



Continuous performance-based feedback and justice perceptions: Evidence for mediation by experienced participation

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Abstract One of the goals of most modern organisations is to ensure justice and fairness. Performance management (PM), a human resource (HR) system, supposedly contributes to how employees perceive procedural, distributive and interactional justice. However, the mechanism underlying performance feedback and the three types of justice perceptions remains unexplored. The author hypothesised and found that it is the experience of participation by employees ($N = 220$) of Indian software multinationals that mediates the relationship between continuous performance-based feedback and perceived justice. Implications of the findings and limitations of the study are discussed.

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Introduction

Organisational justice has been viewed as “a dominating theme in organisational life” (Cremer, 2005, p. 4) and has been widely discussed in academic and practitioner fora (Cohen-Charash & Spector, 2001; Colquitt et al., 2013). The three forms of justice that have emerged in justice literature are distributive justice (Adams, 1963, 1965; fairness of outcomes/rewards received), procedural justice (Lind & Tyler, 1988; Thibaut & Walker, 1975; fairness of procedures/processes followed to arrive at the outcomes), and interactional justice

(Bies & Moag, 1986; Greenberg, 1993; fairness of interactions, interpersonal sensitivity and treatment received from those in authoritative positions).

Given that performance management (PM) is an important human resource management (HRM) system that has significant implications for employees (Dewettinck & Dijk, 2013), employee perceptions of fairness deserve attention. While HR systems supposedly take the technical, legal, economic and strategic business into consideration, employees’ evaluation of these systems seems to be largely guided by their perceptions of fairness (Bowen & Ostroff, 2004). Further, changes in employee attitudes and behaviours depend on how the systems are implemented (Linna et al., 2011). It is unsurprising, therefore, that several researchers acknowledged the importance of employees’ justice perceptions in effectiveness of PM (Cropanzano, Bowen, & Gilliland, 2007; Crow, Lee, & Joo, 2012; Gupta & Kumar, 2013). What is

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surprising, nevertheless, is that only a few organisational justice studies have related performance appraisal and management context (Holbrook, 2002; Jawahar, 2007). Among them, Linna et al. (2011) and Westerman and Westerman (2013) specifically called attention to studying organisational interventions that may facilitate understanding of organisational context and justice perceptions.

India has been making significant contributions to the world economy. During the last two decades, India has increased her global contribution to the global GDP from 3 to 7% (Olarreaga, Lederman, & Soloaga, 2007), and is already seen as the world's leading global sourcing destination for Information Technology and Business Process Management (IT-BPM) services with a share of 55% in 2013 (NASSCOM, 2015). Several foreign and Indian multinational companies (MNCs) compete in the IT business. Consequently, there has been a significant demand for high performance, democratic norms, and employee empowerment. Because the IT industry is knowledge-driven and requires teamwork from those hired, it is important to study whether the way in which their performance is managed and/or appraised determines justice perceptions. More specifically, it is important to study whether experience of participation transmits the effects of continuous performance-based feedback on justice perceptions.

Hypothesis development

While PM literature acknowledges the importance of feedback and its role in achievement of desired goals and performance improvement (DeNisi & Pritchard, 2006), emphasis on (1) quality of interactions, (2) informal exchanges, (3) providing accurate feedback, and (4) promoting feedback-seeking for enhancement of present and future employee performance is rather recent (Pulakos & O'Leary, 2011; Saks & Gruman, 2011; Steelman, Levy, & Snell, 2004; Westerman & Westerman, 2013). In my assessment, the first four organisational behaviours are proxies of experiencing participation.

The foregoing stance has merit. Experience of participation in PM has been viewed as a critical factor in the performance management process (Kleingld, van Tuijl, & Algera, 2004; Roberts, 2003). Thus, joint goal-setting during performance planning by managers and employees, self-rating inclusion in the appraisal process, and self-inputs in performance reviews and discussions have been part of PM. Importantly, such experiences in PM increased retention and performance of employees (Detert & Burris, 2016).

