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ORGANISATIONAL JUSTICE AND AFFECTIVE COMMITMENT: THE MEDIATING ROLE OF PERCEIVED ORGANISATIONAL SUPPORT

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ABSTRACT

Perception of fairness among employees is a guiding force that influences employee attitude and behaviour. However, the mechanisms associated with justice need to be studied further. This study hypothesises that perceived organisational support (POS) mediates the relationship between organisational justice perceptions and affective commitment of employees. The study was conducted in a multi-national organisation operating in India in the service sector; the sample size was 71 employees. Baron and Kenny's model of studying the mediating relationship was used. The findings showed that POS fully mediates the relationship between distributive justice and affective commitment as well as partially mediates the relationship between procedural justice and affective commitment. This study highlights the importance of fairness and justice in organisations and identifies the mechanism by which employee perceptions of justice influence their loyalty and involvement.

Keywords: organisational justice, perceived organisational support, affective commitment

INTRODUCTION

Organisations today are struggling for better utilisation of human resources to gain competitive advantages. This struggle has brought the employeeorganisation relationship in focus among both researchers and practitioners. Because all organisations aim to enhance loyalty and employees' identification with the organisation, this paper intends to study the effects of organisational justice and support on affective commitment.

The perception of justice is directly related to the quality of the relationships that employees have with the organisation and with their immediate supervisors. Depending on the notion of justice employed by different studies, justice perceptions of employees in relation to their organisation have been related to

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various outcome variables, such as organisational commitment, job satisfaction, pay satisfaction, and group commitment. For instance, studies found stronger effects of distributive justice on job satisfaction and pay satisfaction (McFarlin & Sweeney, 1992; Ambrose & Arnaud, 2005) and stronger effects of procedural justice on organisational commitment (McFarlin & Sweeney, 1992) and organisational citizenship behaviour (Moorman, Blakely, & Niehoff, 1998). These studies highlight that positive justice judgments of an employee can affect the employee's relationship with the organisation, by promoting commitment, improving trust and effecting behaviour such as subordination of self interest to group goals and interests. However, research has also shown that the social exchange variable in terms of perceived organisational support also strongly impacts employee actions and behaviours in terms of the employee's commitment towards the organisation (Rhoades & Eisenberger, 2002). What remains, however, is the need to understand why justice perceptions lead to positive employee level outcomes (Masterson, Lewis, Goldman, & Taylor, 2000). Here, it can be argued that the employee's perception of justice leads to his/her formation of schemas of support of the organisation. By virtue of the collective personal experiences of the employee, in terms of the decisions taken by the organisation towards him/her and the treatment received, the employee forms interpretations with respect to the extent of the care available within the organisation and the organisation's commitment towards him or her. The perception of justice is interpreted as the extent to which the employee perceives is his value within the organisation and the employee's sense of belief that he has a sound relationship with the organisation (Ambrose & Arnaud, 2005). Perceptions of being a valued member in an organisation increase feelings of loyalty towards the organisation, and hence, can also be observed as invariably impacting the employee's actions and behaviours in terms of the employee's commitment towards the organisation.

Thus, research shows that fair and favourable outcomes influence the exchange relationship of perceived organisational support, which further impacts employee attitudes and behaviours at work. This highlights the need to study the mediating effect of perceived organisational support in predicting the effect of organisational justice on affective commitment. While the effects of both justice and perceived organisational support on employee level outcomes have been studied independently, these variables have not been integrated in the same study, although previous research on organisational justice has identified the need to study the impact of organisational justice on outcome variables through social exchange variables (Masterson et al., 2000). The integration of organisational justice and perceived organisational support could provide a complete understanding of how employees experience the effects of fairness in the organisation. It would clarify the complex relationship between justice and outcome variables, elucidating the mechanism by which justice judgments affect attitudes and behaviours.

