Collective Bargaining and Perceived Fairness: Validating the Conceptual Structure
Négociation collective et perceptions de justice: validation de la structure conceptuelle
Negociación colectiva y percepciones de justicia: validación de la estructura conceptual

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Résumé de l'article

L'objectif de cette étude consiste à conceptualiser la « justice perçue dans le contexte de la négociation collective ». Ce concept concerne les perceptions de la justice que forment les salariés durant la négociation collective (le processus de détermination des conditions de travail dans les milieux syndiqués). S'appuyant sur la littérature portant sur la justice organisationnelle, nous avons procédé à un travail de conceptualisation et formulé des hypothèses visant à tester sa validité. Cette étude a été menée auprès de professeurs d'une université canadienne, dont la négociation collective a duré près de deux ans. À l'aide d'analyses factorielles confirmatoires et de régressions hiérarchiques, nous avons obtenu des résultats qui soutiennent la validité convergente, discriminante et prédictive de notre conceptualisation. Dans l'ensemble, les résultats montrent que ce concept renferme huit dimensions distinctes, combinant les deux sources d'(in)justice (employeur et syndicat) et les quatre types de perceptions de justice: procédurale, distributive, relationnelle (interpersonnelle) et informationnelle. En effet, les employés distinguent clairement les huit dimensions de justice, lesquelles affectent différemment leurs attitudes : la confiance envers leur employeur et la satisfaction à l'égard de leur syndicat.

De plus, la négociation collective est un processus auquel les employés sont appelés à participer activement, ce qui peut entraîner des coûts (énergie, temps, perte d'argent). Les salariés sont donc susceptibles de construire leurs perceptions de justice en s'appuyant non seulement sur les éléments provenant du *modèle structurel* (Leventhal, 1980) ou du *modèle du contrôle* (Thibaut et Walker, 1975), mais également en utilisant deux nouvelles règles de justice: l'utilité des actions (la probabilité que les actions incitent l'employeur à améliorer son offre au niveau espéré) et la profitabilité des actions (ratio coûts/bénéfices).

Ouvrir la boîte noire de la négociation collective à travers le concept de justice est le premier pas à franchir afin de comprendre les conséquences de la négociation collective sur les attitudes et les comportements des employés lorsqu'ils sont de retour au travail.

Collective Bargaining and Perceived Fairness: Validating the Conceptual Structure

Julie Cloutier, Pascale L. Denis and Henriette Bilodeau

The aim of this study is to conceptualize and empirically validate the “perceived fairness in the context of collective bargaining”, which refers to employees’ justice perceptions formed during the collective bargaining process. Using confirmatory factor analyses (CFA) and hierarchical regressions, we find support for discriminant, convergent, and predictive validity. Overall, the results show that this concept includes eight distinct dimensions, combining the two sources of (in)justice (employer and union) and the four types of justice perceptions: procedural, distributive, relational (interpersonal) and informational justice. Employees clearly distinguish eight justice dimensions, which have a differential effect on their attitudes: trust in the employer and satisfaction with the union. Adding to the *structural model* (Leventhal, 1980) and the *process control model* (Thibaut and Walker, 1975), this study highlights new bases of justice: usefulness and profitability (cost-benefits ratio).

KEYWORDS: organizational justice, labour union, collective bargaining, validation, dimensionality, concept

Introduction

Organizational justice refers to the perception of being treated fairly in the workplace (Colquitt, Greenberg and Zapata-Phelan, 2005; Cropanzano and Greenberg, 1997; Konovsky, 2000). It is among the most popular concepts in the fields of human resource management and organizational behaviour, and rightly so. It is central to the employer-employee relationship, exerting a wide influence on employees’ attitudes and behaviour in the workplace (for reviews, see Colquitt *et al.*, 2005; Cropanzano and Greenberg, 1997; Konovsky, 2000). Indeed, employees assess how fairly they are treated by their organization and respond, for example, by

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increasing or reducing their job satisfaction, organizational trust and commitment, performance, and organizational citizenship behaviour. Perceived unfairness may also generate counterproductive work behaviour, conflict, and withdrawal (for meta-analyses see Cohen-Charash and Spector, 2001; Colquitt *et al.*, 2001). In short, organizational justice is crucial to the well-functioning of organizations.

However, there has been little research on organizational justice in the context of labour relations. Currently, there are a few studies that focus only on justice perceptions in the context of grievance systems – mechanisms used to resolve disagreements regarding the interpretation and the application of a collective bargaining contract (Aryee and Chay, 2001; Fryxell, 1992; Fryxell and Gordon, 1989; Gordon and Fryxell, 1993; Morrow and McElroy, 2006; Nurse and Devonish, 2007). However, the justice perceptions specifically related to collective bargaining – determining the working conditions – have been completely ignored. It seems essential to address this issue because justice perceptions formed during the collective bargaining process are likely to spread to employees' attitudes and behaviours in the workplace. In that respect, Chaulk and Brown (2008) showed that collective bargaining and industrial actions (i.e. strikes) are significant events that can leave deep scars in the workplace, reducing job satisfaction, organizational and union commitment, even lasting several months beyond the end of collective bargaining process. According to the authors, these results may be explained by the negative psychological experience of collective bargaining. This interpretation suggests that the black box of collective bargaining be opened. In short, justice perceptions about collective bargaining could constitute a critical concept to better understand and explain employees' behaviour in the unionized workplace.

The aim of this study is to conceptualize the perceived fairness about collective bargaining and to test the dimensionality (factorial structure) of this concept. The study contributes to advancing knowledge in the field of organizational justice, industrial relations, and organizational behaviour. Indeed, providing this new conceptualization of perceived fairness is the first step to a better understanding of the psychological process underlying the impact of industrial actions on organizational behaviour, weaving a closer link between the two fields. It might also revive research on attitudes and behaviours toward unions. Indeed, our conceptualization of justice might turn out to be a new predictor in future research, shedding light on employees' satisfaction with unions, commitment to unions, participation with union activities and intention to resign.

To reach our objective, we first define the organizational justice framework in order to derive our conceptualization of justice in the context of collective bargaining. Next, we formulate hypotheses as a means of testing the convergent, discriminant, and predictive validity of our conceptualization. After describing the context of our field study, we present the measurement instrument used to collect

data. In the empirical section, we start by describing our analytical approach. We use confirmatory factor analyses (CFA) to test the convergent and discriminant validity of our conceptualization's dimensionality. We also conduct hierarchical linear regressions to confirm discriminant validity and go further by testing predictive validity with two outcome variables: trust in employer and union satisfaction. The presentation and discussion of findings are followed by the identification of research limitations and suggestions for future research directions.

Theoretical Framework

Organizational Justice Concept

The concept of organizational justice concerns the perceived fairness within organizations (Colquitt *et al.*, 2005; Cropanzano and Greenberg, 1997; Konovsky, 2000). It is the perception of justice employees form with regard to the several allocation processes within the organization. Organizational justice refers to four types of justice: distributive, procedural, interpersonal, and informational (Colquitt *et al.*, 2005; Cropanzano and Greenberg, 1997; Konovsky, 2000). Distributive justice concerns the perceived fairness of the results from the decision-making process (*i.e.* the decision itself); the other three forms of justice refer to separate aspects of the decision-making process: the decision rules and their application (procedural justice), the interpersonal relationship during the process (relational or interpersonal justice), and the justifications for decisions (informational justice) (Colquitt *et al.*, 2005; Cropanzano and Greenberg, 1997; Konovsky, 2000) (see below for more details). In short, the concept of organizational justice concerns perceptions of justice regarding both an allocation process and its outcomes.

To conceptualize justice perception in the context of collective bargaining, we need to start by defining the process of collective bargaining and its outcomes. The concept of collective bargaining can be conceptualized through two core dimensions: 1) *the nature of the process*, and 2) *the objective of the process*. In addition, it has been empirically demonstrated that employees form distinct perceptions of justice based on the "source of (in)justice" (Blader and Tyler, 2003; Masterson *et al.*, 2000; Rupp and Cropanzano, 2002). It is about who is involved in the decision-making process and is considered responsible for its fairness. This *multifoci approach of organizational justice* highlights the need to identify precisely the source of justice perception. Therefore, a third core dimension can be used: *the actors of the decision-making process*.

The legal framework that governs unionization and collective bargaining is useful for distinguishing the process, outcomes, and source of (in)justice in the context of collective bargaining. In Canada and the United States, laws¹ on labour relations give employees the right to be represented by a union. When this

is the case, employees' working conditions are determined through a collective bargaining process involving their employer and a union. Parties also have the legal right to use economic weapons, such as strikes and lockouts, to impel the opposing party to make concessions and reach an agreement. Accordingly, the concept of collective bargaining refers to a process of mutual influence (persuasion) between the employer and the union, whose objective is to reach an agreement on employees' working conditions.

