



Legitimacy of team rewards: Analyzing legitimacy as a condition for the effectiveness of team incentive designs

Federico Aime^{a,*}, Christopher J. Meyer^b, Stephen E. Humphrey^c

^a The William S. Spears School of Business, Oklahoma State University, Stillwater, OK 74078, United States

^b Hankammer School of Business, Baylor University, United States

^c Smeal College of Business, Pennsylvania State University, United States

ARTICLE INFO

Article history:

Received 27 April 2007

Accepted 5 February 2009

Keywords:

Legitimacy

Team rewards

Cooperation

Motivation

Team effectiveness

Management theory

ABSTRACT

This article illustrates how the legitimacy of pay and evaluation processes in teams affect the effectiveness of team-based incentive designs in organizational work teams. We present a theoretical model of the development of legitimacy in team-based incentive designs and propose that the development of legitimacy for both pay dispersion in teams (i.e., difference in allocations of incentives among team members) and for the use of interdependent evaluations of performance promote team effectiveness. Our model introduces a new perspective to theorize about the conditions under which team rewards are an effective incentive design.

Published by Elsevier Inc.

Many of the important decisions organizations make to successfully utilize work team structures concern reward systems as one of the core aligning mechanisms. Team reward refers to the adoption of incentive programs in which parts of incomes are tied to the achievement of team goals or some other measure of team performance and is conceptualized in much of the compensation literature as enhancing employee contributions to performance (Landau and Leventhal, 1976; Zenger and Marshall, 2000). Goal-setting theory supports the idea that one of the main mechanisms by which incentives influence performance is by generating commitment to incentive goals (Locke and Latham, 1990; Renn, 1998). In the particular case of team rewards, these goals are at the least twofold: (a) motivate and reinforce individual performance, and (b) promote cooperative team-level behavior (Beersma et al., 2003; DeMatteo et al., 1998).

Academic research on team rewards has focused largely on issues of cooperative versus competitive rewards and on task interdependence as the main moderating constructs in the relationship (Wageman, 1995). Although task interdependence is derived from the demands and constraints inherent in the team's tasks (Humphrey et al., 2007b; Saavedra et al., 1993) and is descriptive of situations in which cooperation is a needed antecedent to team performance, it provides little guidance about motivational levels resulting from differentiations in the workforce. Thus, despite hundreds of studies

examining team rewards, the conditions under which team rewards will be effective are unclear (DeMatteo et al., 1998).

What then are the conditions under which team rewards are an effective pay design? As individuals' social integration increases, they become more a team and less a collection of individuals and can then act collectively to develop the legitimacy of the compensation plan. In fact, what is a team if it is not a consensus? The effectiveness and survival of compensation programs may result from the legitimation of the pay plan structure by the employees. The purpose of this article is to propose a conceptual model for analyzing team-based reward programs with an emphasis on outlining the development of legitimacy in the reward expectations of team members and the relationship between that legitimacy and the effectiveness of team rewards. We define legitimacy as a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman, 1995).

Traditional perspectives on team rewards, motivation, and performance provide different and sometimes contradicting predictions about how team processes may develop in a situation with interdependent tasks and rewards. Expectancy theory predicts some increased performance only if employees can see the link between effort, performance, and outcomes. This link is usually difficult to identify (DeMatteo et al., 1998). For example, individuals in a sales organization may have difficulty understanding scrap levels in production or design issues in engineering. Relative worth and pay status perspectives predict different effects for different team members based on their different sensibilities to incentive intensity – for

* Corresponding author. Tel.: +1 405 744 5108.

E-mail addresses: aime@okstate.edu (F. Aime), christopher_meyer@baylor.edu (C.J. Meyer), stephen.humphrey@psu.edu (S.E. Humphrey).

example, incentives that can motivate a manufacturing foreman but may demotivate a highly paid engineer (Bloom, 1999). Predictions for different individuals will be different based on the value of the incentive to each person. A monetary incentive may be very important for one team member but less important for another who places more value on autonomy than financial gain. Agency theory predicts that mutual monitoring and therefore cooperation will emerge from the interdependence between agents who anticipate a financial incentive based on team outcomes (Fama and Jensen, 1983), especially where they are treated in a procedurally and distributionally fair manner (Welbourne et al., 1995). Recent studies on interdependence predict that task interdependence will promote cooperation, and the type of reward system will add no additional explicative value to performance (Wageman, 1995). Reactance theory predicts that high self-esteem members will be compelled to protect their freedom in order to realize preferred outcomes (Brockner and Elkind, 1985), presenting a threat to cooperative behavior development.

