



The relationship between subjectivity in managerial performance evaluation and the three dimensions of justice perception

Thuy-Van Tran¹ · Sinikka Lepistö² · Janne Järvinen¹

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Abstract

This paper examines the relationship between subjectivity in performance evaluation and the three dimensions of justice perceptions in an emerging economy; prior research on this topic has primarily focused solely on the advanced capitalist economies of Western nations. The paper also aims to expand on existing research by focusing on the role of interactional justice perceptions in relation to subjective evaluation (Byrne et al. in *Hum Resour Manag J* 22(2):129–147; Folger and Cropanzano, in *Organizational justice and human resource management*, Sage, Thousand Oaks, 1998). Results from a survey of 160 middle managers in Vietnam indicate that subjective evaluation is associated predominantly with negative effects. We found that, in an emerging economy like that of Vietnam, subjective evaluation reduces interactional justice perception, which in turn decreases the perception of procedural and distributive justice. The mediating effects suggest that the reason subjective evaluation influences employee procedural/distributive justice perceptions lies in the interactional justice perceived from supervisors. This research clarifies the effects of subjective evaluation on the dimensions of justice perception and contributes to the literature on performance evaluation and organizational justice in a non-Western context. It also highlights the importance of respect and communication for fairness perception in both theory and practice.

Keywords Subjectivity in performance evaluation · Organizational justice · Procedural justice · Distributive justice · Interactional justice · Emerging economies

✉ Thuy-Van Tran
van.tran@oulu.fi

Sinikka Lepistö
sinikka.lepisto@utu.fi

Janne Järvinen
janne.t.jarvinen@oulu.fi

¹ University of Oulu, P.O Box 4600, 90014 Oulu, Finland

² Turku School of Economics, Pori Unit, University of Turku, P.O Box 170, 28101 Pori, Finland

1 Introduction

Fairness or justice perception is not only a pillar of a healthy organizational culture but also essential for employee well-being (Ashkanasy, 2011). As such, it is one of the prevailing moral standards (Whiteside & Barclay, 2016) and core elements of ethical leadership (Brown et al., 2005; Xu et al., 2016). Prior literature states that a control perceived as fair or enabling can positively affect individual behaviours and organizational outcomes (Mahama & Cheng, 2013). Specifically, positive justice perception can promote organizational commitment (Lau & Moser, 2008) and job satisfaction (Viswesvaran & Ones, 2002), and enhance performance (Zainuddin & Isa, 2019). However, low levels of justice perception, are associated with negative outcomes such as stress, retaliatory intentions or disruptive behaviour (Lau & Oger, 2012; Silva & Caetano, 2014; Virtanen & Elovainio, 2018). Justice in organizational settings typically includes three forms: distributive justice, the fairness of employee outcomes; procedural justice, the fairness of procedures used to make the outcome decisions and interactional justice, the fairness of interpersonal treatment (Choon & Embi, 2012; Colquitt et al., 2001).

Subjective judgement, which is a component of performance evaluation practices, is one of the most crucial sources of organizational justice perceptions (Folger & Konovsky, 1989); at the same time, it can entail ethical issues. On the one hand, supervisors have an ethical and legal obligation to give accurate assessments of their subordinates' performance (Sherman & Bohlander, 1988). On the other hand, external factors can arise and render performance evaluation a not entirely rational process (Gomez-Mejia et al., 2007). For example, supervisors' assessments can be lenient or untruthful in order to avoid conflicts, limit complaints, or win the favour of some employees (Bol, 2011). Subjective evaluation brings with it the dilemma that the judgement of superiors is not always aligned with subordinates' performance and contributions, which consequently affects the subordinates' perceived justice. Given the important role of justice perceptions in determining employee behaviour and organizational performance, the management accounting literature has dedicated increased attention to the effectiveness of subjectivity in performance evaluation and its relation to employee perceived justice (e.g. Bellavance et al., 2013; Hartmann et al., 2010; Voußem et al., 2016).

Despite the growing empirical research on subjectivity in performance evaluation and justice perceptions, we know little about the issue in non-Western settings. Researchers have revealed that the effectiveness of performance evaluation practices may differ across cultures (Brockner et al., 2001; Chang & Hahn, 2006; Lam et al., 2002; Stammerjohan et al., 2015; Wu & Chaturvedi, 2009). There could also be profound differences in how people of different national origins react to or perceive the justice of the same sets of controls (Chow et al., 2001; Kim & Leung, 2007), even if justice is considered universally important (Greenberg, 2001). Hence, this study aims to fill this research gap by examining performance evaluation systems and justice perceptions in a non-Western emerging context. Vietnam was chosen as our setting because it has typical cultural characteristics of many other emerging economies, such as a high level of power

distance and collectivism (Hofstede et al., 2010; Power et al., 2010; Walumbwa & Lawler, 2003). The results of the study, therefore, can be applied to understanding the phenomena of management practices and justice perceptions in many other emerging markets, especially in Asia.

In the study, we examine the relationship between subjectivity in performance evaluation and justice perceptions in the Vietnamese context, as an example of emerging economies. We also aim to extend previous work by developing a model in which interactional justice is a mediator between subjective evaluation and the other two justice dimensions.

We expect that employees tend to attribute any (in)justice related to subjective evaluation primarily to their supervisors, who are directly responsible for assessing them. Interactional justice (rather than procedural or distributive justice) is the most relevant to subjective evaluation because interactional justice concerns how individuals treat and communicate with one another in the workplace (Bies & Moag, 1986). Our model is consistent with Colquitt's suggestions (2001) that interactional justice is more related to a supervisor's evaluation than procedural and distributive justice perceptions. It also adopts the arguments from Cohen-Charash and Spector (2001) that interactional justice is an antecedent to distributive and procedural justice. The model is tested from the perspective of middle managers in their roles as subordinates, as it is important and challenging to ensure a high-quality managerial team (Sokol & Oresick, 1986).

Our empirical analysis shows that the negative effects of subjective evaluation on employees' perceived justice are generally stronger than the positive ones, which is consistent with our predictions. Perception of interactional justice is found to be an antecedent of the other forms of justice perceptions: distributive justice and procedural justice. It significantly mediates the relationship between subjective evaluation and perceived procedural/distributive justice.

Our research provides the following contributions to the management accounting literature. First, it contributes to the growing literature on the effects of subjective evaluation on employees' justice perceptions (e.g. Bol, 2011; Hartmann et al., 2010). To the best of our knowledge, our research is the first broad assessment of the effects of subjective evaluation on all three aspects of justice perceptions. While prior literature has mainly examined the effects of subjective evaluation on perceived justice related to evaluation procedures and outcomes, we take a different perspective and focus on the effects on justice perceptions regarding supervisor treatment.

Furthermore, previous research suggests that interactional justice is an important form of justice because it is strongly associated with supervisor-related outcomes such as leader-member exchange, motivation, and commitment (Gupta & Kumar, 2013; Masterson et al., 2000). Libby (1999) emphasizes that communication and explanations, as components of interactional justice perceptions, have a significant effect on employee performance. Nevertheless, there is still limited research on this form of justice. Our paper answers the call for more research into interactional justice perceptions (see Cohen-Charash & Spector, 2001; Colquitt et al., 2001). We highlight the importance of interactional justice perceptions that connect subjective performance evaluation with the perceived justice of procedures and outcome

distribution. Our results also indicate the importance of studying organizational justice concepts as three distinct but related dimensions.