The actors of the decision-making process. Collective bargaining involves two parties: the employer and the union. Both parties have divergent interests, and make different calculations regarding what is fair, beneficial, or effective given the organization's scarce resources and its competitive position (Bacharach and Lawler, 1981; Katz, Kochan and Colvin, 2008). However, they also share a common goal, since they need each other to exist: the employees are the productive power of the organization and the employer provides them wages and benefits. To what extent they are dependent on each other constitutes the basis of their relative power (Bacharach and Lawler, 1981; Katz *et al.*, 2008).

The nature of this process. Collective bargaining is an allocation process for which the objective is to determine the employees' working conditions. It is a decision-making process based on the relative power each party has to persuade the other, using their industrial actions (e.g. negotiating tactics) (Bacharach and Lawler, 1981; Katz *et al.*, 2008). Thus, decisions and actions that both parties carry out are part of the decision-making process. Those actions take the form of argumentation, threats of using pressure tactics or actual use of pressure tactics (sit-ins, picket, strikes, lockout, relocation, etc.), and concessions (Cutcher-Gershenfeld and Kochan, 2004; Katz *et al.*, 2008).

The union undertakes the role of protecting the interests of its members (Katz *et al.*, 2008). This implies that the collective bargaining process comprises two separate and distinct processes for the union. The first is a process internal to the union that aims to ensure that the claims that the union brings to the bargaining table actually reflect the concerns and expectations of its members. The second process, an external one, is intended to influence the employer to agree to union demands.

The objective of this process. The outcome of the bargaining process is the content of the new collective bargaining agreement, that is to say, the employees' working conditions (e.g. wages, benefits, work schedule) (Katz *et al.*, 2008).

In short, collective bargaining is the process of allocation of working conditions when employees are unionized. Building on the literature on organizational justice, we propose in the following sections a conceptualization of perceptions of justice adapted to the specific characteristics of collective bargaining: distributive, procedural, relational and informational justice.

Distributive Justice

Distributive justice is concerned with the perceived fairness of the outcomes received – adequacy of the outcomes –, such as pay level or promotion (Adams, 1965; Colquitt, 2001; Cropanzano and Greenberg, 1997; Folger and Konovsky, 1989; Sweeney and McFarlin, 1993). In the context of collective bargaining, the employees evaluate to what extent the content of the collective bargaining agreement reflects what they believe they are entitled to receive. In other words, they assess how fair their working conditions are.

The internal decision-making process performed by the union also produces outcomes. As such, employees likely form a justice perception related to these outcomes, which result from the types of claims that the union brings to the bargaining table (for example, salary, pension plan, and number of positions). The claims represent the type of results expected by the union, outcomes for which the union tries to reach an agreement with the employer through the process of influence. The employees are concerned with whether the union's claims represent their interest. In this regard, studies show that union members require their union to consider their expectations and include them in their claims (Fiorito, Gallagher and Fukami, 1988; Jarley, Kuruvilla and Casteel, 1990; Frenkel and Kuruvilla, 1999). In short, employees wonder how fair are the union's claims, considering their own concerns.

Procedural Justice

Procedural justice refers to the perceived fairness of the rules and procedures used to determine outcomes (Colquitt, 2001; Cropanzano and Greenberg, 1997; Konovsky, 2000; Sweeney and McFarlin, 1993). It concerns how decisions are made. In short, procedural justice concerns the means that “cause” decisions (Blader and Tyler, 2003).

According to the instrumental perspective (self interest), employees are fundamentally concerned about their own economic outcomes (Lind and Tyler, 1988; Thibaut and Walker, 1975). They give great importance to the decision-making process because they believe that a fair process produces logically fair outcomes (Lind and Tyler, 1988; Thibaut and Walker, 1975). When employees assess procedural justice, they evaluate to what extent the means used are “adequate” or “appropriate” given the objective to get fair outcomes (Folger, 1996; Leventhal, 1980; Sheppard, Lewicki and Minton, 1992). Specifically, an adequate or appropriate decision-making process can be described as a process by which 1) the reality is correctly measured and 2) the resources are distributed in such a way they correspond to this measured reality (Folger, 1996; Sheppard *et al.*, 1992). For example, if employees want to receive fair wages – wage commensurate with their inputs – they expect that the procedures used

accurately measure their input level, and that their wage level is determined in proportion to this measurement.

Two main models help to explain how employees evaluate the fairness or the appropriateness of the decision-making process. First, the *Process Control Model* by Thibaut and Walker (1975) postulates that individuals seek control during the decision-making process in order to assure themselves of the fairness of the results (Greenberg, 1990; Lind and Tyler, 1988; Thibaut and Walker, 1975). Control improves the perception of procedural justice because employees: 1) provide the information required to make decisions (*process control*), and 2) make the final decision (*decision control*) (Thibaut and Walker, 1975). In short, according to this model, the notion of control is underpinning the procedural justice concept.

Second, Leventhal (1980) developed the *Structural Model*, which postulates that employees assess procedural justice by evaluating the fairness of the structural components comprising the allocation process. In other words, they evaluate the extent to which rules and procedures used to make decisions are appropriate. Each of these rules and procedures can be assessed in light of one or more of six justice rules: 1) the same procedures and criteria apply to all recipients (consistency), 2) relevant and unbiased procedures and decision criteria are used, free of personal self-interest (bias suppression), 3) the information on which the decision is based is accurate (accuracy), 4) there is an opportunity to re-examine and reverse the decision (correctability), 5) the set of rules and decision criteria take into account the concerns of recipients (representativeness), and 6) the procedures used meet moral and ethical standards (ethicality)² (Leventhal, 1980: 40).

In the context of collective bargaining, employees evaluate the process of influence, *i.e.* decisions made and actions taken by both parties, to reach an agreement on working conditions. Both parties' actions consist of encouraging the other party to make concessions by increasing the costs of disagreement (economic losses related to failure to reach an agreement) (Chamberlain, 1951; Levinson, 1966). Therefore, given the nature of the perception of procedural justice, employees assess the "appropriateness" of those means relative to their objective, namely, to convince the other party to reach an agreement which reflects what is fair and effective. Thus, procedural justice raises two main questions: 1) To what extent have the parties correctly measured the reality regarding what is fair and effective? 2) To what extent are the actions taken by the parties appropriate to get expected concessions from the opposite party?

Moreover, according to the *multifoci approach of organizational justice*, employees form distinct perceptions of justice based on groups of authorities involved in the decision-making process (Blader and Tyler, 2003; Masterson *et al.*, 2000; Rupp and Cropanzano, 2002). Therefore, employees form two perceptions

of procedural justice: one originates from the employer's actions, the other one from the union's actions. This will be also the case for perceptions of justice related to the other aspects of decision-making process, namely the relational or interpersonal justice and informational justice.

Union's Actions

Regarding the first aspect (measuring what is fair and effective), employees assess how the union determined the level of its claims. Building on the *Structural Model* (Leventhal, 1980), two justice rules seem particularly important: accuracy rule and bias suppression rule. First, employees evaluate to what extent the union had accurate information regarding: 1) what is fair considering the characteristics of the job and workplace, and 2) what is feasible considering the employer's financial and competitive positions. Second, employees try to answer the question of how far the union's representation of fairness and efficiency reflects personal interests or political concerns. Once claims are proven procedurally fair, they become evidence that the current working conditions are unfair. It also strongly suggests that the employer is responsible and has the financial capacity to do better. Thereby, procedural justice contributes to legitimizing the union demands in the eyes of employees.

Regarding the second aspect (taking actions to get concessions), employees assess the appropriateness of the actions taken to persuade the employer to improve his offer at the expected level. As stated in the *Process Control Model* (Thibaut and Walker, 1975), the perception of procedural justice is partly rooted in the notion of decision control. Therefore, employees are more likely to consider the process as fair when they have a say in the decision-making process, for example, through voting. This seems especially important in the context of collective bargaining because it is a mechanism designed to provide a collective voice to employees based on the principle of democracy (Godard, 1992; Katz *et al.*, 2008). Therefore, when employees participate (through voting) in decision-making regarding actions to be undertaken, they would be more likely to consider these actions as fair or adequate.

Moreover, according to the *Expectancy Theory* (Vroom, 1964), human behaviour results from a rational calculation based on the costs and benefits of actions. In its simplest form, this theory predicts that employees believe actions are *appropriate* for obtaining the desired outcomes (benefits) and are motivated to perform them when: 1) the probability that the action will lead to the desired benefits is high (instrumentality), and 2) the costs of actions are lower than the desired benefits (costs-benefits ratio). Applied to the context of collective bargaining, employees determine whether the union's actions are appropriate based on: 1) the actions' instrumentality or usefulness, i.e. the probability that actions are severe enough to

force the employer to improve their offer to the expected level (*Is it useful?*), and 2) the cost/benefit ratio of those actions, i.e. whether the costs employees face are higher than the benefits they seek (*Is it worth it?*). In this vein, McClendon and Klass (1993) showed that the propensity to strike and to participate in strike-related activities depends on the extent to which employees believed that strikes are effective in obtaining desired outcomes and on the perceived costs of striking. In addition, Martin and Sinclair (2001) showed that employees' decisions not to engage in a strike is explained largely by their belief that the costs associated with the strike (perceived hardship of a strike) are too high considering the concessions expected from the employer (expected benefits).