We examine the conditions under which team reward is an effective incentive design by integrating knowledge from diverse settings and applying the concept of legitimacy to team reward effectiveness and pay dispersion (Ensley et al., 2007). First, we introduce legitimacy as a fundamental social process mediating the relationship between structure (i.e., work design and team member characteristics) and action (i.e., motivation to perform and/or cooperative behavior). Legitimation is a process that brings the unaccepted into agreement with accepted norms, values, beliefs, practices, and procedures (Berger et al., 1972). Thus, a mediating mechanism may help us explain why, in contradiction to expectancy theory (Vroom, 1964), employees under certain team reward situations accept investing effort or cooperative behavior even when they have very limited control over the outcome. Second, consistent with goal setting approaches that see incentives as promoting commitment to goals, we organize our theory around two team incentive plan components that are described in multiple accounts of the practice of applying team rewards: the evaluation of merit and the allocation of rewards (Weinberger, 1998). Third, we explore interdependence, the degree to which team members depend on each other to perform their tasks effectively given the design of their jobs (Saavedra et al., 1993). In their review of the team composition literature, DeMatteo et al. (1998) suggest that task interdependence is a critical moderator of the effectiveness of team rewards. We go beyond this simple perspective by focusing on exactly what task interdependence impacts. Fourth, we describe the effects of legitimacy of team rewards on team effectiveness.

The model of legitimacy of team rewards presented here can be useful for organizational theory in three ways. First, it offers theoretical insight into the need to distinguish collective from individual sources of legitimacy in the assessment of incentive programs (Berger et al., 1972; Weber, 1968). Legitimacy acts through a collective consensus that governs behavior and is binding on the members of a team (Ridgeway, 1989). This new approach to team rewards also highlights the dynamic nature of the team process and the implications that participating in work teams may have in the redefinition of individual work identities. Throughout this paper, work teams, teams, and similar expressions are used interchangeably and mean interdependent collections of individuals who have responsibility for common outcomes.

1. Legitimacy theory

Legitimacy has long been recognized as a fundamental social property affecting the behavior, structure, and stability of organizations and teams (Habermas, 1975; Weber 1968). Legitimacy operates through a process by which cultural accounts from a larger social framework within which a social entity is nested, for example a team reward system or an organizational structure, are construed to sup-

port and explain the existence of that social entity (Berger and Luckmann, 1966; Berger et al., 1973). Legitimacy has been studied as a property of teams, power or authority structures, reward redistributions, and cultural practices (Berger and Luckmann, 1966; Walker et al., 1986). Legitimacy is fundamentally the result of a multilevel process (i.e., legitimation) that involves inputs at the level of the broad encompassing social framework, at the level of the object of legitimacy (for example, the team for a team reward system), and at the more local level of actors who mediate the construction of reality that grants or undermines legitimacy (Ridgeway et al., 1998). We are concerned here with legitimacy as a property of team reward systems.

One aspect of organizational life that can impact the legitimacy of team rewards systems is the idea of organizational justice. Although distinct from legitimacy in several ways, this construct is also similar to particular aspects of legitimacy. In order to distinguish similarities and differences between the two constructs, we need to further elucidate the construct of organizational justice.

One dimension of organizational justice that may be related to legitimacy is distributive justice (Colquitt et al., 2001), theorizing of which can be traced back to Aristotle's description of an empirical distributive justice in which rewards were just if they were congruent with contributions. It was further developed in Adam's (1965) work on equity theory, which predicts that employees will evaluate distributive fairness by comparing the ratio of their own inputs and outcomes with some referent's ratio. When these comparisons are unequal, employees perceive their situations as unfair and are motivated to modify their inputs and outcomes, creating pressure for redistribution (Berger et al., 1972), changing their referent choices or perceptions, or quitting in order to maintain their self-concepts. Findings show that outcome distributions perceived to be unfair can lead to lower performance (Greenberg, 1986), reduced commitment (Chebat and Slysarczyk, 2005), or higher turnover and absenteeism (DeConinck and Stilwell, 2004). But nonexperimental investigation finds much less redistribution than do experiments (Bacharach and Baratz, 1970), and the effects of positive inequity do not appear to be as strong as those of negative inequity (Bloom, 1999; Greenberg, 1986). An unfair distribution of outcomes creates pressure to redistribute (Berger et al., 1972). This is usually conceptualized as an auxiliary phenomenon to a variety of processes such as power, authority, political stability (Ridgeway and Berger, 1986), rewards (Adams, 1963; Homans, 1961), and norm formation (Berger et al., 1972). This distinction is important as we consider legitimacy theory where the acceptance of an outcome as fair would fall under one of the dimensions of legitimacy defined by Zelditch (2006), which he explains as having a social dimension called "validity" and an individual dimension called "propriety." Distributive justice would affect the propriety dimension in that those who saw the outcomes as unfair would not endorse the practices of the team as legitimate on that dimension.