Given that the Indian IT industry has global offerings and heavily relies on performance of employees, promoting justice perception within the organisation deserves serious consideration. The virtue of the current study is that it proposes to relate justice perception to continuous feedback on performance of IT employees. Further, it investigates whether continuous feedback results in justice perceptions via experience of participation. It is, therefore, hypothesised that:

Hypothesis 1. Continuous performance feedback (predictor) influences justice performance (criterion) through experienced participation (mediator) in PM.

As there are three criteria of procedural, distributive and interactional justice perceptions, Hypothesis 1 will be referred to as 1a, 1b, and 1c, respectively.

Method

Sample and procedure

Respondents from four Indian software multinational organisations participated in an online survey. They were selected on the basis of non-probabilistic judgmental sampling technique. Human resource managers (one in each organisation) were the point of contact and helped the author in carrying out the surveys. An email was sent out to 700 employees who met the criteria of total work experience (minimum 3 years), current project involvement (employees working in different projects across the organisation were sought for a holistic view), exposure to multiple managers (to gauge a variety of perceptions), and number of performance assessment cycles experienced (minimum 2). In the email invite for participation, it was clearly stated to the employees that (1) the study was an independent research and not a research by their organisations, (2) individual responses would be kept confidential, and (3) the data of the study were to be utilised for research purposes only. Of 350 employees who expressed their willingness to participate in the survey, only 243 responded. However, complete responses were received from 220 participants (response rate = 62.8%). Among them, 160 (72.7%) were male, 178 were in the age group of 30–35 years (80.9%), 142 had total work experience of 8 years or more in the software industry (64.5%), and 190 were serving at middle/senior positions (86.3%). After data collection, all the participants were thanked through an email for their participation in the survey.

Measures

While several research scales were broadly available under the conceptual framework of feedback, employee participation, and justice perceptions as such, none of these validated and pre-tested scales were in the specific context of performance management in the software industry environment. Therefore, based on the insights from relevant research, I developed scales for all the measures to be used.

Continuous performance-based feedback (predictor)

Following recent studies (Dahling & O'Malley, 2011; Linderbaum & Levy, 2010), I developed a 6-item scale of employee perception of the continuous performance-based feedback provided (e.g., I receive feedback from my manager(s) on a continuous basis). Responses were sought along a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Employees' experienced participation in PM (mediator)

I constructed another 4-item scale to measure experienced participation in PM (e.g., I am required to give a self-rating in the PM process). Insights from previous studies (Roberts, 2003; Wood & de Menezes, 2011) guided item generation.

Responses were sought along a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Justice perceptions with respect to PM (criterion)

Insights from research (Colquitt & Rodell, 2011; Cropanzano et al., 2007; Jawahar, 2007) led me to develop a 17-item scale of justice perceptions. This scale included six items of procedural justice (e.g., "Sufficient time is spent on the performance review/discussion", "The process provides for redressal in case of unfair/incorrect performance assessment"), five items of distributive justice (e.g., "Managers give performance rating without any pressure/prejudice", "My organisation's compensation policies are such that they reward good performance"), and six items of interactional justice (e.g., "Managers are rarely rude or arrogant towards employees", "Managers explain the rewards and rating decisions in a clear and candid manner"). As in the predictor and mediator measures, responses to the criterion measures were also along 5-point Likert scales.

Results

Tests of the measurement model

Given that the predictor (continuous performance-based feedback), mediator (experienced participation), and criterion variables of perceived procedural, distributive, and interactional justice, respectively, were all measured, I first checked whether the five constructs were empirically distinct. Toward that goal, I specified responses to the items measuring the five constructs as correlated but distinct in a five-factor confirmatory analysis by AMOS. The fit of the hypothesised measurement model to the data was seemingly satisfactory, $\chi^2(314) = 628.99$, $p < .001$, Tucker Lewis index (TLI) = .89, incremental fit index (IFI) = .90, root mean square error of approximation (RMSEA) = .06, and standardised root mean residual (SRMR) = .05. At the same time, treating all indicators of a dimension of mere evaluation resulted in a rather worse fit, $\chi^2(350) = 1580.61$, $p = .001$, TLI = .64, RMSEA = .12, SRMR = .12. Thus, I regarded the constructs to be empirically distinct. The reliability of the responses constituting each of the five hypothesised factors was checked by Cronbach alpha (α).