Finally, the study provides insights into the phenomena of performance evaluation practices and justice perceptions in a different economy to those typically described as ‘advanced capitalist economies’. It contributes to the generalizability of organizational justice theories (Greenberg & Colquitt, 2013). This meets calls for more research into accounting in emerging economies and the convergence of accounting practices worldwide (e.g. Ezzamel & Xiao, 2011).

Given the role of interactional justice perceptions, these findings have practical implications for applying discretion so that evaluated employees are treated with respect and are communicated with effectively, in the pursuit of positive perceived fairness and other desired outcomes. In other words, subjectivity in performance evaluation should be considered part of organizational social controls, to show consideration and concerns towards employees. For instance, a formal system could be implemented to provide and monitor feedback (such as formal appraisals, performance reviews, routine and periodic formal reporting) on a detailed and frequent basis (Libby, 1999; Pitkänen & Lukka, 2011). Employees should also receive explanations about their performance ratings and outcomes (both rewards and punishments). Furthermore, it is vital to have management teams that can communicate competently and provide feedback effectively (Pitkänen & Lukka, 2011).

The remainder of the paper is structured as follows. Section 2 presents our study’s theoretical background and Sect. 3 develops our hypotheses about the relationship between subjectivity in performance evaluation and the three dimensions of justice perception. In Sect. 4, we describe the design of the empirical study and present our results in Sect. 5. Finally, we discuss the findings and their implications in Sect. 6.

2 Literature review

2.1 Subjectivity in performance evaluation

According to Baker et al. (1994), a good performance metric should be accurate, informative, and timely, and should not expose those evaluated to undue risk. Objective performance measures linked to quantitative and verifiable targets can hardly meet all the criteria because they can be too aggregate, narrow, and retrospective (Baker et al., 1994; Bol, 2008; Ittner et al. 2003; Prendergast & Topel, 1993). Furthermore, objective measures are generally unavailable for certain functions (such as HR, accounting, or legal) and/or frequently changing environments (Frederiksen et al. 2017). Thus, in their role as the subject of an evaluation, middle managers might put more effort into job aspects that are more easily measured and well compensated, and avoid other tasks for which they are not rewarded (Bol, 2008; van der Kolk & Kaufmann, 2018). In addition, managerial performance and target achievements can be affected by uncontrollable and unforeseeable events, such as economic factors or competitors’ actions. Using purely objective measurements can introduce noise and reduce the effectiveness of the performance assessments (Bol, 2008). It can also reduce employees’ effort if the outcomes they receive are only linked to the

target achievements. In sum, objective measures are inadequate and insufficient for measuring middle managers' multifaceted tasks and their contribution to the value of the organization (Baker et al., 1994; Bol, 2008; Ittner et al., 2003; Prendergast & Topel, 1993).

Subjective components have been described as a valuable complement to objective measures in a performance evaluation system (Gibbs et al., 2004; Golman & Bhatia, 2012). Subjectivity refers to the discretion that superiors display in evaluating their subordinates' performance and determining their salaries and bonuses (Chow et al. 2006; Moers, 2005). It can be derived from their judgement of the subordinates' qualitative performance, such as knowledge-sharing and communication skills (Bellavance et al., 2013; Chow et al., 2006; Moers, 2005). Subjectivity can take the form of ex-post adjustment in the weighting of objective performance measurements. It can also relate to flexibility in adjusting evaluations and bonuses based on factors other than pre-specified criteria (Ittner et al., 2003; Woods, 2012). These forms of adjustments normally involve considering uncontrollable events and making adjustments to ex-ante targets to filter out the effects of those events and modify performance targets (Höppe & Moers, 2011; Murphy & Oyer, 2001). Subjectivity in performance evaluation, in any form, is heavily influenced by the personal perceptions, beliefs, and experiences of the person doing the evaluation (Choon & Embi, 2012).

Previous studies have taken different approaches to the concept of subjectivity in performance evaluation. One research stream investigates subjectivity in determining salaries and rewards (Gibbs et al. 2004; Voußem et al., 2016), while another focuses on performance evaluation as a process distinct from bonus systems (Bol & Smith, 2011; Van Rinsum & Verbeeten, 2012). An additional stream of research examines supervisor discretion in evaluating performance and translating the observed performance into rewards (Bol, 2011; Höppe & Moers, 2011). We follow this last approach because it is necessary to consider both the evaluation and reward systems to understand their impacts on all three aspects of justice perceptions. Our use of the concept refers to any subjective judgement by superiors in evaluating middle managers' performance and determining their bonuses.

Subjective evaluation is informative with regard to the qualitative aspects of employees' performance (Baiman & Rajan, 1995; Baker et al., 1994). It can provide a broader view, beyond measuring just a few narrow aspects of performance (Lau & Sholihin, 2005). Since the subjective components are often non-financial, they can be relevant to both short- and long-term objectives. They are not only outcome-based measurements derived from past efforts, but also drive future performance (Lau & Sholihin, 2005). Ex-post adjustments as forms of subjectivity can filter out the effects of uncontrollable events and enhance individual performance (Kelly et al., 2015). As a result, subjectivity in performance evaluation can benefit firms by reducing incentive costs and risks (Gibbs et al., 2004; Ittner et al., 2003; Prendergast & Topel, 1993).

Nevertheless, prior research has highlighted several negative consequences of subjective performance evaluation. It can be inaccurate and biased because subjectivity is not always transparent (Marginson et al., 2014; Van Rinsum & Verbeeten, 2012). Subjective evaluation can also cause favouritism and opportunism from both

evaluatees and evaluators (Cheng & Coyte, 2014; Ittner et al., 2003; Moers, 2005; Woods, 2012). This can be problematic for making decisions regarding personnel and future incentives (Krishnan et al., 2005; Moers, 2005; Otley, 1999).

2.2 Perceptions of organizational justice

Organizational justice relates to perceptions of fairness in a workplace, which leads individuals to conclude that they are being treated fairly or unfairly (Folger & Cropanzano, 1998; Fortin, 2008). It is a crucial issue in both theory and practice, because of its influence on organizational outcomes and the attitudes of organization members (Cropanzano & Greenberg, 1997; Hopwood, 1972; Lind & Tyler, 1988). Positive perceptions of justice encourage cooperation, improve employee satisfaction and performance, and promote the acceptance of organizational change (Lau & Oger, 2012; Zainuddin & Isa, 2019), whereas the absence of justice can lead to negative effects on employees' well-being and various forms of disruptive behaviour (Silva & Caetano, 2014). As with most papers in this research stream, the current paper uses the terms 'justice' and 'fairness' interchangeably.

The organizational justice theory introduced by Folger and Cropanzano (1998) generally classifies justice into three main dimensions: procedural justice, distributive justice, and interactional justice. Procedural justice is the fairness of the rules and processes employed to decide outcome allocations (Cropanzano & Greenberg, 1997; Folger & Konovsky, 1989). It is 'the judgement that procedures and social processes are fair' (Lind & Tyler, 1988). Distributive justice is the fairness of those outcome allocations themselves (Cropanzano & Greenberg, 1997; Folger & Konovsky, 1989; Greenberg, 1987). It is usually based on the principle of equity between individual benefits and their proportional inputs (e.g. education, intelligence and experience) (Leventhal, 1980; Lindquist, 1995). The third type of justice, interactional justice, relates to the quality of communication between superiors and subordinates (Bies & Moag, 1986). This involves the extent to which superiors treat their subordinates with respect and provide candid, sufficient explanations for their evaluation decisions (Simons & Roberson, 2003). The three dimensions of organizational justice have positive and varying roles in employees' behaviour, satisfaction, and performance (Maaniemi & Hakonen, 2008).