Similarly, the idea of procedural justice (Leventhal, 1980) should map well on the legitimacy construct, which is more in line with the conceptualization of validity (Zelditch, 2006) in that something is seen as procedurally fair if the generally social conventions are upheld. That is, the individual has the opportunity to voice an opinion, there is opportunity to provide feedback, and the individual can impact the process. If these conditions are met, the social convention is that the process is fair.

Weber (1968) re-directed the issue of legitimacy in modern social science by stressing forms of organization that provide guidance for action emerging from perceptions of a legitimate order (Ruef and Scott, 1998; Weber, 1968). Extensions of legitimacy in modern theory beyond power structures come from Parson's (1960) idea of the need to validate resource allocations through the consistency between the alignment of the criteria (i.e., use of resources) and societal values and/or functions. New institutionalism theories then advanced the notion of organizations as matching general cultural or normative

models with their processes and structures in order to achieve legitimacy (Berger and Luckmann, 1966).

Legitimacy as an explanation for differences in pay in a team setting is important as a means of maintaining effort and motivation. Legitimacy is the silent partner in a number of explanations for organizational action. For example, justice theory relies on the two facets of legitimacy to explain behavior of individuals in organizations: both the validity and the propriety of a system (Zelditch, 2006). Validity refers to the acceptance of a set of social norms or normative processes, but does not include approval of them. Propriety refers to whether an individual approves of the norms (Zelditch, 2006). Therefore, propriety contains some measure of fairness, as individuals are less likely to approve of systems and norms that exclude fairness. Beginning with Adams (1965), notions of fairness for outcomes were based on legitimate differences in individual's contributions. If this standard is not met, the individual undertakes some action to remedy the injustice. Procedural justice is concerned with the process by which an outcome is determined (Leventhal, 1980). Providing a process that is free from bias is a method for the organization to obtain legitimacy for the outcomes that are then imposed on individuals.

Therefore, legitimacy differs from justice in some very important ways. First, justice does not exist without the perception that the outcome and process are fair (Colquitt et al., 2001). Legitimacy on the other hand can exist without fairness. Legitimacy is a construct that exists at both the team level, with the idea of validity, and at the individual level, with the idea of propriety (Zelditch, 2006). So while justice is concerned with the propriety level of legitimacy, true legitimacy goes even deeper and adds the team perceptions to individual perceptions.

We defined legitimacy earlier as a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman, 1995). As such, it is important to

discuss here a core set of ideas about the nature and effects of the collective (team, organization, societal) form of legitimacy that we apply in this paper. Legitimacy is dependent on consensus because it emerges from the acceptance by the team of the validity of an incentive program (Berger et al., 1972). The issue of the acceptance of validity affects team members' cognitions at the individual level. For example, research has shown that when subjects are responsible for deciding on the distribution of team earnings, their evaluations of justice (i.e., equality or equity) are significantly enhanced when exposed to experimentally manipulated validity. In this sense we can say legitimacy has a normative effect (Walker et al., 1991). Even more important, legitimacy affects behaviors at the team level. Legitimation is also instrumental in the sense that it exists as a socially accepted guide to behavior even for those who disagree (Ridgeway, 1989). Members of a team who may not be individually convinced about the fairness of a reward method will tend to accept team legitimacy as guidance for behavior. Moreover, legitimacy will support monitoring behavior, thus increasing the social demand for performance.

2. Domain, boundary conditions, and assumptions

Legitimacy of pay differences is relevant to both new and ongoing teams. Although legitimacy is sometimes considered as developing over time, it also emerges in new team formations based on the salient status differences between team members. Even in homogeneous teams where people can only differentiate contributions to performance after a period of interaction, status and organizational information about new members precede team formation and provide the basis for initial attributions of members from the beginning of team interaction (Ridgeway, 1989).