Employer's Actions

The assessment of the employer's representation of what is fair and effective (the first aspect of procedural justice) is done in the same way as the evaluation of the union's fairness. Employees rely on the accuracy rule and on the bias suppression rule (Leventhal, 1980). Indeed, employees assess to what extent the employer's beliefs about fair working conditions and the organization's financial position are based on accurate information and unbiased analyses.

In addition, the opportunity to provide information and exert influence during the decision-making process is fundamental to the fairness of the procedures (Thibaut and Walker, 1975). Employees want their views to be heard and considered (Leventhal, 1980). As such, collective bargaining gives employees a voice in the process of determining their working conditions (Godard, 1992; Katz *et al.*, 2008). In short, through their union, the employees want the opportunity to inform the employer about their views on fair working conditions and to make arguments that influence the employer's thoughts. Therefore, when the employer prevents this opportunity, by, for example, not showing up at the bargaining table, he undermines the employees' perception of procedural justice.

This first aspect of procedural justice – related to the measurement of the reality about fairness and efficiency – provides valuable information that employees can use to form their perceptions about the legitimacy of concessions that the employer requested (*Is this justified or legitimate?*). Apart from the legitimacy of the employer's objectives, employees assess directly the appropriateness of the actions taken to achieve them (the second aspect of procedural justice). Studies on justice perception conducted in the contexts of layoffs (Konovsky and Brokner, 1993; Brockner *et al.*, 1995) and divestiture (Gopinath and Becker, 2000) show that employees are more likely to consider an employer's actions as fair when those actions are the only means available to the employer for accomplishing his goal. The likelihood that the employer has no other alternatives reflects the indispensability of his actions (*Is this avoidable?*). In short, as Gopinath and Becker

(2000) emphasized, to perceive the employer's actions as fair, employees must see those actions as *essential* to accomplishing a *legitimate* goal. Overall, this reflects the principle of *necessity of action* on which the procedural justice perception is partly rooted (Konovsky and Brokner, 1993; Brockner *et al.*, 1995, in the context of layoffs, and Gopinath and Becker, 2000, in the context of divestiture).

Relational Justice

Relational (or interpersonal justice) is related to the quality of the interpersonal relationship between authorities charged with applying the procedures and the recipients (Greenberg, 1993a; Bies and Moag, 1986³; Tyler and Bies, 1990). This type of justice stems from the relational perspective of justice, which stipulates that employees place a high value on respect, consideration, and esteem they receive from the organization, *i.e.* the social outcomes of the relationship (Cropanzano and Greenberg, 1997; Lind and Tyler, 1988). The perception of relational justice is based on how an organization and its representatives interact with employees – the extent to which employees believe they are treated with politeness, dignity, respect, and empathy (Bies and Moag, 1986; Greenberg, 1993a; Tyler and Bies, 1990). For example, employees expect authorities to treat them politely, to listen to them carefully, and to respect them without resorting to denigration or humiliation (Bies and Moag, 1986). Moreover, studies show that fairness perception increased when authorities expressed concerns about how decisions were affecting employees (Greenberg, 1993b, 1994).

Informational Justice

Finally, informational justice concerns the justifications and explanations given for decisions made (Colquitt *et al.*, 2001; Greenberg, 1993a). While relational justice refers to “how it is said,” informational justice refers to “what is said” (Gilliland, 1993: 697). Specifically, this concept pertains to the quality of information provided to employees to explain why the authorities have reached their decision (Greenberg, 1993a; Cropanzano, Prehar and Chen, 2002). Employees believe they have the right to know when events affect them (Bies and Moag, 1986). Therefore, they feel more fairly treated when the authorities demonstrate the ways in which reality justifies the decisions that have been made. For example, in the context of pay cuts, when employees are informed about the company's financial problems, they are more convinced of the appropriateness of the pay cuts and they respond less negatively (*e.g.* by stealing) (Greenberg, 1993b). The quality of information refers to credibility or persuasiveness, *i.e.* the clarity, trueness, and adequacy of the reasons that inform decision-making (Bies, 1987; Bies and Moag, 1986; Bies, Shapiro and Cummings, 1988; Greenberg, 1993a; Tyler and Bies, 1990; Shaw, Wild and Colquitt, 2003).

Hypotheses

In order to determine to what extent a concept comprehensively, exclusively, and correctly represents the reality to which it refers, it is essential to test its validity (Campbell and Fiske, 1959; Schwab, 1980). Discriminant validity, convergent validity and predictive validity are thus important issues (Campbell and Fiske, 1959; Schwab, 1980). First, we formulate hypotheses that anticipate the convergent and discriminant validity of our conceptualization's dimensionality. Second, we formulate hypotheses about predictive validity.

As stated in *the multifoci approach of organizational justice*, employees form separate perceptions of fairness depending on the source of (in)justice, i.e. the authorities taking part in the decision-making process (Blader and Tyler, 2003; Masterson *et al.*, 2000; Rupp and Cropanzano, 2002). In the context of collective bargaining, two authorities or parties are involved: the employer and the union representing employees. Therefore, employees should form two distinct perceptions of fairness – one related to the employer's actions and the other one stemming from the union's actions. Thus, we can formulate the following hypothesis:

H1: The perceived fairness of the employer's actions and the perceived fairness of the union's actions are empirically distinct dimensions.

Perceived fairness consists of four types of justice perceptions: distributive, procedural, relational, and informational (Colquitt *et al.*, 2005; Cropanzano and Greenberg, 1997; Konovsky, 2000). In various contexts, a number of studies have theoretically and empirically demonstrated that these four types of justice are distinct and have unique paths in determining attitudes and behaviours (Cohen-Charash and Spector, 2001; Colquitt, 2001; Colquitt *et al.*, 2001, Cropanzano, Prehar and Chen, 2002). Thus, we can formulate the following hypotheses:

H2: The four types of justice perceptions related to the employer (procedural, distributive, relational, and informational) are empirically distinct dimensions.

H3: The four types of justice perceptions related to the union (procedural, distributive, relational and informational) are empirically distinct dimensions.

H4: The items load significantly on the hypothesized dimensions; procedural, distributive, relational and informational justice perception related to the employer; procedural, distributive, relational and informational justice perception related to the union.

As mentioned before, employees develop separate justice perceptions for each authority involved in the decision-making process, that is according to the source of (in)justice (Blader and Tyler, 2003; Masterson *et al.*, 2000; Rupp and Cropanzano, 2002). These justice perceptions engender attitudes toward, and behaviours directed at, the sources of (in)justice (Cropanzano, Prehar and

Chen, 2002; Masterson *et al.*, 2000; Rupp and Cropanzano, 2002). Therefore, the justice perception associated with each of the authorities or parties, the employer and the union for instance, should predict attitudes toward the party concerned. Employees' attitudes toward the source of (in)justice allow us to test the predictive validity of the dimensionality of justice for different allocation processes, including collective bargaining.

Trust in organization appears to be a key dimension of the employer-employee relationship. Trust is the foundation of the exchange relationship between employer and employees. It ensures that organizations can functionally promote effective cooperation among employees (Dirks and Ferrin, 2001; Mayer, Davis and Schoorman, 1995; Tyler, 2003). Studies show that perceived organizational justice is an important predictor of trust in organizations (for meta-analyses, see Cohen-Charash and Spector, 2001; Colquitt *et al.*, 2001; Dirks and Ferrin, 2002). Therefore, in the context of collective bargaining, the employees' perceptions of the employer-related justice should predict the employees' trust in their employer. We can formulate the following hypothesis:

- H5: The perceptions of the employer-related justice (procedural, distributive, relational, informational) exert a positive influence on trust in the employer.

Union satisfaction is a critical concept for the survival of unions. As pointed out by Clawson and Clawson (1999), unions are responsible to a large extent for their own decline because, to some extent, their way of doing things has led to dissatisfaction among their members. In this regard, Klandermans (1986) and Waddington (2006) showed that dissatisfaction with unions is an important factor for explaining why union members leave their union. In general, studies show that perceptions of justice influence the satisfaction with the source of (in) justice (for reviews see Cohen-Charash and Spector, 2001; Colquitt *et al.*, 2001). Along this line of reasoning, Fryxell and Gordon (1989) showed that fairness afforded by a grievance system is related to satisfaction with unions. Therefore, we can assume that perceptions of union-related justice influence members' satisfaction with the union. Thus, we formulate the following hypothesis:

- H6: The perceptions of the union-related justice (procedural, distributive, relational, and informational) exert a positive influence on union satisfaction.

Method

Context and Sample

This study was conducted among 1000 faculty members at a Canadian university. After the collective agreement expired, the employer and the union agreed to postpone negotiations on the monetary clauses for 15 months due to the

serious financial problems that the university was facing at the time. Once the postponement ended, the employer rejected negotiation attempts for a further three months. Negotiations failed for an additional three months, at which time the union proposed to its members a strike ballot. The faculty members voted overwhelmingly in favour of a strike. This was twenty-one months after the beginning of the collective bargaining process. Having achieved wage gains (wage catch-up of 11.6%) and an increase in authorized positions, faculty returned to work after seven weeks of strike.