REVIEW OF THE LITERATURE

Starting from Adam's (in Cohen-Charash & Spector, 2001) work on organisational justice in the early 1960s, numerous studies have examined the role of justice in organisations (Cohen-Charash & Spector, 2001, references therein). Justice impacts outcomes such as work performance, organisational citizenship behaviour, counter-productive work behaviour, withdrawal behaviour, and attitudinal and affective reactions towards specific outcomes, the organisation and the supervisor (Cohen-Charash & Spector, 2001). Researchers have identified different types of justice perceptions (Colquitt, Conlon, Wesson, Porter, & Yee Ng, 2001). The perceived fairness of outcomes is distributive justice, the perceived fairness of processes by which outcomes were divided is procedural justice, the quality of interpersonal treatment one receives during the enactment of organisational procedures is interactional justice and explanations of why certain procedures were used in a certain manner is informational justice (Holtz & Harold, 2009). Two main sources of workplace justice are organisations and supervisors (Holtz & Harold, 2009). This study focuses on the organisational sources of justice (distributive and procedural) as these perceptions would impact employee attitude and behaviour towards the organisation.

Organisational Justice and Affective Commitment

Justice perceptions of employees are influenced by outcomes received from the organisation, as well as the policies, procedures and practices, and the characteristics of the perceiver, such as demographic characteristics and personality traits (Cohen-Charash & Spector, 2001). However, the two justice constructs differ in their relationships with specific criterion variables or links to different criterion variables (Hauenstein, McGonigle, & Flinder, 2001). One proposition provides (Folger & Konovsky, 1989) that distributive justice has strong effects on attitudes for specific outcomes, such as pay and job satisfaction, whereas procedural justice has strong effects on global attitudes for specific authority or institutions, such as organisational commitment. Folger and Konovsky (1989) reasoned that perceived distributive justice does not affect trust and commitment because of the quid pro quo matters concerning fairness in the exchange of labour for compensation. The employees, in lieu of their compensation, provide their labour, and hence do not feel any further obligation towards the organisation beyond this quid pro quo. Distributive justice does not have any impact on the perception of the supervisor because fair pay for work is what most organisations are expected to provide whereas procedural justice increases organisational commitment and trust in supervisors or in those making allocating decisions.

However, McFarlin and Sweeney (1992) stated that distributive justice and procedural justice had significant interactive effects on organisational outcomes, subordinates' evaluation of supervisors and organisational commitment. This is explained by the referent cognitions theory, which argues that under conditions of procedural fairness, employees would be unable to envision more positive outcomes. Another explanation provided for the stronger effect of procedural justice is due to the primacy effect of process- and procedure-related information (Lind, 2001). According to the fairness heuristic theory, the information that is received first will have greater impact on the general fairness judgment (Lind, 2001). Because information related to processes and procedures is received before outcomes, it exerts a stronger influence. Lambert, Hogan, and Griffin (2007) have shown that both distributive justice and procedural justice significantly influenced organisational commitment; however, the effect of procedural justice was much larger.

While much research has examined the differential impacts of distributive justice and procedural justice on attitudinal outcomes, the research has not focused on the indirect relationships of distributive justice with organisational commitment and procedural justice on pay satisfaction (Ambrose & Arnaud, 2005). While studying the differential effects of different types of justices has its relevance in explaining their differential effects, a comprehensive view that studies the indirect effects is critical, as different forms of justice are not exclusive but significantly correlated with each other.

Meyer and Allen (1984) provided two different aspects of organisational commitment: (1) affective, denoting the emotional attachment to, identification with, and involvement with the organisation, and (2) continued commitment, denoting the perceived costs of leaving the organisation. Subsequently, Allen and Meyer (1990) added the third component normative commitment, which reflects the perceived obligation to remain with the organisation. Research shows that affective commitment correlates strongly with work experience variables, while normative commitment correlates less strongly; for continuance commitment, the relationship was reversed (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Meyer and Allen (1997, as cited in Rhoades, Eisenberger, & Armeli, 2001) noted that work experiences, such as organisational rewards, procedural justice and supervisor support, have stronger associations with affective commitment than structural aspects of the organisational or personal characteristics. Hence, this study focuses on the affective commitment as it is most strongly related to work experiences of the employees. Thus, this study hypothesises:

- H₁: The higher the employees' distributive justice perceptions, the higher their affective commitment will be.
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H₂: The higher the employees' procedural justice perceptions, the higher their affective commitment will be.