Fig. 1 presents a model for analyzing the legitimacy of team reward components (i.e., evaluation or allocation) as predictors of effective use of individual versus team incentive plans. As discussed earlier, it

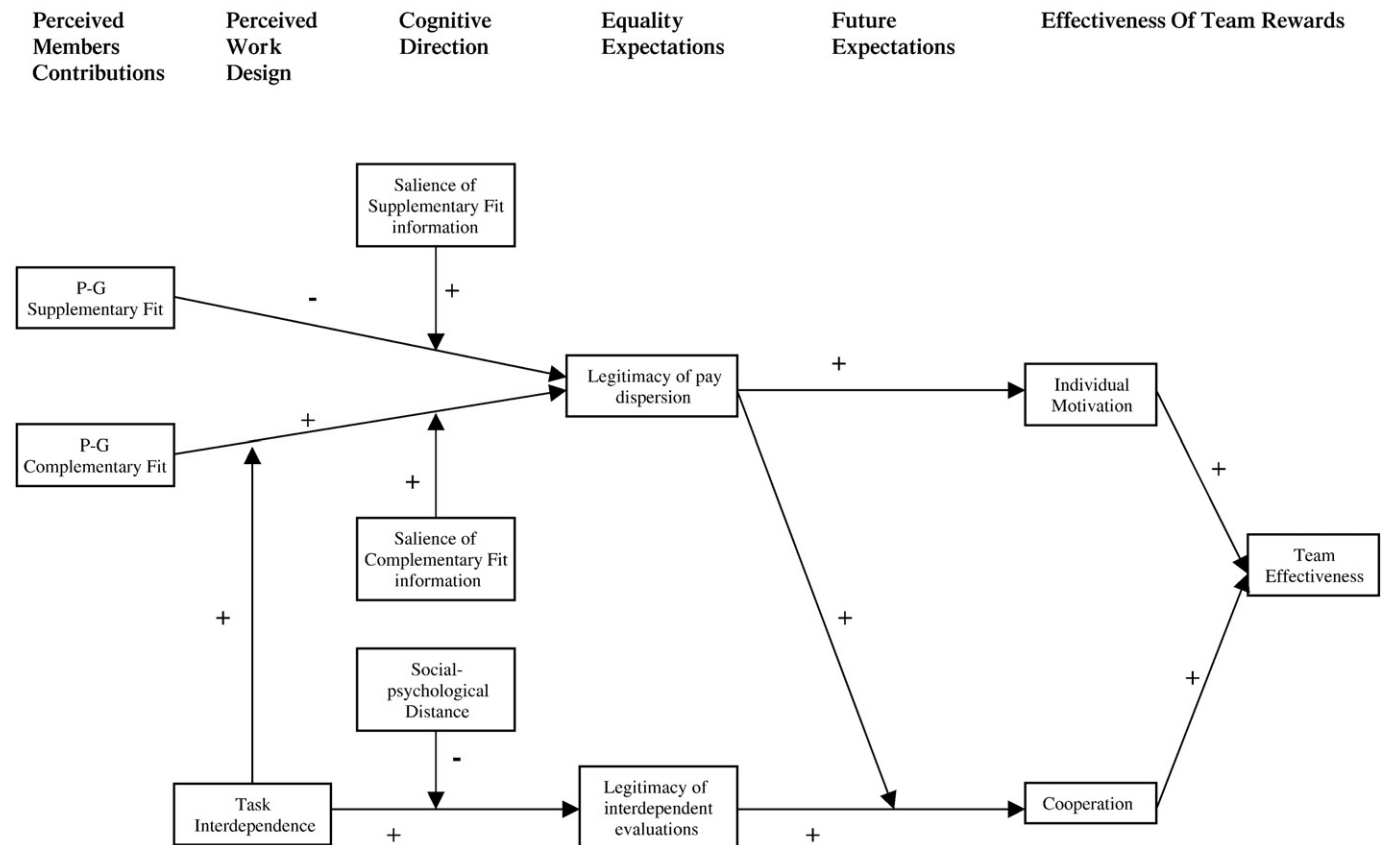


Fig. 1. Ungrouping team rewards.

focuses on the allocation and evaluation elements of the incentive plans that are relevant drivers of effectiveness. Thus, legitimacy is constructed in the model both for the distribution of incentives (i.e., pay dispersion) and for the form of evaluation (i.e., interdependent evaluations).