Using an online questionnaire, the data used for this study were collected in two stages. The questionnaire was developed and produced in French, the working language at this university. The first data collection was performed five weeks after the start of the strike. The data collected then dealt with control variables and variables related to perceptions of the employer’s fairness in collective bargaining. This first questionnaire was fully completed by 296 faculty members, representing a response rate of 29%. The second data collection took place seven weeks later (i.e. six weeks after the collective agreement was adopted) to collect data on the other variables under examination. At that time, 158 respondents completed the questionnaire for a response rate of 16%. Means, standard deviations and correlations are reported in Table 1.

TABLE 1
Correlations among Variables, Means and Standard Deviations

Variables	1	2	3	4	5	6	7	8	9	10
1. PJ – ORG	.856									
2. DJ – ORG	**. 481	.883								
3. RJ – ORG	**. 833	**. 542	.860							
4. IJ – ORG	**. 814	**. 487	**. 831	.848						
5. PJ – UNION	**. 501	**. 273	**. 470	**. 499	.931					
6. DJ – UNION	**. 446	-. 009	**. 355	**. 300	**. 791	.922				
7. RJ – UNION	**. 412	**. 209	**. 391	**. 420	**. 834	**. 773	.899			
8. IJ – UNION	**. 317	-. 136	**. 261	**. 242	**. 733	**. 751	**. 791	.940		
9. Trust – Employer	**. 525	**. 204	**. 582	**. 602	**. 238	-. 142	**. 204	-. 071	.920	
10. Satisfaction – Union	**. 304	**. 199	**. 337	**. 328	**. 738	**. 756	**. 699	**. 734	**. 364	.897
Mean	1.61	1.76	1.76	1.76	4.12	4.08	4.21	4.06	2.14	3.84
SD	.77	.93	.89	.90	1.01	.97	.91	.99	.99	1.03

Notes: PJ = procedural justice, DJ = distributive justice, RJ = relational justice and IJ = informational justice.
Cronbach’s α in bold.
*p < .05, **p < 0.01

Samples for both time measures are mainly composed of males ($T1 = 58\%$; $T2 = 51\%$), who are 50 years old or younger ($T1 = 52\%$; $T2 = 58\%$ of the sample), and who have a mean job tenure of 14 years ($SD = 9.98$) and 13.23 years ($SD = 9.39$), for Time 1 and Time 2 respectively. In order to assess if characteristics of both samples were similar, we performed chi-squares and T-tests. Samples characteristics are similar for the sex ($\chi^2 = 1.815$, $p = .21$), age ($\chi^2 = 3.653$, $p = .46$), seniority ($t = -.430$, $p = .67$), status ($\chi^2 = 1.444$, $p = .70$), and faculty membership ($\chi^2 = 3.636$, $p = .73$).

Measures

For all variables, excluding the control variable, respondents indicated their degree of agreement with statements on five-point Likert scales (1 = strongly disagree to 5 = strongly agree). Regarding procedural, distributive, relational, and informational justice, statements were introduced by the following general question: "In general, along the negotiation of the new collective agreement, I had the impression that..."

To measure the *perception of procedural justice*, we used a direct multiscale measure (Gilliland, 1994; McFarlin and Sweeney, 1992; Rupp and Cropanzano, 2002). For the employer and the union sources respectively, we developed three items measuring the extent to which the decisions and actions during the collective bargaining process were fair, appropriate, or necessary (e.g., "The way the employer leads the bargaining was appropriate"). We added an additional item to the union measure to represent the democratic aspect that characterizes the negotiation process carried out by the union.

The data about the *perception of distributive justice related to employer source* were collected using a multiscale measurement asking respondents for their opinion about their pay fairness, pay being one of the principal concerns of this collective bargaining. Based on the Colquitt measure (2001), we adapted a three scale measure in the context of this study (e.g., "my salary is appropriate for the amount of job I'm doing"). Regarding the *perception of distributive justice related to the union source*, we develop a three scale measurement representing the extent to which claims that what the union brings to the bargaining table is representative of the union members' concerns and expectations (e.g., "the union managed bargaining in its members' best interest").

In order to measure the *perceptions of relational justice and informational justice*, we relied on the work of Bies and Moag (1986) and developed respectively two multiscale measures, each containing three items (e.g., for relational justice: "the [union, employer] treated its [members, faculty] with dignity"; for informational justice: "the [union, employer] explains to its [members, faculty] reasons behind its bargaining actions").

From the perspective of employees, *trust in organization* can be defined as the employees' willingness to leave the organization in control of their work life. As Dietz and Den Hartog (2006: 571) pointed out about trust measurement, "most measures are of the trustworthiness belief," which is a conceptually and empirically distinct concept that predicts trust (Mayer, Davis and Schoorman, 1995). In the absence of a multiscale measure of trust, we developed a measure for this study drawing on the work of Brockner *et al.* (1997), Clark and Payne (1997) and Mayer and Davis (1999). The three items used are, for example: "I trust the management of the [name of the university]" .

The *union satisfaction* measure was adapted from measures developed by Jarley *et al.* (1990), which ask employees to what extent they are satisfied with the union achievement, effort, and the way to handle events. One of the two items used is "I am satisfied with the way [union's name] negotiated the collective agreement" .

Analytic Approach

First, we conducted confirmatory factor analyses (CFA) to test the validity of the dimensionality of the perceived fairness conceptualization. Discriminant validity refers to the degree to which constructs or dimensions are empirically distinct (Campbell and Fiske, 1959; Schwab, 1980). In CFA, there is convergent validity when each indicator's estimated coefficient loaded significantly on its own underlying dimension (Anderson and Gerbing, 1988).

Second, hierarchical regression analyses were performed to test perceived fairness conceptualization predictive power with respect to attitudes toward the employer and the union, such as trust in the employer and satisfaction with the union. These results are indicative of the predictive validity, which refers to the ability of a concept to influence the outcome that it is theoretically supposed to predict (Anastasi, 1994; Nunnally and Bernstein, 1994).

Results

Confirmatory Factor Analysis (CFA)

In order to test the discriminant validity of our conceptualization (hypotheses 1 to 3), we compare structurally distinct models and examine several goodness-of-fit statistics. A standard $\chi^2_{\text{difference}}$ test is used to determine if the more complex models provide a statistically better fit to the data (Anderson and Gerbing, 1988). To reduce the influence of sample size on the χ^2 statistics, we use the *Normed chi-square* (NC) (χ^2 value/df) (Bollen, 1989). A value between 3.0 and 5.0 indicates a reasonable fit (Bollen, 1989). Because of the propensity of χ^2 statistics to decrease with model complexity (Kline, 2005; Jöreskog and Sörbom, 1996), we also use

Akaike's (1987) *Information Criterion* (AIC) and the *Expected Cross-Validation Index* (ECVI, see Browne and Cudeck, 1993). Lower values indicate a better fit. We also report the NFI, CFI, NNFI. A value above 0.90 is considered acceptable for all these fit indexes (Bentler and Bonett, 1980; Kline, 2005). Finally, a model is considered acceptable with a RMSEA of 0.08 or less (Browne and Cudeck, 1993).

Hypothesis 1 stipulated that the perceived fairness of the employer's actions and the perceived fairness of the union's actions are empirically distinct dimensions. To test this hypothesis, we conduct CFA analyses to compare the fit of two models. The first model is a one-factor structure representing an overall perception of fairness in the context of collective bargaining. The second model is a two-factor structure where factors reflect, respectively, the overall justice perception related to the employer and related to the union. Thus, the structure of the two models differs by the source of (in)justice.

Results from CFA are reported in Table 2. The result for the $\chi^2_{\text{difference}}$ test is significant ($p < .01$), indicating that the two-factor structure provides a significantly better fit than the one-factor structure. Moreover, the two-factor structure shows the lowest ECVI and AIC, confirming its greater explanatory power. The value of 3.65 estimated for the NC index indicates a reasonable fit (≤ 5.0). Finally, NFI, NNFI, and CFI values also indicate a reasonable fit (around .90). Thus, goodness-of-fit indexes for the two-factor structure indicate that the perceived fairness from the employer source and the perceived fairness of the union source represented distinct dimensions. Therefore, Hypothesis 1 is supported. However, the RMSEA value exceeds the value of .08 reached for reasonable fit, and the value estimated is not comprised within the 90% confidence interval. This result is indicative of the high variance of data in each of the two dimensions, requiring us to refine our conceptualization, as suggest by the Hypotheses 2 and 3.

TABLE 2
Fit Indices for Perceived Fairness for Factor Structures

Measurement model N = 100	χ^2	df	NC χ^2/df	NFI	NNFI	CFI	ECVI	AIC	RMSEA	90% RMSEA Confidence interval
One-factor structure	2196.15	299	7.34	.81	.83	.84	23.23	2300.15	.25	(.24; .26)
Two-factor structure	1087.61**	298	3.65	.87	.90	.91	12.06	1193.23	.16	(.15; .17)

Notes: The one-factor structure combined the four types of perceived justice related to both employer's and union's actions (procedural, distributive, relational, and informational).