Organisational Justice and Perceived Organisational Support

Perceived organisational support reflects the employees' beliefs concerning the organisation's commitment towards them. The organisation is personified through the actions of its agents. Its readiness to reward increased work and meet employees' need for praise results in the employees' development of beliefs regarding the extent to which the organisation values them and cares about their well being (Eisenberger, Huntington, Hutchinson, & Sowa, 1986) while motivating employees to achieve organisation goals (Wayne, Shore, & Liden, 1997). According to Eisenberger et al. (1986), material rewards, such as pay, job enrichment and influence over policy, would increase the perceived organisational support if the employee attributes these to the organisation's own disposition. Shore and Shore (as cited in Moorman, Blakely, & Niehoff, 1998) have stated how perceptions of justice lead to the formation of "global schema of history of support." "In other words, it is the history of decisions, and the associated employee interpretations of organizational caring, that are most likely to influence employee behavior" (Shore & Shore, as cited in Moorman, Blakely, & Niehoff, 1998). Rhoades and Eisenberger (2002) have stated that favourable treatment received by employees is positively related to perceived organisational support and this, in turn, influences outcomes such as affective commitment, performance and reduced turnover. Lind (2001) states that the most important part of fairness is the resultant belief the employees develop in being a valued member of the organisation. Research has shown that level of organisational justice present in management decisions directly relates to the quality of social exchange relationships between the organisation and their employees (Tekleab, Takeuchi, & Taylor, 2005). Wayne, Shore, Bommer, and Tetrick (2002) have found distributive that and procedural justice relate significantly with perceived organisational support, with procedural justice having a stronger relationship. The employees perceive that the organisation cares when decisions are based on accurate and unbiased information and when the employees have the ability to raise their concerns. Hence, the following hypotheses are formulated:

- H₃: The higher the employees' perception of distributive justice, the higher their perceived organisational support will be.
- H₄: The higher the employees' perception of procedural justice, the higher their perceived organisational support will be.

Mediation Effect of Perceived Organisational Support

Employers value dedication and loyalty in employees, as emotional commitment is a predictor of outcomes, such as performance, absenteeism and turnover (Mathieu & Zajac, 1990). At the same time, employees want to be valued and be an integral part of the organisation (Rhoades & Eisenberger, 2002). While positive work experiences have strong associations with affective commitment, little research has examined the mechanisms that are responsible for this relationship (Rhoades et al., 2001; Masterson et al., 2000). Rhoades et al. (2001) have found that perceived organisational support mediated the associations of favourable work experience with affective commitment; this was due to the reciprocation of positive regard and caring, as well as the incorporation of organisational membership in the social identity. According to Fuller, Barnett, Hester, and Relyea (2003), this relationship can be explained by the social identity theory, which states that individuals feel recognised within an organisation when their employer values their contributions towards the organisation. Recognition of their work and status in the organisation helps meet their socio-emotional needs, which contributes to building their social identity, and in turn enhances their sense of belonging and pride in the organisation. Aube, Rousseau, and Morin (2007) have explained the relationship between perceived organisational support and affective commitment by referring to Blau's Social Exchange Theory. It states that the development and maintenance of all human relationships is based on an exchange of resources that are valued by the individuals interacting with the organisation. Behaviours related to organisational support, such as promotions and salary increases, are interpreted by employees as marks of respect and consideration from the employer. To show their gratitude, employees develop a positive attitude towards the organisation by increasing their affective commitment. Thus, it can be concluded that distributive justice (perceived fairness of outcomes) and procedural justice (perceived fairness of procedures) make the employees feel valued and cared for by the organisation. This organisational support enhances their loyalty and emotional attachment to the organisation. Based on this line of reasoning, the following hypotheses are formulated:

- H₅: The relationship between distributive justice and affective commitment will be mediated by perceived organisational support.
- H₆: The relationship between procedural justice and affective commitment will be mediated by perceived organisational support.