Table 1 presents the α s and correlation coefficients among the five variables. Given that the measures had acceptable coefficients of reliability (i.e., .73 and higher) and the highest correlation of .64, I concluded that the constructs were correlated but distinct.

Tests of the mediation model

Hypothesis 1a, 1b and 1c was tested by running three separate PROCESS Model 4 analyses for the three criterion variables of procedural, distributive, and interactional justice. This decision was justified because the total effect (c) of continuous performance-based feedback was significant on each of the three criteria (see c coefficients in the three diagrams of Fig. 1). Using 5000 bootstrap samples, the indirect, direct, and total effects of continuous performance-based feedback on procedural justice, distributive justice,

Table 1 Reliability and correlation coefficients.

Variables	1	2	3	4	5
1. Continuous performance-based feedback (predictor)	(.93)	.56*	.64*	0.59*	.54*
2. Employee participation in PM (mediator)		(.73)	.60*	0.59*	.62*
3. Procedural justice (criterion)			(.82)	.62*	.54*
4. Distributive justice (criterion)				(.84)	.48*
5. Interactional justice (criterion)					(.85)

Note. $N = 220$. Reliabilities of the scales are indicated in the corresponding parentheses along the diagonal.

* $p < 0.01$.

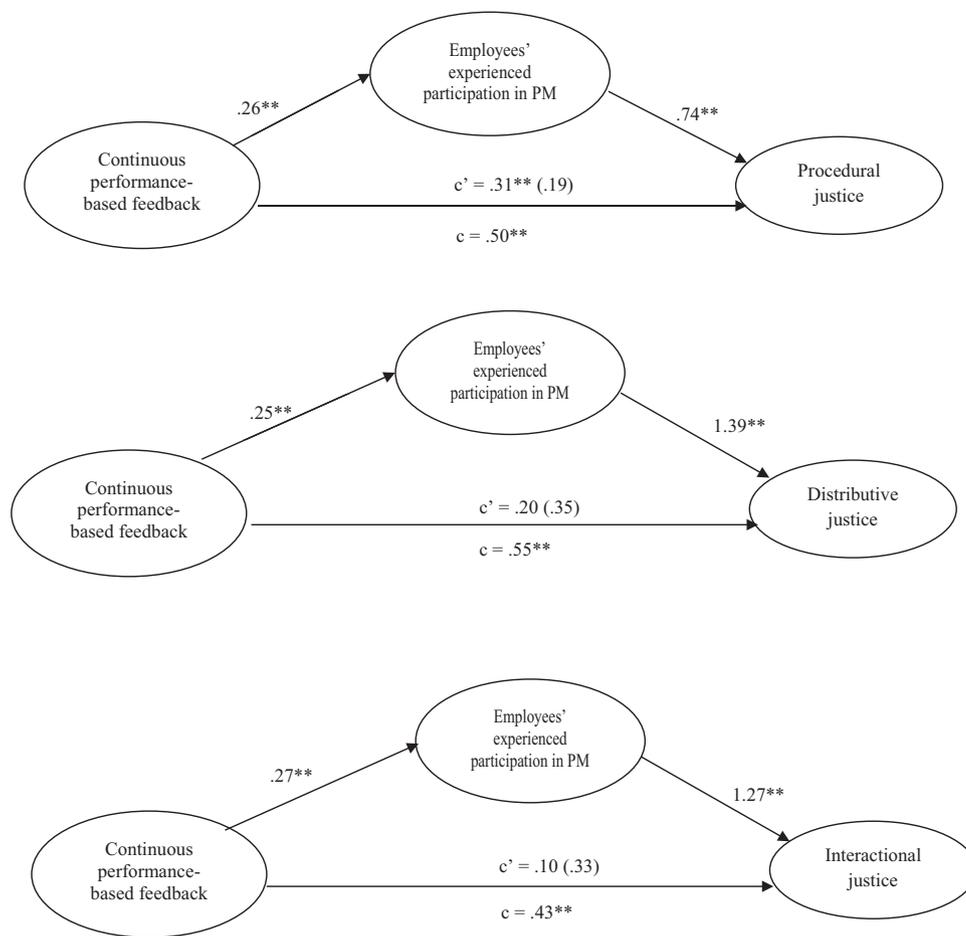
and interactional justice were calculated. An indirect effect (IE) was considered as significant if its 95% confidence intervals (95% CIs) did not include a zero. The unstandardised regression coefficients from the three PROCESS Model 4 analyses are displayed in Fig. 1.