The two-factor structure: the first factor combined the four types of perceived justice related to the employer's actions. The second factor combined the four types of perceived justice related to the union's actions.

The $\chi^2_{\text{difference}}$ statistic is significant at ** $p < 0.01$.

χ^2 = chi-square; df = degree of freedom; NC = Normed chi-square; NFI = Normed fit index; NNFI = non-normed fit index; CFI = comparative fit index; ECVI = Expected cross-validation index; AIC = Akaike information criterion; RMSEA = Root mean squared error of approximation; RMSEA 90% = confidence interval.

Hypothesis 2 stipulated that the four types of justice perceptions related to the employer (procedural, distributive, relational and informational) are empirically distinct dimensions. To test this hypothesis, we compared the goodness-of-fit of four models with different structures. The first model combines the four types of justice perceptions (procedural, distributive, relational and informational) from the employer source. This model reflects the overall justice perception resulting from the employer's actions. The other three models are different combinations of the four types of justice perceptions (see description below the Table 3). Results are reported in Table 3.

TABLE 3
Fit Indices for Perceived Employer Fairness Structure

Measurement model N = 296	χ^2	df	NC χ^2/df	NFI	NNFI	CFI	ECVI	AIC	RMSEA	RMSEA Confidence interval
One-factor structure	695.65	54	12.88	.87	.85	.88	2.52	743.65	.20	(.19; .21)
Two-factor structure	685.39**	53	12.93	.87	.85	.88	2.49	735.39	.20	(.19; .21)
Three-factor structure	237.35**	51	4.65	.96	.96	.97	.99	291.35	.11	(.084; .13)
Four-factor structure	193.18**	48	4.02	.97	.97	.98	.86	253.18	.10	(.087; .12)

Notes: The one-factor structure combined the four types of perceived justice related to the employer's actions (procedural, distributive, relational, and informational).

The two-factor structure: factor 1 = distributive justice, factor 2 = procedural, relational and informational justice.

The three-factor structure: factor 1 = distributive justice, factor 2 = procedural justice, factor 3 = relational and informational justice.

The four-factor structure: factor 1 = distributive justice, factor 2 = procedural justice, factor 3 = relational justice, factor 4 = informational justice.

All χ^2 difference statistics are significant at ** $p < 0.01$.

The significant $\chi^2_{\text{difference}}$ statistic ($p < .01$) obtained indicated that separating dimensions improves the model's fit, the four-factor structure showing the better fit to the data. This result is supported by the lowest ECVI and AIC estimated for this model. The value of 4.02 for NC index (≤ 5.0) indicates a reasonable fit, whereas NFI, NNFI, CFI ($> .95$) indicate a good fit. Finally, the RMSEA exceeds .08 (RMSEA = .10). Taken jointly, the results provide evidence of the discriminant validity of the four-factor structure. Therefore, Hypothesis 2 is supported. The four types of justice perceptions stemming from the employer's actions are empirically distinct.

Hypothesis 3 stipulated that the four types of justice perceptions related to the union (procedural, distributive, relational and informational) are empirically distinct dimensions. To test this hypothesis, we followed the same approach that we used to test Hypothesis 2, considering one, two, three and four-factor structures (see description below the Table 4).

TABLE 4
Fit Indices for Perceived Union Fairness Structure

Measurement model N = 145	χ^2	df	NC χ^2/df	NFI	NNFI	CFI	ECVI	AIC	RMSEA	RMSEA Confidence interval
One-factor structure	593.23	77	7.70	.92	.92	.93	4.51	649.23	.22	(.20; .23)
Two-factor structure	465.20**	76	6.12	.94	.94	.95	3.63	523.20	.19	(.17; .21)
Three-factor structure	297.04**	74	4.01	.95	.95	.96	2.67	384.19	.15	(.14; .17)
Four-factor structure	191.56**	71	2.70	.97	.97	.98	1.80	259.56	.11	(.09; .13)

Notes: The one-factor structure combined the four types of perceived justice related to the union's actions (procedural, distributive, relational, and informational).

The two-factor structure: factor 1 = distributive justice, factor 2 = procedural, relational and informational justice.

The three-factor structure: factor 1 = distributive justice, factor 2 = procedural justice, factor 3 = relational and informational justice.

The four-factor structure: factor 1 = distributive justice, factor 2 = procedural justice, factor 3 = relational justice, factor 4 = informational justice.

All χ^2 difference statistics are significant at ** $p < 0.01$.

As reported in Table 4, the χ^2 difference statistics are significant ($p < .01$) and indicate that the four-factor structure better explains the data than the other reduced structures. This result is supported by the ECVI and AIC lowest values estimated for this fourth structure. The value of 2.70 for NC index (< 3.0) indicates a good fit. Altogether, the other fit indexes show a good fit (NFI, NNFI and CFI $> .95$; RMSEA = 0.11). Overall, the results show support to the discriminant validity of the four-factor structure. Thus, Hypothesis 3 is supported. The four types of justice perceptions related to the union's action are separate realities.

In order to test the convergent validity of our conceptualization (Hypothesis 4), we test the significance of the standardized factor loading coefficients estimated through the CFA. As anticipated by *Hypothesis 4*, all the items load significantly on their underlying hypothesized dimension (results available upon request). In addition, all the standardized factor loading coefficients are above .70. Factor loading up to .70 are considered high and adequate (Kline, 2005). These results provided strong evidence of convergent validity for the dimensions related to the employer's actions and union's action as well. In short, Hypothesis 4 is supported.

Hierarchical Regression Analysis: Testing the Predictive Validity of Employer and Union Fairness

To test the predictive validity of our conceptualization (Hypothesis 5 and 6), we conducted linear hierarchical regression analyses based on ordinary least squares (OSL). A high correlation between variables expected to be correlated indicates predictive validity (Hinkin, 1998; Nunnally and Bernstein, 1994). We regressed

the two dependent variables (trust in employer and satisfaction with the union) on a set of independent variables reflecting our conceptualization of perceived fairness in the context of collective bargaining. For trust in the employer, we entered control variables (sex, age, faculty or school membership, and tenure in the organization) in a first step. In a second step, we added the independent variables (procedural, distributive, relational and informational justice). We did the same for satisfaction with the union.

Hypothesis 5 stated that the perceptions of employer justice exert a positive influence on trust in the employer. As reported in Table 5, the regression coefficients estimated are positive and significant only for informational justice

TABLE 5
Hierarchical Regression Analyses

	Dependent variables							
	Trust in employer				Union satisfaction			
	b	SE b	β	ΔR ²	b	SE b	β	ΔR ²
Step 1 Regression 1 and 2								
Control variables								
Intercept	**1.63				**4.43			
Sex (female)	-.35	.21	-.17		.23	.21	.11	
Age	.090	.16	.08		-.25	.16	-.22	
Faculty or school	.04	.04	.09		.05	.05	.12	
Tenure in the university	.01	.02	.131		-.01	.02	-.04	
R ²	.07				*.11			
Step 2 Regression 1								
Procedural Justice – ORG	.10	.22	.06		-.13	.27	.09	
Distributive Justice – ORG	-.14	.12	-.10		-.11	.15	.10	
Relational Justice – ORG	.33	.19	.27		-.09	.24	-.23	
Informational Justice – ORG	**4.7	.18	.38		-.19	.23	-.13	
Full model R ²	**4.4				**2.0			
Step 2				**3.7				*.09
Step 2 Regression 2								
Procedural Justice – UNION	-.27	.18	-.29		**2.9	.11	.30	
Distributive Justice – UNION	.04	.18	.04		**2.8	.11	.27	
Relational Justice – UNION	-.17	.21	-.17		-.07	.14	-.07	
Informational Justice – UNION	.25	.19	.25		**3.9	.12	.37	
Full model R ²	.13				**6.9			
Step 2				.06				**5.8

Notes: b = Unstandardized regression coefficients, SE b = Standard error, β = Standardized regression coefficients, R² = explained variance, ΔR² = Differential R² relative to the full model (Δ step 1 and 2) when the variables of step 2 are removed from the regression.
*p< .05, **p< 0.01

($b = .47, p < .01$). Moreover, none of the justice perceptions stemming from the union source are significant. Thus, Hypothesis 5 is partially supported. Turning to the attitude towards the union, the results partially support *Hypothesis 6*. Three of the four perceptions of union justice show positive and significant regression coefficients: procedural ($b = .29, p < .01$), distributive ($b = .28, p < .01$), and informational justice ($b = .39, p < .01$). The regression coefficients for the perceptions of employer-related justice are not significant.

Discussion and Conclusion

The aim of this study was to conceptualize the “perceived fairness in the context of collective bargaining” and empirically validate the internal structure of this new conceptualization. Drawing on the organizational justice literature, we derive a conceptualization and formulate six hypotheses regarding the convergent, discriminant and predictive validity of the concept’s dimensionality.