It should be noted that some previous studies consider interactional justice to be part of procedural justice, while many others maintain the distinction between these concepts (Bies, 2005; Colquitt, 2001). Interactional justice distinguishes itself from procedural justice by being about the communication provided to employees during evaluation processes and explanations, instead of about the procedures themselves. Conceptual reviews and meta-analytic evidence from Colquitt and Greenberg (2003) also separate those concepts because of their different antecedents and descendants. Interactional justice perception is more strongly associated with supervisor-related outcomes such as leader-member exchange and commitment, while procedural justice perception is more strongly related to organizational-relevant outcomes such as organizational commitment (Masterson et al., 2000). Prior studies show that those who perceive high interactional justice are more likely to show high motivation and

put extra effort into their work (Gupta & Kumar, 2013). In this study, we examine interactional justice as a separate form of justice to better understand different aspects of justice perceptions.

2.3 National culture

National culture is defined as ‘the collective programming of the mind which distinguishes the members of one group or society from those of another’ (Hofstede, 1980, p. 25), and is approached in different ways by researchers. In the study, we focus on two dimensions: power distance and individualism/collectivism (Hofstede, 1980), since they are considered the most relevant to employees’ reactions to various controls in organizations. They are the most common dimensions used by researchers in considering cultural impacts on management and accounting practices (Chow et al., 2001; Cohen & Avrahami, 2006). Because of their frequent appearance in accounting research, we do not present their detailed descriptions in the current study.

Emerging markets are typically different from advanced markets in terms of cultural values. Individuals in emerging countries generally show stronger collectivism and power distance, while advanced markets are characterised by high levels of individualism and low power distance (Hofstede et al., 2010; Power et al., 2010; Walumbwa & Lawler, 2003). Vietnam was chosen as representative of emerging economies because Vietnamese culture, characterised by high collectivism and power distance, reflects the typical cultural values and orientation of many emerging markets (Du & Choi, 2010). In Vietnam, management and performance evaluation practices emphasise harmony in social relationships, are characterised by seniority preference and limited feedback (Hempel, 2001; Shen, 2004; Warner, 2010).

Empirical studies have found similarities and differences in the effectiveness of management practices and employee attitudes across cultures (e.g. Chang & Hahn, 2006; Stammerjohan et al., 2015; Wu & Chaturvedi, 2009). For instance, Chang and Hahn (2006) indicate that certain types of control practices affect employees from Korea and the US in a consistent manner, regardless of their cultural differences. On the other hand, some research indicates that some management practices may be only effective in certain national settings, but ineffective or even dysfunctional in others (Chow et al., 2001). Ng et al. (2011) examine the impacts of culture on how employees react to rating biases (rating leniency and halo), and find that employees with high power distance values are more susceptible to rating bias than those with low values.

As argued by many researchers (Folger & Skarlicki, 2008; Greenberg, 2001), justice is universally important in interpersonal relations. This is because beyond socio-cultural contexts, a positive justice perception has crucial impacts on organizational outcomes and employee behaviour (Lind & Tyler, 1988). Lam et al. (2002), Leung et al. (2001) and Morris and Leung (2000) find that the positive effects of perceived justice on employee outcomes (performance, absenteeism, and job satisfaction) are similar in all cultural contexts. At the same time, other research shows differences across cultures in certain aspects of justice perceptions. For example, the degree to

which justice perceptions influence individual outcomes may differ in different cultures. Erdogan and Liden (2006) find that the relation between interactional justice and leader-member exchange (LMX) is weaker for individuals high in collectivism than those low in collectivism. Research by Kim and Leung (2007) indicates that organizational injustice has a stronger negative impact on job satisfaction and intention to leave in America than in China, Korea, and Japan. They also find that distributive justice matters more in the formation of overall fairness for Chinese and Koreans than for Americans and Japanese. Interactional justice, by contrast, shapes overall fairness more strongly for Americans and Japanese than for Chinese and Koreans.

3 Hypothesis development

Based on the existing literature, we propose hypotheses for testing the relationships between subjectivity in performance evaluations and the three dimensions of organizational justice perception.

3.1 Subjectivity in performance evaluation and interactional justice perceptions

Subjective evaluation usually involves the adoption of broad and varied non-financial performance measures. It enables assessments of job aspects that are value-adding but cannot be measured in an objective manner, such as work attitudes, communication and knowledge-sharing (Voußem et al., 2016). As for middle managers as evaluatees, subjective evaluation can help to assess their performance on management tasks which relates to leading and increasing the work quality of their teams (Sherf, 2016). A supervisor who includes such aspects in his/her assessments is likely to increase subordinates' sense of interactional justice because their effort on the tasks is recognised and appreciated.

In addition, subjectivity in performance evaluation, which includes flexibility based on factors other than performance measures specified ex-ante, can enable evaluators to correct noisy objective targets and better capture employee effort. Specifically, they can neutralise the effects of unforeseeable events that are not under employees' control but influence their performance and rewards (Bol & Smith, 2011; Kelly et al., 2015). Supervisors can show benevolence and concern for their subordinates by being considerate in giving performance ratings (Lau & Tan, 2006). Applying subjective evaluation can also provide supervisors and subordinates with opportunities for open communication, giving feedback and explanations, because only the subordinates are fully aware of their circumstances. Previous studies show that favourable subjective allocations can signal support and benevolent intentions (Voußem et al., 2016). This suggests that the adoption of subjective evaluation can be positively related to perceived interactional justice.

However, subjective performance evaluation, being based mainly on human judgement, can be biased in several ways. First, when facing high workloads with scarce personal resources, evaluators may prioritise core organizational targets and

the completion of incentivised tasks (Schmidt & DeShon, 2007). Other tasks, such as subordinate evaluation and justice, are neglected, as they are considered less important to the success of the employees and their organizations (Sherf, 2016). Supervisors tend not to put enough effort into giving feedback and not to provide sufficient explanations or clarifications of misunderstandings to their subordinates regarding their evaluations.

Second, supervisors' assessments can be unconsciously influenced by cognitive bias, meaning that they may treat their subordinates differently from one another. According to attribution theory (Feldman, 1981), a supervisor makes attributions about his/her subordinates and assigns them to categories. This categorisation produces a bias in performance evaluation because some information is irrelevant, yet salient and influences subjective assessments. In addition, subjective assessments can be influenced by favouritism and likeability (Bol & Smith, 2011; Fisher et al., 2005; Moers, 2005). A supervisor may have more positive/negative sentiments towards more/less charismatic subordinates (Scott et al., 2007). Positive sentiments lead to respectful and courteous treatment and appropriate feedback, while negative sentiments can cause prejudicial communication. When employees receive less equal and respectful treatment from their supervisors than their co-workers, they are likely to feel that their supervisors do not respect or act benevolently enough towards them.