As can be seen in Fig. 1, the indirect effects of continuous performance-based feedback on procedural justice, IE = 0.19, 95% CI: 0.09, 0.35, distributive justice, IE = 0.35, 95% CI: 0.20, 0.61, and interactional justice, IE = 0.33, 95% CI: 0.19, 0.61, were all greater than zero. The direct effect (c') was significant for procedural justice, $c' = 0.31$, $t = 9.80$, $p < .001$, but not for distributive, $c' = 0.20$, $t = 5.33$, $p = .09$, or interactional justice, $c' = 0.10$, $t = 4.49$, $p = .23$. Overall, then, the support for Hypothesis 1a, 1b, and 1c was good.

Discussion

Findings of the current study indicate relation among three measured variables of continuous performance-based feedback, employees' experienced participation, and employees' justice perceptions. More specifically, they make two major contributions. First, continuous performance-based feedback results in perception of justice among employees working in Indian software MNCs. While previous studies (Dewettinck & Dijk, 2013; Kurra & Barnett, 2016; Stobbeleir, Ashford, & Buyens, 2011) have emphasised the importance of supportive feedback environments and their potential influence on employee performance, this study goes a step further and illustrates the role of continuous performance-based feedback in influencing employees' PM related justice perceptions as well.

Second, and more important, this relation between the predictor (i.e. continuous performance-based feedback) and criterion (i.e. justice perceptions) is mediated by employees' experienced participation in PM. It is interesting that the same mediator underlies perception of procedural, distributive, and interactional justice. This evidence is notable because it is the first one to causally link participation with fairness. Apparently, IT professionals perceive organisational justice through participation they experience on the job. In the present case, it is participation in PM that influences justice



Notes. The figure only shows latent variables.
Indirect effects have been reported in parentheses.
 $**p < .001$.

Figure 1 Mediation models for procedural (H1a), distributive (H1b) and interactional (H1c) justice perceptions regarding PM.

perception. Therefore, Hypothesis 1 is supported by the results obtained.

It deserves mention that experienced participation mediated the predictor-criterion link partially in case of procedural justice, and fully in cases of distributive and interactional justice. Such differences across criterion variables may arise out of three sources. First, the measures might not be equally reliable. Second, they might not be equally valid in representing the constructs measured. Finally, there may be multiple mediators in cases of partial mediation. In this study, the goal was to assess whether experienced participation is a reliable mediator, and this goal has been achieved. Nevertheless, future investigators should explore other mediators underlying the present predictor-criterion links.

Implications for practice

One practical implication of the findings lies in providing continuous performance-based feedback to software professionals. As software professionals primarily work in knowledge-

generating collaborative teams, mutual feedback could also result in as much feeling of participation as does continuous performance-based feedback from supervisors. One area of future research may be the causal link between peer feedback and justice perceptions. Findings also imply that employees' experienced participation in PM may be a significant factor influencing PM fairness perceptions. IT organisations, must, therefore, encourage employees to participate in PM processes.