In the context of Indian organisations, few studies have integrated aspects of organisational justice and social exchange. The few studies found by the researcher of the present study (Pillai, Scandura, & Williams, 1999; Bhal, 2006)

have investigated organisational justice and leader member exchange in relation to employee attitudes. A need remains to integrate organisational support and organisational justice in the same study and relate them to employee attitudes at work in the Indian context.

METHOD

The data for this study were collected from middle-level managers in a multinational service organisation. This organisation provides consulting, technology and outsourcing services in different industry sectors. The human resource (HR) department was approached to obtain approval to access the middle-level managers in the organisation for a period of three weeks. As per the suggestion from HR, a questionnaire was put online and an email was sent by the researcher requesting participation by filling the questionnaire online (through the HR) to the employees who were middle-level managers. The confidentiality of the respondents and their responses was assured. A total of 71 employees filled out the survey in a period of three weeks, although about 200 employees had been requested to do so. The response rate was 35%. The age group of the respondents was from 28 to 45 years; 85% were males and 15% were females.

Measures

The Neihoff and Moorman (1993) scale was used to measure distributive and procedural justices. The scale had five items for distributive justice and six items for procedural justice on a seven-point rating scale. Cronbach's alpha for distributive justice was .86 and for procedural justice was .92. For perceived organisational support, the sixteen item scale by Eisenberger et al. (1986) was used. The scale has a seven-point rating scale, and Cronbach's alpha was .92. For organisational commitment, the affective commitment scale by Meyer, Allen, and Smith (1993) was used. It is a six-item scale with a seven-point rating scale. The alpha coefficient of the affective commitment scale was .91.

RESULTS AND ANALYSIS

Regression analysis using Baron and Kenny (1986) hypotheses was used to determine the mediating effect of perceived organisational support on the relationship of two forms of organisational justice and the affective commitment of employees. Table 1 reports the intercorrelations between the four variables. The pattern of correlations provides some support for the hypothesis. Significant positive correlations exist between justice perceptions and affective commitment, as well as with perceived organisational support. However, the perceived

organisational support has a stronger correlation with affective commitment (r = 0.67, p < .01) than it does with procedural justice (r = 0.66, p < .01) and distributive justice (r = 0.52, p < .01). Procedural justice has a stronger correlation with perceived organisational support (r = 0.67, p < .01) than it does with distributive justice (r = 0.65, p < .01).

Table 1

Means, standard deviations and correlations among the variables studied. The Cronbach alpha are given in parentheses along the diagonal. **p < .01

Variables	Ν	Mean	SD	1	2	3	4
Distributive Justice	71	21.70	6.41	(.86)			
Procedural Justice	71	25.70	8.64	.72**	(.92)		
Perceived Organizational Support	71	69.20	16.8	.65**	.67**	(.92)	
Affective Commitment	71	27.11	8.21	.52**	.66**	.67**	(.91)

Baron and Kenny's (1986) recommendations were followed to test the mediation. According to them, three conditions must hold to establish a significant mediation effect:

- 1. The independent variable must impact the dependent (criterion) variable.
- 2. The independent variable must significantly impact the mediator.
- 3. The mediator must impact the dependent (criterion) variable and the impact of the independent variable on the dependent must either become insignificant (total mediation) or become less significant (partial mediation) in the third condition.

Three equations were used to test the mediation effect of perceived organisational support on distributive justice-affective commitment relationship, and three equations were used to determine the mediating effect on the procedural justice-affective commitment relationship. The results for the mediation are demonstrated in Table 2 and Table 3.

The first equation in Table 2 shows the direct relationship between distributive justice and affective commitment ($\beta = .66$, p < .01). Thus, hypothesis 1 is accepted. The second equation in Table 2 shows the direct relationship between distributive justice and perceived organisational support ($\beta = 1.72$, p < .01). Thus, hypothesis 3 is accepted. The third equation in Table 2 shows the mediating effect of perceived organisational support on distributive justice-affective commitment relationship. It can be observed that the main effect of distributive justice on affective commitment becomes insignificant ($\beta = .18$), and the effect of perceived organisational support on affective commitment is stronger and

significant ($\beta = .28$, p < .01). Thus, hypothesis 5 is accepted, and it can be concluded that perceived organisational support fully mediates the relationship between distributive justice and affective commitment.