The findings provide evidence of the construct validity of the multidimensional concept we developed. Indeed, the results provide support for the discriminant, convergent, and predictive validity. This concept is best conceptualized as an eight distinct dimensions concept, combining the two sources of (in)justice (employer and union) and the four types of justice perceptions: procedural, distributive, relational and informational justice.

On the one hand, we found that, in the context of collective bargaining, the employees clearly distinguish the source of (in)justice, that is, the authorities who meet or violate the principles of justice to which employees subscribe. Therefore, they form distinct perceptions of justice regarding the employer and the union. These results are consistent with the *multifoci approach of organizational justice* and extend its application to a different management context: collective bargaining.

On the other hand, the employees differentiate the different types of justice. They evaluate different aspects of the collective bargaining context and they perceived them as separate realities. Indeed, they form distinct justice perceptions regarding: 1) the process’ results (distributive justice); 2) the procedures and actions taken to determine the union’s claims and the employer’s offer as well as to get concessions from the opposite party (procedural justice); 3) the way they are interpersonally treated in their communication with the employer and the union (relational or interpersonal justice); and 4) the information they receive about the negotiations (informational justice).

Moreover, in line with the *multifoci approach*, we also found that employees’ justice perceptions play a different role in shaping their attitudes according to the source of (in)justice. Indeed, the distinct justice perceptions predict different

outcomes. The more employees consider their employer to be fair during collective bargaining, the more they trust him. In contrast, the perceived union fairness exerts a positive influence on satisfaction with the union. Interestingly, although the perceptions of justice related to the employer and the union are moderately and negatively correlated, to the extent that employees believe themselves unfairly treated by their employer, they do not respond by showing a more positive attitude towards the union, and vice versa. Therefore, it seems that perceived fairness in the context of collective bargaining is not a zero-sum game. The positive effects of the justice perceptions on attitudes towards the union are not made at the expense of organizational outcomes. Accordingly, through their actions, both parties are able to promote positive attitudes towards themselves.

We also found that the different types of justice perceptions have a differential effect on employee attitudes. For example, procedural, distributive and informational justice have stronger effects on satisfaction with the union than relational justice. Turning to the attitude toward the employer, we found that informational justice has better predictive power for trust in the employer than the other types of justice perceptions. However, it is possible that these results reflect a problem of multicollinearity. Indeed, the correlation coefficients for procedural, relational and informational justice are highly intercorrelated, slightly below .85 (Kline, 2005).

Collective bargaining is an allocation process where employees are encouraged to actively participate in activities aimed to put pressure on the employer. Therefore, their participation is revealed as crucial for determining outcomes. Moreover, their participation involves a cost they have to pay. On the one hand, employees assess procedural justice based on the justice rules from the *Structural model* (Leventhal, 1980) and based on the control they have (see Process Control Model, Thibaut and Walker, 1975). On the other hand, they evaluate the extent to which actions are useful and profitable (cost-benefit ratio). These last two elements of justice are new in the field of procedural justice and bring a contribution to the conceptualization of procedural justice in contexts where employees are actively involved in decision-making processes. For example, employees may perceive unfairness when all employees participate in a decision-making process, because of the costs engendered by such a process and their impact on financial resources available to ultimately improve employees' working conditions.

The concept of "perceived fairness in the context of collective bargaining" that we developed allows for a better understanding of the psychological mechanism underlying employees' reactions during the collective bargaining process. Opening the black box of collective bargaining through the concept of fairness is also the first step in understanding the attitudinal and behavioural consequences of collective bargaining after employees have returned to work. Moreover, the concept of fairness might be a central concept for understanding the effects of

strategies and tactics performed by both parties on the employees. Finally, the results of our research offer a new conceptualization that might contribute to stimulate research on the predictors of attitudes and behaviours toward unions, such as satisfaction with the union, commitment to the union and intention to leave the union. Overall, our study introduces a concept that opens up many new directions for research.

However, our study has some limitations. On the one hand, regarding the dimensionality of perceived employer-related justice and perceived union-related justice, RMSEA exceeds .08, possibly because of the relatively small size of our sample (Kline, 2005). However, this does not appear to be a serious limitation, since the other fit indexes indicate a good fit to the data. On the other hand, the generalizability of our conceptualization is limited. First, the study was conducted in only one setting among university faculty. This population of employees may be quite different from employees in general, in particular with respect to average education levels. Thus, further studies among a variety of jobs and in different work environments are needed. There is also a need for studies conducted with non-French language samples. Second, the extent to which the perceptions of employer-related justice and union-related justice are distinct and negatively correlated may reflect the specific nature of the negotiation which took place. Indeed, the extended and unsuccessful negotiation that resulted in a strike may be the consequence of labour-management relationships based on conflict rather than cooperation. Studies should be undertaken in more integrative cooperative bargaining contexts.

Moreover, further studies are necessary to pursue the validation process of the “perceived fairness in the context of collective bargaining”. First, it would be suitable to test the discriminant validity of this new conceptualization using the concept of perceived organizational justice. Second, the predictive validity needs to be further tested with other attitudes towards the employer and the union, such as employer satisfaction, or union trust. In addition, it would be interesting to examine simultaneously the distinct effects of justice perceptions on organizational and union commitment, or on dual commitment.

Our study also calls for validation work on new justice perception measures. Indeed, to collect data about procedural justice, we developed direct measures. The measures are called “direct” because they refer to terms directly related to the notion of fairness, such as fair, appropriate or necessary. Although this is the most popular approach as Colquitt and co-authors (2001) showed, the indirect measure has a better predictive power than the direct measures (Colquitt *et al.*, 2001). Therefore, we need to develop and validate indirect measures based on the several elements or criteria employees use to assess the procedural justice stemming both from employers’ and unions’ actions, such as accuracy, bias suppression, control, usefulness, profitability (costs-benefits ratio) and the lack of alternatives.

Notes

- 1 The *Canada Labour Code* (R.S.C. 1985, c. L-2) in Canada, the *Code du travail* (R.S.Q., c. C-27) in Quebec and the *National Labor Relations Act* (NLRA) in the United States.
- 2 Leventhal's ethicality rule is not related to results, and thus should be considered as "purely noninstrumental" (Folger, 1996), being more closely related to *interpersonal* justice, e.g. the quality of treatment.
- 3 Bies and Moag (1986) used the term "interactional justice" to refer to the fairness of interpersonal communication during the enactment of the procedures, combining features of interpersonal and informational justice.

References

- Adams, S.J. 1965. "Inequity in Social Exchange." *Advances in Experimental Social Psychology*. L. Berkowitz, ed. New York, NY: Academic Press, Vol. 2, 267-299.
- Akaike, H. 1987. "Factor Analysis and AIC." *Psychometrika*, 52, 317-332.
- Anastasi, A. 1994. *Introduction à la psychométrie*. Montréal: Guérin Universitaire.
- Anderson, J.C. and D.W. Gerbing. 1988. "Structural Equation Modeling in Practice: A Review and Recommended Two-step Approach." *Psychological Bulletin*, 103 (3), 411-423.
- Aryee, S. and Y.W. Chay. 2001. "Workplace Justice, Citizenship Behaviour, and Turnover Intention in a Union Context: Examining the Mediating Role of Perceived Union Support and Union Instrumentality." *Journal of Applied Psychology*, 86 (1), 154-160.
- Bacharach, S.B. and E.J. Lawler. 1981. "Power and Tactics in Bargaining." *Industrial and Labor Relations Review*, 34 (2), 219-233.
- Bentler, P.M. and D.G. Bonett. 1980. "Significance Tests and Goodness of Fit in the Analysis of Covariance Structures." *Psychological Bulletin*, 88, 588-606.
- Bies, R.J. 1987. "The Predicament of Injustice: The Management of Moral Outrage." *Research in Organizational Behaviour*. L.L. Cummings and B.M. Staw, eds. Greenwich, Conn.: JAI Press, Vol. 9, 289-319.
- Bies, R.J. and J.S. Moag. 1986. "Interactional Justice: Communication Criteria of Fairness." *Research on Negotiation in Organizations*, 1, 43-55.
- Bies, R.J., D.L. Shapiro and L.L. Cummings. 1988. "Causal Accounts and Managing Organizational Conflict: Is It Enough to Say It's Not My Fault?" *Communication Research*, 15, 381-399.
- Blader, S.L. and T.R. Tyler. 2003. "A Four-component Model of Procedural Justice: Defining the Meaning of a Fair Process." *Personality and Social Psychology Bulletin*, 29 (6), 747-758.
- Bollen, K.A. 1989. *Structural Equations with Latent Variables*. New York: Wiley.
- Brockner, J., B.M. Wiesenfeld and C.L. Martin. 1995. "Decision Frame, Procedural Justice, and Survivors' Reactions to Job Layoffs." *Organizational Behavior and Human Decision Processes*, 63 (1), 59-68.
- Brockner, J., P.A. Siegel, J.P. Daly, T. Tyler and C. Martin. 1997. "When Trust Matters: The Moderating Effect of Outcome Favourability." *Administrative Science Quarterly*, 42, 558-583.
- Browne, M.W. and R. Cudeck. 1993. "Alternative Ways of Assessing Model Fit." *Testing Structural Equation Models*. K.A. Bollen and J.S. Long, eds. Newbury Park, Calif.: Sage Publications, 136-162.