Evidence for influence of continuous performance-based feedback and employees' experienced participation in PM on fairness perceptions implies that performance facilitation, opportunities for performance improvement, and the degree to which employees are involved in the process, may very well be considered as important fairness criteria by employees. It is about time that organisations actually walk the talk regarding PM—the importance of continuous performance-based feedback and employees' experienced participation in PM should not be left unacknowledged or underplayed.

There is also a need to focus on feedback valence, mutual trust, quality of manager-employee interactions, and feedback-giving capabilities of managers as factors in fairness

perceptions. Several researchers (Ghosh, Rai, & Sinha, 2014; Pulakos & O'Leary, 2011) have advocated the need for training of supervisors in soft skills and structural/process aspects (more awareness about what needs to be evaluated) that can enhance their feedback-delivery and coaching abilities. "Feedback about feedback" (Dahling & O'Malley, 2011) is critical in volatile performance environments. Organisations need to regularly communicate and apprise their managers/supervisors on the value of giving continuous performance-based feedback, and how they can facilitate superior performance and also reward managers who display such behaviours. Therefore, even while the work teams and dyads are very dynamic in the software industry (as people switch roles/projects), it is very critical that software organisations still invest in training their managers on building supportive dyadic relationships.

Limitations

Although findings were supportive of the causal hypothesis, the correlational data on the three measured variables make the conclusion rather suggestive. To solidify the present causal conclusion, longitudinal or experimental data in which performance-feedback precedes the experienced participation are needed. Further, the self-report data from 5-point type Likert scales raise the possibility of a common method bias. To deal with common method bias, I took some precautionary measures such as assuring response anonymity, encouraging free and frank opinion, and emphasising that there were no right or wrong answers. Such remedies are supposed to reduce the threat of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Conclusion

In sum, it can be said that the current system of providing continuous performance-based feedback to IT staff does result in justice perception through experience of participation. Thus, IT organisations should consider providing their professionals with more frequent experiences of participation in all kinds of systems. As the theme gains dominance, this study may be instrumental in encouraging industrial and organisational psychologists to initiate further research in context of organisational justice and PM to advance our understanding of related issues and promote development of just PM systems.