Finally, the opportunities for communication and feedback that come with subjective evaluation do not always have positive effects on perceived justice. The feedback process can be perceived as another task to be done, which leads to anxiety for many employees (Baker et al., 2013). It may also focus on how one is not performing well or not reaching predetermined goals (Selden & Sowa, 2011). Overall, the feedback process can lead to undesirable outcomes such as one-sided conversations, misunderstanding, greater stress levels, and competition, which subsequently reduces the perceived interactional justice (DeGregorio & Fisher, 1988; Gravina & Siers, 2011; Mulder, 2013).

The above discussion suggests that employees are only likely to have favourable interactional justice perceptions if supervisors show truthfulness, concern, and goodwill in their assessments. This happens when supervisors are considerate of subordinates' needs and interests and act benevolently towards them. On the contrary, if subjective evaluation comes with bias and favouritism, it is a great source of interactional unfairness.

Given the cultural values of Vietnam, we predict that a greater level of subjective evaluation may be associated with lower perceived interactional justice. As there is high power distance—a great degree of inequality between supervisors and subordinates, supervisors are generally decision-makers and subordinates are not expected to provide their opinions (Kirkman et al., 2006). In such a context, the feedback process, if applicable, is most likely considered to be a one-sided, critical conversation rather than an opportunity for information exchange. Hence, subjective assessments are given with little information-sharing or explanation, which decreases the chance that employees feel respected and heard. A lack of explanations and communication may increase the level of information asymmetry, opening the door even wider for favouritism and bias. The collectivistic culture may also amplify the negative effects

of biased ratings on perceived interactional justice, because individuals who seek common interest and collective goals tend to build greater resentment towards their supervisors' misjudgment and disrespect. Correspondingly, we form the following hypothesis for the emerging context:

H1 Subjectivity in performance evaluation practices is negatively related to perceptions of interactional justice.

3.2 The relationship between perceived interactional justice and the other two justice dimensions

3.2.1 Interactional justice and procedural justice

People develop their perceptions of justice based on the subsequence of information they receive (Van den Bos et al., 1997). Because evaluation procedures are not always transparent and straightforward, employees are unable to perceive those procedures directly. Meanwhile, they can directly observe the communication and treatment from their supervisor who is responsible for the performance assessment. They also tend to routinely identify the person(s) responsible for injustice if it happens (Folger & Cropanzano, 1998; Liu et al., 2013). Put differently, people perceive interactional justice on a daily basis in virtually any supervisor-subordinate encounter, including communication during the evaluation process (Bies, 2005). Hence, we predict that perceptions of interactional justice come before perceived procedural justice.

Furthermore, we argue that how employees think about the procedures is influenced by how supervisors enact resource allocation procedures and treat the employees (Liu et al., 2013). Employees perceive positive interactional justice when their supervisors can use communication as opportunities for information sharing, reasonable explanations, and clarification of doubts and misunderstanding (Bies & Shapiro, 1988; Lau & Tan, 2006). According to expectancy theory, adequate communication can enhance employees' certainty about the mission and goals to be achieved (Rosen et al., 2006). In addition, employees who are given a chance to communicate their views to their supervisors tend to believe that they can influence the process. As a result, the communication will make the evaluation process appear more transparent, thus increasing perceived accuracy and reducing potential biases (Hartmann & Slapničar, 2012). In addition, respectful treatment can enhance the sense of self-worth and group standing, thereby promoting employees' perceived procedural justice (Tyler, 1989; Tyler & Lind, 1992). Overall, and consistent with Cohen-Charash and Spector (2001), we argue that interactional justice is an antecedent to procedural justice.

Prior research provides evidence about the positive role of interactional justice perceptions across cultures (Leung et al., 2001; Morris & Leung, 2000). Kim and Leung (2007) find that interactional justice positively shapes overall fairness perceptions across their sample of Americans, Japanese, Chinese and Koreans. A lack of interactional justice perceptions, by contrast, is linked to workplace deviant

behaviours, regardless of different levels of power distance. That being said, we expect to find a positive relationship between interactional justice and procedural justice perceptions in the context of emerging economies, which is the same manner in Western cultures. A positive perceived interactional justice is likely to enhance perceived accuracy and foster a favourable perception of procedural justice in emerging economies, and vice versa. We propose the following hypothesis:

H2 Interactional justice perception is positively related to procedural justice perception.

3.2.2 Interactional justice and distributive justice

In line with Cohen-Charash and Spector (2001), we argue that interactional justice perception is also an antecedent to distributive justice perception for the following reasons. First, fairness judgements are more strongly influenced by information received at an earlier stage of interaction with the authority figure than by information received subsequently (Van den Bos et al., 1997). Since information about supervisors' treatment is usually available before any rewards are given out, interactional justice perceptions may be perceived earlier than distributive justice perceptions.

Second, perceived interactional justice influences employees' trust in their supervisors, which in turn affects their distributive justice perceptions. If the supervisors show consideration for their subordinates' needs and interests and refrain from exploiting others, the subordinates tend to see the supervisors as being trustworthy (Whitener et al., 1998). The high level of trust allows the employees to have confidence in the supervisors' knowledge and competencies to make better decisions regarding evaluation outcomes (Yang et al., 2009). By contrast, a low level of trust due to low perceived interactional justice might lead to anxiety and suspicion about any outcome decisions the superiors make.

Third, employees who perceive a greater level of interactional justice by having respectful and sufficient communication are more likely to be satisfied with their outcomes. According to expectancy theory, employees who get more feedback can better understand good performance standards and can use the feedback to improve their performance (Rosen et al., 2006). As a result, they can have more favourable outcomes, thus more positive justice perceptions. Even when the outcomes are unfavourable to the employees, the dissatisfaction can be alleviated by receiving adequate feedback and explanations, such as those related to claims of incompetence, budgetary constraints, restrictions due to company policy, and inconsistent company norms (Beugré, 2007; Bies et al., 1988; Libby, 1999).

We have discussed in the previous section that the links of justice forms should be similar across cultures. Kim and Leung (2007) describe that interactional justice perception is positively related to overall perceived justice in multiple countries of diverse cultures. Consistent with this, Leung et al. (2001) indicate positive effects of perceived interactional justice on decision outcomes in China. Hence, we expect to find a similar relationship between interactional justice perceptions and distributive justice perceptions across contexts.

From the above discussion, we develop the following hypothesis:

H3 Interactional justice perception is positively related to distributive justice perception.

3.3 Subjectivity in performance evaluation and procedural justice perceptions: mediated by interactional justice perceptions

Thus far, we have hypothesised that subjectivity in performance evaluation influences employee interactional justice perceptions. We also suggested that interactional justice perceptions come before procedural justice perceptions. Therefore, we expect that the relationship between subjective evaluation and procedural justice perceptions is indirect through interactional justice perceptions.

Subjectivity in performance evaluation is enacted and influenced by the personal judgement of a supervisor. Hence, it should be the most relevant to interactional justice which concerns the fairness of the treatment and communication towards employees (rather than procedural or distributive justice). We expect that employees tend to attribute the fairness of subjective evaluation primarily to their supervisors, who have significant decision-making roles in the assessments. If subjective judgements can enable feedback and show the supervisors' consideration and benevolence, the employees are likely to feel respected and heard, and perceive positive interactional justice perceptions. This, in turn, makes the performance evaluation procedures appear more transparent and less biased, which increases perceived procedural justice. On the contrary, if the supervisors' assessments are influenced by bias and favouritism, the employees tend to attribute the injustice to the supervisors responsible (Folger & Cropanzano, 1998). A biased evaluation can signal disrespect and interpersonal malevolence from the supervisors, which degrade employees' sense of interactional justice. Consequently, decreased interactional justice is related to decreased procedural justice perception, as the subordinates become less convinced that performance evaluation procedures are applied consistently and appropriately. Our prediction is consistent with suggestions by Colquitt (2001) and Moorman (1991) that a supervisor's evaluation may be even more related to perceived interactional justice than to the other forms of justice.