Table 2

Regression analysis for testing mediation; Perceived organizational support as mediator of distributive justice-affective commitment relationship

Variable	Perceived organizational support	Affective commitment (<i>Unstandardized</i> β)		
	(Unstandardized β)			
Equation 1				
Distributive Justice		.66**		
		df = (1, 69)		
		$R^2 = .27$		
		F=25.37**		
Equation 2				
Distributive Justice	1.72**			
	df = (1, 69)			
	$R^2 = .43$			
	<i>F</i> = 51.21**			
Equation 3				
Distributive Justice		.18		
Perceived		.28**		
Organizational				
Support				
		df = (2,68)		

Notes: **p* < .003; ***p* < .01

The first equation in Table 3 shows the direct relationship between procedural justice and affective commitment ($\beta = .63$, p < .01), and the second equation shows the relationship between procedural justice and perceived organisational support ($\beta = 1.31$, p < .01). Both hypotheses 2 and 4 are accepted as both unstandardised coefficients were significant. The third equation shows the mediating effect of perceived organisational support on procedural justice-affective commitment relationship. It can be observed that the main effect of procedural justice on affective commitment is reduced ($\beta = .37$, p < .01) when perceived organisational support is introduced into the equation. The results indicate that perceived organisational support partially mediates the relationship between procedural justice and affective commitment. Thus, hypothesis 6 is also accepted.

Table 3

Regression analysis for testing mediation; Perceived organisational support as mediator of procedural justice-affective commitment relationship

Variable	Perceived Organisational Support Unstandardized β	Affective Commitment Unstandardized β
Equation 1	οπειαπαίταιζεα ρ	
Procedural Justice		.63**
		<i>df</i> =(1,69)
		$R^2 = .44$
		<i>F</i> = 54.19**
Equation 2		
Procedural Justice	1.31	
	df = (1,69)	
	$R^2 = .45$	
	F=56.17**	
Equation 3		
Procedural Justice		$.37^{**}(p < .001)$
Perceived Organisationa	1	.20**
Support		
		df = (2,68)

Notes: **p* < .003; ***p* < .01

The Sobel test (Preacher & Leonardelli, 2010) was further used to test the significance of mediation of perceived organisational support on the effect of distributive justice on affective commitment and procedural justice on affective commitment. The Sobel test statistic (see Table 4) for distributive justice as the independent variable was 4.09 (p < .01), and the Sobel test statistic (see Table 5) for procedural justice as independent variable was 3.35 (p < .01). Hence, it can be concluded that perceived organisational support mediates the relationship between the two independent variables and the dependent variable.

Table 4

Sobel test, Aroian test and Goodman test for distributive justice as independent variable, perceived organisational support as a mediating variable and affective commitment as a dependent variable.

Test Statistic	
Sobel test	4.09**
Aroian test	4.06**
Goodman test	4.12**

Note: ** *p* < .01

Table 5

Sobel test, Aroian test and Goodman test for procedural justice as independent variable, perceived organisational support as mediating and affective commitment as a dependent variable.

Test Statistic	
Sobel test	3.35**
Aroian test	3.32**
Goodman test	3.37**

Note: ** p < .01

DISCUSSION

The purpose of the study was to examine the mediating effect of perceived organisational support on distributive justice-affective commitment and procedural justice-affective commitment relationships. The findings supported the contention; perceived organisational support fully mediates the relationship between distributive justice and affective commitment while partially mediating the relationship between procedural justice and affective commitment. The findings of the study are in line with previous studies in the literature. A positive significant relationship was found between distributive justice and procedural justice with perceived organisational support. Studies have found that organisational rewards and favourable job conditions (such as good pay, promotions, job enrichment and influence over policies) contribute to the perceived organisational support (Rhoades & Eisenberger, 2002; Wayne, Shore, Bommer, & Tetrick, 2002). Hence, distributive justice signifies favourable working conditions and rewards for employees; it communicates the organisation's concerns for the employee's well-being. According to the relational model of procedural justice (Ambrose & Arnaud, 2005), fair procedures signify how much the group values its members; it satisfies one's desire to be seen as a fully fledged and full status member. Thus, both distributive and procedural justices communicate the organisation's support and commitment to its employees. The consequences of perceived organisational support are that employees feel recognised and valued by the organisation. It tells employees that the employer recognises their contributions to the organisation and takes care of their socio-emotional needs (Fuller et al., 2003; Aube et al., 2007). In response to these underlying psychological processes, employees develop a positive attitude towards their organisation. It creates feelings within the individual to repay the organisation (Settoon, Bennett & Liden, 1996) and the employee would reciprocate with commitment (Cropanzano & Rupp, 2008). The results in this study show that an indirect relationship exists between distributive justice and affective commitment through perceived organisation support. Procedural justice