References

- Adams, J. S. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology, 67*(5), 422-436.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). New York: Academic Press.
- Bies, R. J., & Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard, & M. Bazerman (Eds.), *Research on negotiation in organizations* (Vol. 1, pp. 43-55). Greenwich, CT: JAI Press.
- Bowen, D., & Ostroff, C. (2004). HRM-firm performance linkages: The role of the strength of the HRM system. *Academy of Management Review, 29*(2), 203-221.
- 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., & Rodell, J. B. (2011). Justice, trust, and trustworthiness: A longitudinal analysis integrating three theoretical perspectives. *Academy of Management Journal, 54*(6), 1183-1206.
- Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., et al. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *The Journal of Applied Psychology, 98*(2), 199-236.
- Cremer, D. (2005). Procedural and distributive justice effects moderated by organizational identification. *Journal of Managerial Psychology, 20*(1), 4-13.
- Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007). The management of organizational justice. *Academy of Management Perspectives, 21*(4), 34-48.
- Crow, M. S., Lee, C., & Joo, J. (2012). Organizational justice and organizational commitment among South Korean police officers: An investigation of work satisfaction as a mediator. *International Journal of Police Strategies & Management, 35*(2), 402-423.
- Dahling, J. J., & O'Malley, A. I. (2011). Supportive feedback environments can mend broken performance management systems. *Industrial and Organizational Psychology, 4*(2), 201-203.
- DeNisi, A. S., & Pritchard, R. D. (2006). Performance appraisal, performance management and improving individual performance: A motivational framework. *Management and Organization Review, 2*(2), 253-277.
- Detert, J. R., & Burris, E. R. (2016). Can your employees really speak freely? *Harvard Business Review, 94*(1-2), 81-87.
- Dewettinck, K., & Dijk, H. (2013). Linking Belgian employee performance management system characteristics with performance management system effectiveness: exploring the mediating role of fairness. *International Journal of Human Resource Management, 24*(4), 806-825.
- Ghosh, P., Rai, A., & Sinha, A. (2014). Organizational justice and employee engagement. *Personnel Review, 43*(4), 628-652.
- Greenberg, J. (1993). The social side of fairness: Interpersonal and informational classes of organizational justice. In R. Cropanzano (Ed.), *Justice in the workplace: Approaching fairness in human resource management* (pp. 79-103). Hillsdale, NJ: Lawrence Erlbaum.
- Gupta, V., & Kumar, S. (2013). Impact of performance appraisal justice on employee engagement: A study of Indian professionals. *Employee Relations, 35*(1), 61-78.
- Holbrook, L. (2002). Contact points and flash points: Conceptualizing the use of justice mechanisms in the performance appraisal interview. *Human Resource Management Review, 12*(1), 101-123.
- Jawahar, I. (2007). The influence of perceptions of fairness on performance appraisal reactions. *Journal of Labor Research, 28*(4), 735-754.
- Kleingeld, A., van Tuijl, H., & Algera, J. A. (2004). Participation in the design of PM Systems: A quasi-experimental field study. *Journal of Organizational Behavior, 25*(7), 831-851.
- Kurra, G., & Barnett, J. (2016). The future of feedback: frequent, candid, and entirely more effective, workforce solutions review, July issue, 8-12.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum Press.
- Linderbaum, B. G., & Levy, P. E. (2010). The development and validation of the Feedback Orientation Scale (FOS). *Journal of Management, 36*(6), 1372-1405.
- Linna, A., Väänänen, A., Elovainio, M., Kivimäki, M., Pentti, J., & Vahtera, J. (2011). Effect of participative intervention on organisational justice perceptions: a quasi-experimental study on

- Finnish public sector employees. *The International Journal of Human Resource Management*, 22(3), 706-721.
- NASSCOM. (2015). *The IT-BPM Sector in India: Strategic Review 2015*. Executive Summary accessed. Retrieved from http://164.100.105.198:8098/pasc/resources/PASC38_Indian%20IT-BPM%20Industry-%20The%20Transformation%20Catalyst.pdf.
- Olarreaga, M., Lederman, D., & Soloaga, I. (2007). *The growth of china and India in world trade: opportunity or threat for Latin America and the Caribbean?* Washington, DC: World Bank Policy Research. Working Paper No. 4320.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879-903.
- Pulakos, E. D., & O'Leary, R. S. (2011). Why is performance management broken? *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 4(2), 146-164.
- Roberts, G. E. (2003). Employee performance appraisal system participation: A technique that works. *Public Personnel Management*, 32(1), 89-98.
- Saks, M. A., & Gruman, J. A. (2011). Manage employee engagement to manage performance. *Industrial and Organizational Psychology*, 4(2), 204-207.
- Steelman, L. A., Levy, P. E., & Snell, A. F. (2004). The feedback environment scale: Construct definition, measurement, and validation. *Educational and Psychological Measurement*, 64(1), 165-184.
- Stobbeleir, K. E. M., Ashford, S. J., & Buyens, D. (2011). Self-regulation of creativity at work: The role of feedback-seeking behavior in creative performance. *Academy of Management Journal*, 54(4), 811-831.
- Thibaut, J. W., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Lawrence Erlbaum.
- Westerman, C. Y. K., & Westerman, D. K. (2013). What's fair? Public and private delivery of project feedback. *Journal of Business Communication*, 50(2), 190-207.
- Wood, S., & de Menezes, L. M. (2011). High involvement management, high-performance worksystems and well-being. *The International Journal of Human Resource Management*, 22(7), 1586-1610.