In the case of Vietnam and other emerging economies, as described in Sect. 3.1, we predict interactional justice perceptions to be lower when there is a greater subjective evaluation. As a result, that brings out decreased procedural justice perceptions. Accordingly, we propose the following hypothesis:

H4 Interactional justice perception mediates the relationship between subjectivity in performance evaluation and procedural justice perceptions. Specifically, a higher level of subjectivity significantly decreases perceived interactional justice, and in turn relates to decreased perceived procedural justice.

3.4 Subjectivity in performance evaluation and distributive justice perceptions: mediated by interactional justice perceptions

We have suggested that subjectivity in performance evaluation affects interactional justice perceptions. In addition, interactional justice perception is expected to be an antecedent to distributive justice perception. Thus, we argue that interactional justice could explain the mechanism through which subjective evaluation is related to perceptions of distributive justice. Specifically, if the subjective evaluation shows truthfulness, benevolence, and goodwill from supervisors and enhances employee interactional justice perceptions, the employees tend to see their supervisors as trustworthy (Whitener et al., 1998). This, in turn, allows the employees to be confident of the supervisors' ability to make better decisions related to evaluation outcomes; as a result, they will perceive high levels of distributive justice (Yang et al., 2009). By contrast, if the employees observe biases from their supervisors' treatments and judgements, they are inclined to perceive a low level of interactional justice. That lowers the employees' perceived distributive justice because they become convinced that their outcomes are relatively undervalued compared to their effort and that of their peers (Bol et al., 2016).

Given the Vietnamese nationals' high power distance and collectivism, the latter is likely to apply, as discussed earlier in Sect. 3.1. We expect a greater level of subjectivity in performance evaluation to relate to a lower level of perceived interactional justice, which leads to lower distributive justice perceptions. Formally, we hypothesise:

H5 Interactional justice perception mediates the relationship between subjectivity in performance evaluation and distributive justice perceptions. Specifically, a higher level of subjectivity negatively affects perceived interactional justice, and in turn relates to decreased perceived distributive justice.

4 Methodology

4.1 Sample

The sample for this study was obtained from the Vietnam Chamber of Commerce and Industry (VCCI), a national entity that brings together and represents the business community in Vietnam. The VCCI database was selected because it included firms of various sizes and industries. The large size of the database necessitated limiting the survey to three selected cities: Hanoi, Ho Chi Minh City, and Danang, the country's main economic hubs.

Following prior work, we addressed organizations with more than 20 employees, because they were more likely to utilise proper performance evaluation practices and an associated reward system. The respondents to our study were middle-level managers (such as divisional or department managers), whose tasks were usually multi-dimensional and subject to diverse performance evaluation practices, including subjective evaluation.

4.2 Survey design and data collection

We conducted a survey to collect data from our targeted participants. Before being launched, the questionnaire was pre-tested to assess the length and the comprehensibility of the English-Vietnamese translation (Dillman & Groves, 2011; Morgan, 1990; Van der Stede et al., 2005). We also assessed the validity of the measurement instruments in the Vietnamese context. For this preliminary stage, we invited academics and practitioners from various business fields to take part, in order to receive comments from various perspectives. The questionnaire was continuously improved and modified during the pre-test process.

The survey instrument was web-based. An initial invitation email containing the relevant link was sent to the targeted participants in June 2017. A cover letter was included to provide a brief introduction to the main purposes of the research. It also gave assurances regarding the confidentiality of the responses, emphasising that only aggregate results would be published and used solely for academic purposes. We sought to make the recipients feel comfortable with taking part in the survey.

As suggested by Dillman and Groves (2011), we sent reminder emails three weeks after the initial email, and a second reminder was sent three weeks after that. In all, 163 managers completed the survey form from the 700 invitations that we sent. Following the removal of three disengaged responses that featured the same answers to almost all the questions, we had a final sample of 160 (for a response rate of 22%).

4.3 Measurement instrument

4.3.1 Subjectivity in performance evaluation (Subj)

We measured subjectivity using a two-item scale adapted from Kruis (2010). Respondents were asked about the degree to which they thought their supervisors used subjective judgement to evaluate their performance. The respondents also rated the degree to which the supervisors determined salaries and bonuses using their discretion. Responses used a five-point Likert scale from 'not at all' (coded 1) to 'very much' (coded 5). Higher scores indicate higher levels of subjectivity in evaluating a middle manager's performance.

4.3.2 Perceptions of procedural justice of the performance evaluation system (ProcJ)

We assessed perceptions of procedural justice using direct measures, as recommended by Greenberg and Colquitt (2013). This direct approach involved asking respondents explicitly about their justice perceptions, rather than judging from implicit principles or elements of justice. Perceived procedural justice was measured using a three-item Likert scale adapted from Hartmann and Slapničar (2012) and McFarlin and Sweeney (1992). The scale addressed the extent to which the

participants trusted the fairness of the evaluation system. Higher scores indicate that middle managers considered the performance evaluation process to be fairer.

4.3.3 Perceptions of the distributive justice of the performance evaluation outcomes (DistrJ)

A three-item instrument developed by Colquitt (2001) and Moorman (1991) was used to measure distributive justice perception. The respondents indicated whether they had received fair salaries and rewards for their effort, experience, and competence. Responses were rated on a five-point Likert scale from 'strongly disagree' (coded 1) to 'strongly agree' (coded 5). Higher scores indicate higher levels of distributive justice perception.

4.3.4 Perceptions of the interactional justice of performance evaluation system (InterJ)

The perception of interactional justice was measured with a five-item instrument developed by Colquitt (2001) and Moorman (1991). The participants addressed the extent to which their supervisors treated them with respect and politeness, and showed concern for their rights as employees. The other three items addressed the communication between participants and their supervisors. Respondents rated the extent to which they were provided with reasonable explanations and feedback about the procedures, and the degree to which their supervisors were frank and honest in their communication. A five-point Likert scale from 'strongly disagree' (coded 1) to 'strongly agree' (coded 5) was used, with higher scores reflecting greater levels of interactional justice perception.

4.3.5 Control variables

We controlled for three demographic variables: age, firm size and type of firm ownership. Age was indicated in years. Firm size was measured by a dummy variable with '1' for small and medium-sized firms (20–50 employees) and '2' for large firms (more than 50 employees). Ownership type was measured by a dummy variable with '1' for state-owned enterprises and '2' for other ownership types. Our statistical tests indicated that none of the control variables were significantly associated with our dependent variables.

4.4 Descriptive analysis

As recommended by Van der Stede et al. (2005), we tested for non-response bias by comparing early and late respondents in terms of the mean values of various demographic variables: age, gender, work and management experience, number of employees in the organization, and type of ownership. Four main variables (Subj, ProJ, DisJ, InterJ) were also compared. The results of the non-response bias test revealed no systematic differences for any of the variables, so there is no risk of

non-response bias in the study. Table 1 presents the mean, standard deviation and percentage details for the demographic variables.