- Campbell, D.T. and D.W. Fiske. 1959. "Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix." *Psychological Bulletin*, 56 (2), 81-105.
- Chamberlain, N.W. 1951. *Collective Bargaining*. New York: McGraw-Hill.
- Chaulk, K. and T.B. Brow. 2008. "An Assessment of Worker Reaction to their Union and Employer Post-Strike: A Canadian Experience." *Relations Industrielles/Industrial Relations*, 63 (2), 223-245.
- Clark, M.C. and R.L. Payne. 1997. "The Nature and Structure of Worker's Trust in Management." *Journal of Organizational Behavior*, 18, 205-227.
- Clawson, D. and M.A. Clawson. 1999. "What Has Appened to the US Labour Movement? Union Decline and Revewal." *Annual Review of Sociology*, 25, 95-119.
- Cohen, J., P. Cohen, S.G. West and L.S. Aiken. 2003. *Applied Multiple Regression/Correlation Analysis for the Behavioural Sciences*. 3rd edition. Mahawah, NJ: Lawrence Erlbaum Associates Publishers.
- Cohen-Charash, Y. and P.E. Spector. 2001. "The Role of Justice in Organization: A Meta-Analysis." *Organizational Behavior and Human Decision Processes*, 86 (2), 278-321.
- Colquitt, J.A. 2001. "On the Dimensionality of Organizational Justice: A Construct Validation of a Measure." *Journal of Applied Psychology*, 86 (3), 386-400.
- Colquitt, J.A., D.E. Conlon, M. Wesson, C.O.L.H. Porter and K.Y. Ng. 2001. "Justice at the Millennium: A Meta-Analytic Review of 25 Years of Organizational Justice Research." *Journal of Applied Psychology*, 86 (3), 425-445.
- Colquitt, J.A., J. Greenberg and C.P. Zapata-Phelan. 2005. "What is Organizational Justice? A Historical Overview." *Handbook of Organizational Justice*. J. Greenberg and J.A. Colquitt, eds. New York, NY: Lawrence Erlbaum Associates, 3-56.
- Cropanzano, R. and J. Greenberg. 1997. "Progress in Organizational Justice: Tunneling through the Maze." *International Review of Industrial and Organizational Psychology*, 12, 317-372.
- Cropanzano, R., C. Prehar and P. Chen. 2002. "Using Social Exchange Theory to Distinguish Procedural from Interactional Justice." *Group and Organization Management*, 27, 324-351.
- Cutcher-Gershenfeld, J. and T. Kochan. 2004. "Taking Stock: Collective Bargaining at the Turn of the Century." *Industrial and Labor Relations Review*, 58 (1), 3-26.
- Dietz, G. and D.N. Den Hartog. 2006. "Measuring Trust Inside Organizations." *Personnel Review*, 35 (5), 557-588.
- Dirks, K.T. and D.L. Ferrin. 2001. "The Role of Trust in Organizational Settings." *Organization Science*, 12 (4), 450-467.
- Dirks, K.T. and D.L. Ferrin. 2002. "Trust in Leadership: Meta-analytic Findings and Implications for Research and Practice." *Journal of Applied Psychology*, 87 (4), 611-628.
- Fiorito, J., D.G. Gallagher and C.V. Fukami. 1988. "Satisfaction with Union Representation." *Industrial and Labor Relations Review*, 41 (2), 294-307.
- Folger, R. 1996. "Distributive and Procedural Justice: Multifaceted Meaning and Interrelations." *Social Justice Research*, 9 (4), 395-416.
- Folger, R. and M.A. Konovsky. 1989. "Effects of Procedural and Distributive Justice on Reactions to Pay Raise Decisions." *Academy of Management Journal*, 32 (1), 115-130.

- Frenkel, S.J. and S. Kuruville. 1999. "Union-Member Relations and Satisfaction with Unions in South Korea." *Industrial Relations*, 37 (4), 559-575.
- Fryxell, G. 1992. "Perceptions of Justice Afforded by Formal Grievance Systems as Predictors of a Belief in a Just Workplace." *Journal of Business Ethics*, 11, 635-647.
- Fryxell, G.E. and M.E. Gordon. 1989. "Workplace Justice and Job Satisfaction as Predictors of Satisfaction with Union and Management." *Academy of Management Journal*, 32 (4), 851-866.
- Gilliland, S.W. 1993. "The Perceived Fairness of Selection Systems: An Organizational Justice Perspective." *Academy of Management Review*, 18 (4), 694-734.
- Gilliland, S.W. 1994. "Effects of Procedural and Distributive Justice on Reactions to a Selection System." *Journal of Applied Psychology*, 79 (5), 691-701.
- Godard, J. 1992. "Strikes as Collective Voice: A Behavioural Analysis of Strike Activity." *Industrial and Labor Relations Review*, 46 (1), 161-175.
- Gopinath, C. and T.E. Becker. 2000. "Communication, Procedural Justice, and Employee Attitudes: Relationships under Conditions of Divestiture." *Journal of Management*, 26 (1), 63-83.
- Gordon, M.E. and G.E. Fryxell. 1993. "The Role of Interpersonal Justice in Organizational Grievance Systems." *Justice in the Workplace: Approaching Fairness in Human Resource Management*. R. Cropanzano, ed. Hillsdale, NJ: Lawrence Erlbaum Associates, 231-255.
- Greenberg, J. 1990. "Organizational Justice: Yesterday, Today and Tomorrow." *Journal of Management*, 16 (2), 399-432.
- Greenberg, J. 1993a. "The Social Side of Fairness: Interpersonal and Informational Classes of Organizational Justice." *Justice in the Workplace: Approaching Fairness in Human Resource Management*. R. Cropanzano, ed. Hillsdale, NJ: Lawrence Erlbaum Associates, 79-103.
- Greenberg, J. 1993b. "Stealing in the Name of Justice: Informational and Interpersonal Moderators of Theft Reactions to Underpayment Inequity." *Organizational Behavior and Human Decision Processes*, 54, 81-103.
- Greenberg, J. 1994. "Using Socially Fair Treatment to Promote Acceptance of a Work Site Smoking Ban." *Journal of Applied Psychology*, 79 (2), 288-297.
- Hinkin, T.R. 1998. "A Brief Tutorial on the Development of Measure for Use in Survey Questionnaires." *Organizational Research Methods*, 1 (1), 104-121.
- Jarley, P., S. Kuruville and D. Casteel. 1990. "Member-union Relations and Union Satisfaction." *Industrial Relations*, 29 (1), 128-134.
- Jöreskog, K.G. and D. Sörbom. 1996. *LISREL 8: User's Reference Guide*. Chicago: Scientific Software International.
- Katz, H.C., T.A. Kochan and A.J.S. Colvin. 2008. *An Introduction to Collective Bargaining and Industrial Relations*. 4th edition. Boston: McGraw-Hill.
- Klandermans, B. 1986. "Psychology and Trade Union Participation: Joining, Acting, Quitting." *Journal of Occupational Psychology*, 59, 189-204.
- Kline, R.B. 2005. *Principles and Practice of Structural Equation Modeling*. 2nd ed. New York: The Guilford Press.
- Konovsky, M.A. 2000. "Understanding Procedural Justice and its Impact on Business Organizations." *Journal of Management*, 26 (3), 489-511.

