N.S.	Supported
D_Justice	→	Motivation	→	CWB	N.S.	N.S.	N.S.
P_Justice	→	Motivation	→	CWB	N.S.	N.S.	N.S.
I_Justice	→	Motivation	→	CWB	N.S.	N.S.	N.S.
LMX	=	Moderator		Supported		N.S.	

Note: N.S. = not-supported; D_Justice = distributive justice; P_Justice = procedural justice; I_Justice = interactional justice; CWB = counterproductive work behavior; OCB = organizational citizenship behavior; LMX = leader–member exchange.

Conclusions

The aim of the current paper was to elucidate (1) the relationship between organizational justice (as reflected by its three dimensions: distributive, procedural, and interactional) and positive (i.e., OCB) and negative (i.e., CWB) outcomes; (2) the mediational mechanism of work motivation in said association; and (3) the moderation effect of LMX on the whole research model (as outlined in Figure 1). In order to do so, we employed a pilot study (i.e., Study 1) and a follow-up study (i.e., Study 2) with a significantly larger sample size.

The results show distinct differences between the two samples (Study 1 vs. Study 2). In the pilot study, most of our hypotheses were corroborated: (1) organizational justice (distributive, procedural, interactional) negatively correlates with CWB, and positively with OCB (H1 and H2); (2) work motivation mediated only two of these relationships (procedural/distributive justice \rightarrow motivation \rightarrow OCB) (H4); and (3) the LMX level, as a moderator, seemed to be a conditional factor on the overall model (H5). However, in our larger sample (Study 2) we revealed a better and more sensible correlative constellation among the variables. The mediation of work motivation (H3 and H4) has been bolstered, and the moderation of LMX (H5) has been completely rejected.

There are some implications to our research. First, we can learn from the differences between the two studies. Employing a pilot before conducting the full-scale research may be useful, to a certain extent. As in the current research, a pilot portrays the network of relationships, enabling us to view the general picture. However, evidently, the model resulted somewhat differently in Study 2, with the larger sample size. As Study 2 is more representative of the population, one may assume the associations found in it better resemble reality. For example, LMX was found to be a moderator in Study 1, but *not at all* in Study 2. Also, mediation analyses produced better findings in Study 2. This connects to the central limit theorem, which estimates that a larger the sample size in a given set (i.e., $n \rightarrow \infty$) approximates to a normal distribution (e.g., Rosenblatt, 1956). We, therefore, recommend the use of larger sample sizes as humanly possible, especially in cross-sectional research such as this.

These results manifested in a certain cultural context (i.e., Romania), and might not be relevant to other cultures and/or places. As such, we suggest replicating the study in other countries, similar to or different from Romanian cultural values to extend the external validity of the research. Replications have been employed successfully in well-established sciences such as physics, chemistry and biology to ensure veracity of findings. Therefore, we recommend that this approach be applied to behavioral sciences as well. Thus, replication of investigations such as the current one should be embarked on despite the support our hypotheses in this study have gained (Tziner, in press).

We can see that, finally, LMX did not moderate any of the relationships in the model, as hypothesized; therefore, the exchanges between managers and their subordinates do not act as a conditional factor. Thus, (1) there may be an untapped cognitive process of attribution that should be explored in the future (perhaps the employees do not attribute lack of fairness to their immediate manager); and (2) future studies should consider other potential moderators such as ethical climate in the workplace, the size of the organization/department, Big Five personality factors, and job autonomy.

In addition to these, the associations discovered in our research may be useful for organizations. We recommend that organizations create a just and fair work environment as

work environment can lead to increased work motivation and organizational citizenship behavior (when perceived as positive), or counterproductive work behavior (when perceived as negative). We also recommend monitoring the motivation of the employees, as this acts as a partial mediational mechanism to OCB (i.e., organizational justice → motivation → OCB), and as such, increasing it may result in increased OCB.

Using a self-report CWB questionnaire comprising items of a “judgmental” nature about the employee’s conduct at work might have impacted the results, as the effects on CWB as an outcome are weak or non-significant, as opposed to OCB. The questionnaire may be perceived as a “critical voice,” thus making it difficult for the respondent to report his or her own negative behaviors (as well as towards others). Items such as “I have taken property from work without permission” or “I have fabricated a receipt in order to get remuneration for work expenses” may be difficult to answer honestly. Individuals may find it difficult to admit to behaviors such as disparagement of others or theft, even to themselves, and under anonymity. Chernyak-Hai and Tziner’s (2014) study, which revealed a low average CWB ($M = 2.64$ on a scale of 1-6), similar to our results ($M = 2.50$ and $M = 2.10$ on a scale of 1-6, for Study 1 and Study 2, respectively), provides empiric support.

Furthermore, the use of a *self-reported* measure of CWB might be considered a limitation of this analysis. This deficiency might be remedied by supplementing self-reporting measures with *other-reported* measures (e.g., by supervisors and co-workers) of CWB, the latter being thought of as comparatively objective. Nevertheless, as CWB is difficult to observe, the inter-rater reliability of other-reported measures of CWB is typically low (Berry, Carpenter and Barratt, 2012).

In our model, we did not consider any proper individual differences such as emotional intelligence or the Big Five personality factors as predictors, as organizational justice perceptions may be considered as an attitudinal individual difference. We might have been able to draw deeper conclusions from doing so (e.g., Staw and Cohen-Charash, 2005).

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