We used a covariance-based structural equation model (SEM) to test the hypotheses (Hair et al., 2014; Schumacher & Lomax, 1996). This method is preferable over others (e.g. partial least square—PLS) because of its ability to estimate multiple and interrelated dependence relationships and deal with inherent errors (Hair et al., 2014, p. 547). It produces better estimates of the population parameters and is considered the best choice for obtaining accurate estimates, even when the sample is small (Chumney, 2013; Goodhue et al., 2012). The quality of the measurement model was assessed by exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) for item reliability and validity. Tables 2 and 3 present the EFA results and the assessment from these tests.

The reliability of the constructs was assessed by Cronbach's alpha values. Reliability is how well 'individual items of a scale measure the same construct and thus are highly inter-correlated' (Hair et al., 2014, p. 123). As shown in Table 2, all these values are greater than 0.7, which is a satisfactory indicator of reliability.

Convergent validity assesses 'the degree to which two measures of a same concept are correlated' (Hair et al., 2014, p. 123). The condition is satisfied when items load significantly on their corresponding latent variable (Sila, 2010). In Table 3, all standardised loading estimates are higher than 0.7 (except for "InterJ1" with loading value close to 0.6), which is satisfactory. Convergent validity was also evaluated by average variance extracted (AVE), which should be higher than 0.5, and construct reliability (CR), which should be 0.7 or above. Table 2 shows that all CR and AVE values indicate good convergence or internal consistency; thus, the convergent validity is satisfactory.

The second form of validity, discriminant validity, is 'the degree to which two conceptually similar concepts are distinct' (Hair et al., 2014, p. 124). Fornell and Larcker (1981) state that the condition of discriminant validity is satisfied when a construct's AVE is greater than all pair square correlations between the construct and other constructs in the model. Table 4 presents the correlations of the variables, and shows that the square root of the AVE for each variable is greater than the off-diagonal elements. Taken together, these results provide evidence of the convergent and discriminant validity of our scales.

It should be noted from Table 4 that three types of justice are highly correlated, which may raise issues about discriminant validity. However, the high correlations are quite predictable because they are sub-categories within organizational justice theory. The analysis has shown strong support for discriminant validity, suggesting that the high correlations among justice do not substantially affect our subsequent analysis and conclusions.

In addition, the CFA results indicate a good fit as follows: chi-square = 115.187; df: 94; $p = 0.068$; comparative fit index (CFI): 0.986; goodness-of-fit index (GFI): 0.92; root-mean-square error of approximation (RMSEA): 0.038. Model fit is typically inferred when the p -value is not significant (greater than 0.05), CFI and GFI are greater than 0.89, and RMSEA is lower than 0.05 (Hair et al., 2014, p. 584).

Table 1 Respondents' background information

	<i>n</i>	% or Mean (SD)
<i>Panel A—Characteristics of managers</i>		
Gender		
Male	79	49.6
Female	81	50.6
Age		
25–30	57	35.6
31–40	61	38.1
41–50	31	19.4
51–59	11	6.9
Department		
Sales	42	26.3
Accounting	23	14.4
Administration	12	7.5
HR	15	9.4
Production	18	11.3
Customer service	8	5
IT and technical	7	4.4
Others	35	21.9
Years of work experience	160	9 (7.705)
Years of management experience	160	6.5 (5.843)
<i>Panel B—Characteristics of the firms</i>		
Number of employees		
50 or below	26	16.3
More than 50	134	83.8
Sector of operation		
Manufacturing	24	15
Trading	37	23.1
Transportation and construction	10	6.3
Banking or financial services	16	10
Education and training	13	8.1
Health services	5	3.1
Information and communication	16	10
Culture, sport or tourism service	14	8.8
Other sectors	25	15.6
Forms of ownership		
100% state-ownership	35	21.9
Stock equity with more than 50% state-owned	21	13.1
Stock equity with less than 50% state-owned	5	3.1
Stock equity of domestic investors	29	18.1
Private ownership	16	10.0
Joint venture between state and foreign investors	1	0.6
Joint venture between domestic and foreign investors	16	10.0

Table 1 (continued)

	<i>n</i>	% or Mean (SD)
100% foreign ownership	37	23.1
City		
Hanoi	33	20.6
Danang	65	40.6
Ho Chi Minh City	62	38.8

5 Results

As stated earlier, our study proposes that interactional justice perception mediates the relationships between subjective evaluation and procedural justice perception. It also proposes that interactional justice perception is the mediator in the relationship between subjective evaluation and distributive justice perception.

We tested the mediation hypotheses following the mediation model of Baron and Kenny (1986). In the first step, the correlation between the independent variable (Subj) and the mediating variable (InterJ) was examined (path a). We also examined the association between the mediating variable InterJ and the dependent variables (ProJ and DisJ) in paths b_1 and b_2 , respectively. The relationships between the independent variable and the dependent variables were also tested (path c_1 and path c_2). In the second step, we tested paths c_1 and c_2 again when controlling for the mediating variable. If the correlation between the independent variable and the dependent variable previously found to be significant is no longer statistically significant, it is referred to as full mediation. This implies that the relationship between the independent variable and the dependent variable unfolds through the mediator (Baron & Kenny, 1986). When both indirect and direct effects exist, the mediation effect is partial. The results are shown in Figs. 1 and 2.

The first phase of analysis shows statistical significance in all the direct effects (Fig. 1). Subj has a significant negative effect on InterJ (the coefficient of path a is -0.23 , $p < 0.01$). There is also a significant positive correlation between InterJ and ProcJ (the coefficient of path b_1 is 0.80 , $p < 0.01$). The direct relationship between Subj and ProcJ is significant and negative (the coefficient of path c_1 is -0.24 , $p < 0.01$). The significant results confirm H1 and H2, and offer initial support for H4.

As for the relationship paths between Subj and DistrJ, the coefficients between Subj and InterJ (path a, $\beta = -0.23$), InterJ and DistrJ (path b_2 , $\beta = 0.70$), and Subj and DistrJ (path c_2 , $\beta = -0.29$) are all significant (at $p < 0.01$) (see Fig. 1). The results confirm H3 and give initial support to H5. Even though we did not form a hypothesis regarding the relationship between procedural justice and distributive justice, we tested and found a positive association between them.

Figure 2 shows the results from the full model when InterJ (the mediator) is controlled for (second step). Mediation effects are interpreted as the strength of the indirect relationship between Subj and two dependent variables (ProcJ and DistrJ) when InterJ serves as the mediator. The sizes of the indirect effects (see

Table 2 Descriptive statistical analysis of the main variables, construct reliability and validity

Items	Cronbach alpha	Construct reliability	Average variance extracted	Mean	SD
Subjectivity (Subj)		0.795	0.66	2.86	0.924
Subj1					
How much do you think your supervisor uses subjective judgement to evaluate your performance?					
Subj2				2.58	1.049
How much does your supervisor use subjective judgement to determine your bonus?					
Procedural justice (Procl)	0.876	0.881	0.714		
Procl1				3.71	0.806
I have full confidence in the fairness of the appraisal process					
Procl2				3.64	0.813
I have full confidence in the fairness of the salary and reward system					
Procl3				3.49	0.854
I have full confidence in the fairness of employee promotion process					
Distributive justice (DistrJ)	0.924	0.925	0.804		
DistrJ1				3.69	0.793
I have received fair salaries and rewards for the effort I put forth					
DistrJ2				3.73	0.785
I have received fair salaries and rewards in view of my experience					
DistrJ3				3.67	0.807
I have received fair salaries and rewards for the work I have completed					
Interactional justice (InterJ)	0.86	0.862	0.556		
InterJ1				4.14	0.649
My supervisor treats me with respect and courtesy					
InterJ2				3.78	0.808
My supervisor shows concern for my rights as an employee					
InterJ3				3.54	0.896
My supervisor provides me with reasonable explanations regarding the procedures					
InterJ4				3.64	0.878
My supervisor provides me with timely and detailed feedback					
InterJ5				3.59	0.826
My supervisor is frank and honest					