- Konovsky, M.A. and J. Brokner. 1993. "Managing Victim and Survivor Layoff Reactions: A Procedural Justice Perspective." *Justice in the Workplace: Approaching Fairness in Human Resource Management*. R. Cropanzano, ed. Hillsdale, NJ: Lawrence Erlbaum Associates, 133-153.
- Leventhal, G.S. 1980. "What Should Be Done with Equity Theory? New Approaches to the Study of Fairness in Social Relationships." *Social Exchange: Advances in Theory and Research*. J. Kenneth, M.S. Gergen, J. Greenberg and H.R. Willis, eds. New York, NY: Plenum Press, 27-55.
- Levinson, H.M. 1966. *Determining Forces in Collective Wage Bargaining*. New York: Wiley.
- Lind, A.E. and T.R. Tyler. 1988. *The Social Psychology of Procedural Justice*. New York, NY: Plenum Press.
- Martin, J.E. and R.R. Sinclair. 2001. "A Multiple Motive Perspective on Strike Propensities." *Journal of Organizational Behavior*, 22 (4), 387-407.
- Masteron, S., K. Lewis, B. Goldman and M. Taylor. 2000. "Integrating Justice and Social Exchange: The Differing Effects of Fair Procedures and Treatment on Work Relationships." *Academy of Management Journal*, 43, 738-748.
- Mayer, R.C. and J.H. Davis. 1999. "The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi-Experiment." *Journal of Applied Psychology*, 84 (1), 123-136.
- Mayer, R.C., J.H. Davis and F.D. Schoorman. 1995. "An Integrative Model of Organizational Trust." *Academy of Management Review*, 20 (3), 709-734.
- McClendon, J.A. and B. Klass. 1993. "Determinants of Strike-Related Militancy: An Analysis of a University Faculty Strike." *Industrial and Labor Relations Review*, 46 (3), 560.
- McFarlin, D.B. and P.D. Sweeney. 1992. "Distributive and Procedural Justice as Predictors of Satisfaction with Personal and Organizational Outcomes." *Academy of Management Journal*, 35 (3), 626-637.
- Morrow, P.C. and J.C. McElroy. 2006. "Union Loyalty Antecedents: A Justice Perspective." *Journal of Labor Research*, 27 (1), 75-87.
- Nunnally, J. and I. Bernstein. 1994. *Psychometric Theory*. 3rd edition. New York, NY: McGraw-Hill.
- Nurse, L. and D. Devonish. 2007. "Grievance Management and its Links to Workplace Justice." *Employee Relations*, 29 (1), 89-109.
- Rupp, D.E. and R. Cropanzano. 2002. "The Mediating Effects of Social Exchange Relationships in Predicting Workplace Outcomes from Multifoci Organizational Justice." *Organizational Behavior and Human Decision Processes*, 89, 925-946.
- Schwab, D.P. 1980. "Construct Validity in Organizational Behaviour." *Research in Organizational Behavior*, 1, 3-43.
- Shaw, J.C., E. Wild and J.A. Colquitt. 2003. "To Justify of Excuse? A Meta-Analytic Review of the Effects of Explanations." *Journal of Applied Psychology*, 88 (3), 444-458.
- Sheppard, B.H., R.J. Lewicki and J.W. Minton. 1992. *Organizational Justice: The Search for Fairness in the Workplace*. New York, NY: Lexington Books.
- Sweeney, P.D. and D.B. McFarlin. 1993. "Workers' Evaluations of the Ends and the Means: An Examination of Four Models of Distributive and Procedural Justice." *Organizational Behavior and Human Decision Processes*, 55 (1), 23-40.

- Thibaut, J. and L. Walker. 1975. *Procedural Justice: A Psychological Analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates Publishers.
- Tyler, T.R. 2003. "Trust within Organizations." *Personnel Review*, 32 (5), 556-568.
- Tyler, T.R. and R.J. Bies. 1990. "Beyond Formal Procedures: The Interpersonal Context of Procedural Justice." *Applied Social Psychology and Organizational Settings*. J.S. Carroll, ed. Hillsdale, NJ: Lawrence Erlbaum Associates, 77-98.
- Vroom, V.H. 1964. *Work and Motivation*. New York: Wiley.
- Waddington, J. 2006. "Why do Members Leave? The Importance of Retention to Trade Union Growth." *Labor Studies Journal*, 31 (3), 15-38.

SUMMARY

Collective Bargaining and Perceived Fairness: Validating the Conceptual Structure

The aim of this study is to conceptualize the "perceived fairness in the context of collective bargaining" and empirically validate its internal structure. This concept refers to employees' justice perceptions formed during the collective bargaining process (the process of determining the employees' working conditions when they are unionized). Drawing on the organizational justice literature, we derive a conceptualization and formulate hypotheses regarding the convergent, discriminant and predictive validity of the concept's dimensionality. The study was conducted among faculty at a Canadian university, where the collective bargaining process took nearly two years to complete. Using confirmatory factor analyses and hierarchical regressions, we find support for discriminant, convergent, and predictive validity. The results show that the new conceptualization includes eight distinct dimensions, combining the two sources of (in)justice (employer and union) and the four types of justice perceptions: procedural, distributive, relational (interpersonal) and informational justice. Indeed, employees clearly distinguish eight justice dimensions, which have a differential effect on their attitudes: trust in the employer and satisfaction with the union.

Moreover, collective bargaining is an allocation process which encourages employees to participate actively. Because such participation might entails costs (energy, time, loss of money), employees are likely to form their justice perceptions based on not only elements from the *structural model* (Leventhal, 1980) and the *process control model* (Thibaut and Walker, 1975), but also two new justice elements: the usefulness of actions (the probability that actions force the employer to improve their offer to the expected level) and the profitability of actions (cost-benefits ratio).

Opening the black box of collective bargaining through the concept of fairness is the first step in order to understanding the attitudinal and behavioural consequences of collective bargaining after employees have returned to work.

KEYWORDS: organizational justice, labour union, collective bargaining, validation, dimensionality, concept

RÉSUMÉ

Négociation collective et perceptions de justice: validation de la structure conceptuelle

L'objectif de cette étude consiste à conceptualiser la « justice perçue dans le contexte de la négociation collective ». Ce concept concerne les perceptions de la justice que forment les salariés durant la négociation collective (le processus de détermination des conditions de travail dans les milieux syndiqués). S'appuyant sur la littérature portant sur la justice organisationnelle, nous avons procédé à un travail de conceptualisation et formulé des hypothèses visant à tester sa validité. Cette étude a été menée auprès de professeurs d'une université canadienne, dont la négociation collective a duré près de deux ans. À l'aide d'analyses factorielles confirmatoires et de régressions hiérarchiques, nous avons obtenu des résultats qui soutiennent la validité convergente, discriminante et prédictive de notre conceptualisation. Dans l'ensemble, les résultats montrent que ce concept renferme huit dimensions distinctes, combinant les deux sources d'(in)justice (employeur et syndicat) et les quatre types de perceptions de justice: procédurale, distributive, relationnelle (interpersonnelle) et informationnelle. En effet, les employés distinguent clairement les huit dimensions de justice, lesquelles affectent différemment leurs attitudes: la confiance envers leur employeur et la satisfaction à l'égard de leur syndicat.

De plus, la négociation collective est un processus auquel les employés sont appelés à participer activement, ce qui peut entraîner des coûts (énergie, temps, perte d'argent). Les salariés sont donc susceptibles de construire leurs perceptions de justice en s'appuyant non seulement sur les éléments provenant du *modèle structurel* (Leventhal, 1980) ou du *modèle du contrôle* (Thibaut et Walker, 1975), mais également en utilisant deux nouvelles règles de justice: l'utilité des actions (la probabilité que les actions incitent l'employeur à améliorer son offre au niveau espéré) et la profitabilité des actions (ratio coûts/bénéfices).

Ouvrir la boîte noire de la négociation collective à travers le concept de justice est le premier pas à franchir afin de comprendre les conséquences de la négociation collective sur les attitudes et les comportements des employés lorsqu'ils sont de retour au travail.

MOTS-CLÉS: justice organisationnelle, syndicat, négociation collective, validation, dimensionnalité, concept

RESUMEN

Negociación colectiva y percepciones de justicia: validación de la estructura conceptual

El objetivo de este estudio consiste en conceptualizar la “justicia percibida en el contexto de la negociación colectiva”. Este concepto concierne las percepciones de la justicia que se hacen los asalariados durante la negociación colectiva (el proceso de determinación de las condiciones de trabajo en los medios sindicalizados). Apoyándose en la literatura que trata de la justicia organizacional, hemos procedido a un trabajo de conceptualización y hemos formulado hipótesis orientadas a evaluar su validez. Este estudio se llevó a cabo con profesores de una universidad canadiense cuya negociación colectiva duró más dos de años. Con la ayuda de análisis factoriales confirmatorios y de regresiones logísticas, hemos obtenido resultados que sostienen la validez convergente, discriminante y predictiva de nuestra conceptualización. En general, los resultados muestran que este concepto comporta ocho dimensiones distintas, combinando las dos fuentes de (in)justicia (empleador y sindicato) y los cuatro tipos de percepciones de justicia: procesal, distributiva, relacional (interpersonal) e informacional. En efecto, los empleados distinguen claramente las ocho dimensiones de justicia, las cuales afectan de manera diferente sus actitudes respecto a la confianza en sus empleadores y la satisfacción respecto a su sindicato.

Además, la negociación colectiva es un proceso en el cual los empleados son llamados a participar activamente, lo que puede acarrear costos (energía, tiempo, pérdida de dinero). Los asalariados son así susceptibles de construir sus percepciones de justicia apoyándose no sólo en los elementos que provienen del *modelo estructural* (Leventhal, 1980) o del *modelo del control* (Teobaldo y Walker, 1975), pero también utilizando dos nuevas reglas de justicia: la utilidad de las acciones (la probabilidad que las acciones inciten al empleador a mejorar su oferta al nivel esperado) y el margen de provecho de las acciones (proporción costos / beneficios).

Abrir la caja negra de la negociación colectiva mediante el concepto de justicia es el primer paso a franquear para comprender las consecuencias de la negociación colectiva sobre las actitudes y los comportamientos de los empleados cuando están de regreso al trabajo.

PALABRAS CLAVES: justicia organizacional, sindicato, negociación colectiva, validación, dimensionalidad, concepto