also effects affective commitment through perceived organisational support, though partially. Hence both forms of organisational justice would influence the affective commitment of employees by communicating to them that the organisation values their contribution and cares about their welfare. This belief results in feelings of positivity and loyalty towards the organisation.

CONCLUSIONS, IMPLICATIONS AND LIMITATIONS

This study fills the gap in the literature of integrating justice perceptions and the social exchange variable-perceived organisational support in the same study. While previous research had examined the direct effect of justice perceptions on distinct criterion variables, the need remained to study the role of social exchange variables in mediating these relationships. This study has highlighted the importance of perceived organisational support as the mechanism by which organisational justice impacts employee attitudes. Fair and favourable outcomes as well as procedures are perceived by the employees as a sign of organisational support to which the employees feel obligated to reciprocate with loyalty and commitment. This study also focused on the indirect relationship between distributive justice and affective commitment, which has been overlooked in the literature thus far. Research has largely studied procedural and distributive justice as distinct constructs relating to specific criterion variables; however, neither forms of organisational justice are mutually exclusive with each other. Hence, this study adds to the limited research investigating the effects of procedural and distributive justices on the same criterion variable. In the Indian context, this study also adds to the limited literature in the area of organisational justice and support. It provides the mechanism by which positive justice judgments influence the attitudes of employees working in an organisation.

This study has practical implications for managers in both Indian and international contexts. It highlights the importance of justice perceptions and organisational support in enhancing feelings of loyalty and identification with the organisation. Most employers want their employees to be dedicated to the organisation, to identify with the organisational goals and to work towards fulfilling them. Organisations, by providing positive work experiences through fair rewards and recognition, communicate that they value the employee's contribution. When decisions are based on accurate and unbiased information and the employees have a voice, it shows that the organisation cares about the employees' well-being. Employees respond to these positive work experiences by being more dedicated and feel a sense of belonging and pride in their organisation.

Though the study provides useful insights, the results may be viewed in light of the limitations. The data were collected from the same source; hence the possibility of common method variance may be present. Future studies can obtain data from other sources and thereby enhance the generalisability of the findings. The data were cross-sectional; thus, the causality can only be assumed and not confirmed. Using longitudinal data and other ratings of attitudes could provide support for the findings of this study. The data were collected through self-reports; as such, social desirability response bias may have occurred. While this bias cannot be ruled out, some researchers have shown that social desirability may not be a source of bias in measuring organisational perceptions (Moorman & Podsakoff, 1992). Another limitation was the small sample size. Future studies could use larger sample sizes and multiple sources of data for better generalisability of the findings.

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REFERENCES

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organisation. *Journal of Occupational Psychology*, 63, 1–18.
- Ambrose, M. L., & Arnaud, A. (2005). Are procedural justice and distributive justice conceptually distinct? In J. Greenberg & J. A. Colquitt (Eds.), *Handbook of organizational justice* (pp. 59–84). New Jersey: Lawrence Erlbaum Associates.
- Aube, C., Rousseau, V. & Morin, E. M. (2007). Perceived organizational support and organizational commitment the moderating effect of locus of control and work autonomy. *Journal of Managerial Psychology*, 22(5), 479–495.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations. *Journal of Applied Psychology*, 51(6), 1173– 1182.
- Bhal, K. T. (2006). LMX-citizenship behavior relations: justice as a mediator. Leadership & Organizational Development Journal, 27(2), 106–117.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. Organizational Behavior and Human Decision Processes, 86(2), 278–321.

- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H. & Yee Ng, K. (2001). Justice at the millennium: A meta-analystic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86(3), 425–445.
- Cropanzano, R., & Rupp, D. E. (2008). Social exchange theory and organizational justice: Job performance, citizenship behaviors, multiple foci, and a historical integration of two literatures. In S.W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Justice, morality and social responsibility* (pp. 63–99). Charlotte, NC: Information Age Publishing.
- Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D. (1986). Perceived organizational support. *Journal Of Applied Psychology*, 71(3), 500–507.
- Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, *32*(1), 115–130.
- Fuller, J., Barnett, T., Hester, K., & Relyea, C. (2003). A social identity perspective on the relationship between perceived organizational support and organizational commitment. *The Journal of Social Psychology*, *143*(6), 789–791.
- Griffin, M., & Hepburn, J. (2005). Side bets and reciprocity as determinants of organizational commitment among correctional officers. *Journal of Criminal Justice*, 33, 611–625.
- Hauenstein, N. M. A., McGonigle, T., & Flinder, S. W. (2001). A meta-analysis of the relationship between procedural justice and distributive justice: implications of justice research. *Employee Responsibilities and Rights Journal*, 13(1), 39–55.
- Holtz, B. C. & Harold, C. M. (2009). Fair today, fair tomorrow? A longitudinal investigation of overall justice perceptions. *Journal of Applied Psychology*, 95(5), 1185–1199.
- Lambert, E. G., Hogan, N. L., & Griffin, M. L. (2007). The impact of distributive and procedural justice on correctional staff job stress, job satisfaction and organizational commitment. *Journal of Criminal Justice*, 35, 644–656.
- Lind, E. A. (2001). Fairness heuristic theory: Justice judgments as pivotal cognitions in organizational relations. In J. Greenberg & R. Cropanzano (Eds.), *Advances in organizational justice* (pp. 56–88). Stanford, CA: Stanford University Press.
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43(4), 738–748.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates and consequences of organizational commitment. *Psychological Bulletin*, 108(2),171–194.

- McFarlin, D. B., & Sweeney, P. D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, *35*(3), 626–637.
- Meyer, J. P. & Allen, N. J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, *69*, 372–378.
- Meyer, J., Allen, N., & Smith, C. (1993). Commitment to organizations and occupations: extension and test of a three component conceptualization. *Journal of Applied Psychology*, 78(4), 538–551.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61, 20–52.
- Moorman, R. H., Blakely, G. L., & Niehoff, B. P. (1998). Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal*, *41*(3), 351–357.
- Moorman, R. H., Niehoff, B. P., & Organ, D. W. (1993). Treating employees fairly and organizational citizenship behavior: sorting the effects of job satisfaction, organizational commitment and procedural justice. *Employees Responsibilities and Rights Journal*, 6(3), 209–225.
- Moorman, R. H., & Podsakoff, P. M. (1992). A meta-analytic review and empirical test of the potential confounding effects of social desirability response sets in organizational behavior research. *Journal of Occupational and Organizational Psychology*, 65, 131–149.
- Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. Academy of Management Journal, 36(3), 527–556.
- Pillai, R., Scandura, T. A., & Williams, E. A. (1999). Leadership and organizational justice: Similarities and differences across cultures. *Journal of International Business Studies*, 30(4), 763–779.
- Preacher, K. J., & Leonardelli, G. J. (2010). Calculation for the Sobel test website. Retrieved 11 October 2010, from http://people.ku.edu/~ preacher/sobel/sobel.htm
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714.
- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of Applied Psychology*, 86(5), 825–836.
- Settoon R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81, 219–227.

- Tekleab, A. G., Takeuchi, R., & Taylor, M. S. (2005). Extending the chain of relationships among organizational justice, social exchange and employee reactions: The role of contract violations. Academy of Management Journal, 48(1), 146–157.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82–111.
- Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of Applied Psychology*, 87(3), 590–598.