Table 3 Results of exploratory factor analysis (EFA) performed separately for each measurement instruments and for all items

Items	Factor loading after promax rotation			
	Factor 1	Factor 2	Factor 3	Factor 4
Subj1	0.77	0.057	-0.081	0.928
Subj2	0.85	-0.062	0.082	0.709
Procl1	0.830	0.006	0.845	0.037
Procl2	0.950	0.097	0.825	-0.017
Procl3	0.740	-0.050	0.745	-0.030
DistrJ1	0.910	0.839	0.091	-0.012
DistrJ2	0.850	0.860	0.061	0.032
DistrJ3	0.930	0.968	-0.116	-0.025
InterJ1	0.620	-0.078	0.153	0.056
InterJ2	0.780	0.036	0.156	0.067
InterJ3	0.770	0.067	0.088	-0.064
InterJ4	0.780	-0.003	-0.139	-0.026
InterJ5	0.770	0.003	0.010	-0.017

The values in bold present the results of factor analysis performed on all items, showing the factor loading of five distinct factors of the study (subjectivity in performance evaluation, procedural justice, distributive justice and interactional justice)

Table 4 Test of discriminant validity of each measurable variable

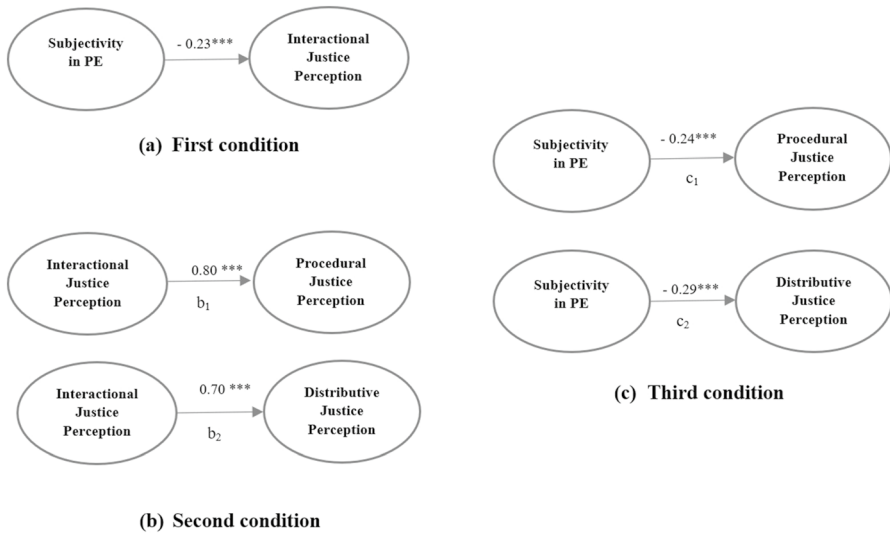
	1	2	3	4
1. Subjectivity	0.730			
2. Procedural Justice	-0.204	0.848		
3. Distributive Justice	-0.195	0.646	0.899	
4. Interactional Justice	-0.157	0.742	0.651	0.745

Table 5) are based on the path coefficients in Fig. 2 (coefficients of path $a \times$ coefficients of path b_1 or b_2). We also examined adjusted R^2 values to obtain an estimate of the mediator's effect size.

In the full model, Subj has a significant correlation with InterJ, but it no longer has a significant effect on ProcJ ($p > 0.05$) (see Fig. 2). This indicates that InterJ has a full mediation effect on the relationship between Subj and ProcJ, since it eliminates their previous significant correlation (the indirect effect path coefficient is -0.18 , $p < 0.01$, R^2 increased from 10 to 64.5%) (see Table 5). Subj does not intrinsically affect ProcJ; it acts through the link of InterJ, thus H4 is supported. According to Zhao et al. (2010), the result implies that there is no mediating variable omitted between Subj and ProcJ.

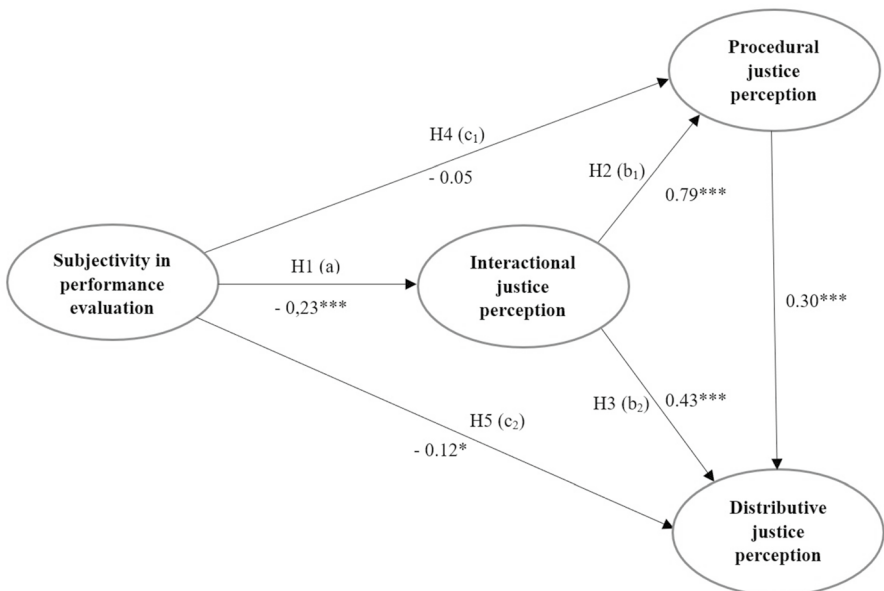
InterJ also acts as the mediator in the relationship between Subj and DistrJ. Subj still has a significant direct effect on DistrJ in the full model (the path coefficient is -0.12 , $p < 0.1$), even though the effect is not as strong as previously in path c_2 of Fig. 1. It can be stated that InterJ has a partial mediating effect on the relationship between Subj and DistrJ (the indirect effect path coefficient is -0.10 , $p < 0.01$, R^2 increased from 12 to 54.6%) (see Table 5). This is defined by Zhao et al. (2010) as complementary mediation, in which the mediated effect ($a \times b_2$) and direct effect (c_2) both exist and point in the same direction; both are negative in this case. Hence, H5 is confirmed. When a greater level of Subj is applied, middle managers may doubt the consistency of treatment by their supervisors and perceive a lower level of interactional justice. The decreased interactional justice perception relates to decreased distributive justice; in other words, they think they are not fairly compensated for their performance.

To check the robustness of our model specification, we re-performed our analysis, including only participants from large organizations (with more than 50 employees). The results are almost identical, with a similar significance level for the paths, and qualitatively equivalent to those reported earlier. This provides assurance as to the robustness of our findings with respect to the size of the organizations in the sample.



Notes: Significance level (***) $p < 0.001$, (**) $p < 0.05$, (*) $p < 0.10$

Fig. 1 Testing conditions of mediation model



Notes: Significance level (***) $p < 0.001$, (**) $p < 0.05$, (*) $p < 0.10$

Fig. 2 Structural model of subjectivity and the dimensions of justice perception

Table 5 Testing mediation effects of interactional justice perception

Independent variable	Dependent variable	Direct path		Mediation path	
		Coefficient	R ²	Coefficient	R ²
Subjectivity	Procedural justice	-0.057	10%	-0.18***	64.50%
	Distributive justice	-0.12*	12%	-0.10***	54.60%

Path (Subjectivity–Interactional justice–Procedural justice) = $-0.23 \times 0.79 = -0.18$

Path (Subjectivity–Interactional justice–Distributive justice) = $-0.23 \times 0.43 = -0.10$

6 Discussion and conclusion

One of the outcomes desired from any performance evaluation system is positive justice perceived by employees, which, in turn, enhances performance and inspires favourable work attitudes such as motivation and commitment (Kernan & Hanges, 2002; Lau & Moser, 2008). Positive perceived justice is also an important component for ethical management practices in organizations (Brown et al., 2005; Xu et al., 2016). This study investigates the effect of a component of a performance evaluation system—subjective evaluation—on three forms of justice perception. We aim to extend the literature by analysing the role of interactional justice perceptions as a critical mechanism underlying the impacts of subjective evaluation on procedural and distributive justice perceptions. The setting of the study involves performance evaluation systems in Vietnam as a representative of emerging economies, since there has been limited research in these contexts. We specifically examine the impact of two culture dimensions—power distance and individualism/collectivism (Hofstede, 1980)—because of their relevance to employees' reactions to control practices in organizations (Chow et al., 2001).

Results from our data supported our hypotheses that the negative effects of subjectivity in performance evaluation are more prominent than positive ones. We find that subjective evaluation is negatively associated with three dimensions of justice perception. This can be explained by the limitations in human judgements and individuals' personal resources. Subjectivity in performance evaluation practices, in any form, is heavily influenced by private 'mental' aspects (LaFave, 2008) or personal perception, beliefs, or experiences (Choon & Embi, 2012). Therefore, it is subject to numerous biases and favouritism, which negatively affect the perceived justice of those middle managers being evaluated. In addition, supervisors' personal resources are limited and scarce. When they are expected to engage in multiple tasks including core technical and managerial tasks, they tend to prioritise core responsibilities, which usually result in their own desired outcomes (bonuses, promotions, and recognition). Management tasks related to interacting with subordinates, providing them with information and giving performance evaluations are often neglected (Sherf, 2016).

The results can be justified in the context of Vietnam as an emerging economy, a research setting that has been largely neglected in management accounting literature. In a high power distance culture, subjective assessments are given with little

information sharing or explanations from employees, which may increase information asymmetry and the opportunity for favouritism. The collectivistic culture may also amplify the negative impact of biased ratings, since individuals who seek common interest and collective goals tend to build greater resentment towards misjudgment and disrespect. Nevertheless, our results are consistent with findings in advanced markets regardless of cultural differences (e.g. Bellavance et al., 2013; Van Rinsum & Verbeeten, 2012).

More importantly, we find that interactional justice perception is a mediator in the relationship between subjective evaluation and procedural justice perceptions. People tend to attribute the fairness of subjective evaluation to supervisors who have significant decision-making roles in the assessments. Since procedural justice is not always straightforward, middle managers perceive it through the way their supervisors treat them. Similarly, the relationship between subjectivity in performance evaluation and perceptions of distributive justice is partially indirect through interactional justice perceptions. Subjectivity in performance evaluation has a negative effect on perceptions of interactional justice, which lowers employees' confidence in their supervisors' ability to make fair decisions on their evaluation outcomes.

Overall, our results advance our understanding of the complex interrelationships between subjective performance evaluation and the three dimensions of justice perception (e.g. Hartmann et al., 2010; Voußem et al., 2016). Furthermore, our research is one of the very few analyses on the effects of subjective evaluation on all three aspects of justice perceptions, as prior studies have mostly focused on perceived procedural justice and distributive justice. We take a different perspective and focus on the role of interactional justice perceptions towards supervisors' treatments. Second, the study answers the calls of Cohen-Charash and Spector (2001) for an in-depth investigation of interactional justice perceptions. Our findings highlight that subjective evaluation influences justice perceptions due to the interactional justice perceived from the supervisors. The results also indicate the importance of studying organizational justice concepts as three distinct yet related dimensions. Finally, our study expands on the growing literature on performance evaluation practices and justice perceptions in emerging economies. It meets the call from Ezzamel and Xiao (2011) for richer literature across countries and contributes to the generalizability of organizational justice theories worldwide (Greenberg & Colquitt, 2013).

Our study has managerial implications related to how subjective evaluation should be applied to improve justice perceptions and encourage ethical behaviour in organizations. First, the negative effect of subjective evaluation on justice perception does not automatically imply that subjectivity should be dropped from performance evaluation systems. Rather, it suggests that top management should consider the trade-off between the benefits and drawbacks of subjective elements in performance evaluation. Perhaps excessive subjectivity in performance evaluation should be avoided. More importantly, the mediating role of interactional justice perceptions suggests that subjective evaluation could be designed to enhance respectful treatment and quality of communication towards employees to be deemed fairer by the evaluated employees. In particular, an organizational feedback-oriented culture could be implemented to provide detailed and timely feedback along with rewards or punishments to employees (Levy & Williams, 2004; London & Smither, 2002).

Superiors should explain performance assessments and outcomes to employees in a respectful and transparent manner (Gupta & Kumar, 2013). Adequate communication is meant to enhance the quality of feedback given in the organization, to increase the acceptance of feedback, and to make both evaluators and evaluatees feel comfortable in the process (London, 2003, p. 231; Rosen et al., 2006). Additionally, it may be worthwhile to place a greater emphasis on the competence of management teams so that they can communicate and produce feedback effectively (Pitkänen & Lukka, 2011).

There are several limitations to our study. First, it was carried out in Vietnam, so any generalisation of our results to other settings should be performed with caution. Second, the measurement instruments were based on studies in English. Despite great efforts to ensure the accuracy and relevance of the English-Vietnamese translation, it is nevertheless possible that differences still exist between the English and Vietnamese versions. Such differences could introduce bias to the survey. Third, we did not ask the respondents to identify their organizations because we wanted to ensure their confidentiality and obtain a higher response rate. Hence, there might have been more than one respondent from some organizations, as the questionnaire was sent to several middle managers of each firm. This too may have led to some minor bias in the analysis.

Future studies could further examine the specific organizational circumstances that affect the relationship between subjectivity in performance evaluation and perceived interactional justice, as the relationship is prone to be influenced by contextual factors and the characteristics of those involved. In addition, since we only examined subjectivity as a whole, it might be fruitful to explore particular aspects of subjectivity in-depth, such as the use of subjective measures, flexibility in the weighting of certain performance measures, and ex-post discretionary judgement. Finally, perceived interactional justice only has a partial mediating effect on the relationship between subjectivity and perceived distributive justice. This suggests the possible existence of some omitted mediators, which further studies can address.

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