3. Members' contributions

Reward expectations (Wagner and Berger, 1993) emphasize the existence of referential structures that can be activated as guidelines in particular job situations. When activated, each of these referential structures becomes a guideline for the formation of expectations for rewards (Adams, 1963; Berger et al., 1985). Legitimacy of rewards is a collective conceptualization of rewards expectations. In a broad sense, it resembles a collective conceptualization of distributive justice (i.e., congruence with contributions, Rackham, 1934), relating team rewards to the expectation of members' contributions to future outcomes.

The referential basis for rewards in the case of teams comes from the contributions of members to the objectives in terms of (a) output (productivity), (b) member satisfaction, and (c) capacity for continued cooperation or viability (Nadler et al., 1979). We construct members' contributions to these objectives using the concept of person–team (P–G) fit, i.e., the compatibility between people and teams that occurs when: (a) at least one entity provides what the other needs, or (b) they share similar fundamental characteristics, or (c) both, adapting Kristof's (1996) conceptualization of Person–Organization fit to P–G fit.

P–G fit is an increasingly relevant construct due to the growing use of team arrangements in organizing work (Guzzo and Dickson, 1996). More tasks are undertaken by teams (Ilgen, 1999), teams have more decision power and authority, and teams pursue specific agendas to enact change within organizations (Komorita and Parks, 1995). If team members are to work well together, some level of fit must exist among the members (Kristof, 1996). If the fit is low and there is conflict or the team doesn't interact or work well together, this will have a large impact (Jehn et al., 1999). P–G fit is different from organizational fit in that teams often have more constrained demands–abilities needs than organizations and develop separate and proprietary beliefs, norms, and values within the organization (Trice and Beyer, 1993). P–G fit is a particular version of P–E fit. Two distinctions have been raised to clarify the conceptualization of fit: (1) Supplementary Fit (SF), which results when a person supplements, adds, or possesses characteristics that are similar to other individuals within that environment or within the team; and (2) Complementary Fit (CF), or the fact that a person completes, perfects, or contributes what is absent in a particular environment or in a particular team (Kristof, 1996). In Fig. 1, we construct perception of supplementary P–G fit and complementary P–G fit as relevant antecedents to the analysis of the legitimacy of rewards.

Perceptions of P–G fit are conceptualized at the team level and result from the individual aggregation of shared perceptions about each member's contributions to team outcomes. Possible operationalizations of perceptions of complementary P–G fit may be the particular knowledge, skills, and abilities (KSAs) that members bring into a team (Laughlin et al., 1969; Shaw, 1981), members' expected contributions or freeloading behaviors (Price, 2006), or the relevance of the ties people hold for the achievement of team goals (Burt, 1992; Granovetter, 1973). An example of complementarity in this sense is the relevant ties that a team supervisor may have to others who have resources or information needed for the team's success. This supervisor may be seen as contributing to team objectives with his/her ability to utilize relationships to access resources that can be essential to team performance and therefore to have complementary fit to the group because he or she contributes to success in ways that others in the group cannot. Particular relevant contents for supplementary P–G

fit may be goal alignment (Weldon and Weingart, 1993), performance similarity, demographic or personality homogeneity (Jackson et al., 1991), and shared ties (Burt, 1997).

4. Effects of member contributions and salience on legitimacy of pay dispersion

The salience of perceived member contributions, the activated references in reward expectation theory (Wagner and Berger, 1993), will strengthen their links to task outcomes and will reinforce the legitimacy of reward expectations. For example, the contribution of a team member with relevant technical knowledge may be made more salient when used to deal with a particular unexpected event in the project. Management can also manipulate the salience of contributions by specifying the value that each member brings to the team at any point in time. Increases in the amount of consistent status information salient for the contributions of any actor in a team turn those contributions into shared referential structures of member expectations, add perceived relevance to its link to task outcomes, and generate within-team allocation of reward expectations (Berger et al., 1985). Thus, the salience of the referential contents within the measures of P–G fit will make them more or less relevant in predicting within-team reward expectations.

When team members are perceived as making initially different contributions to achieve team goals (Humphrey et al., 2007a), these differences produce corresponding expectations for differences in status (and competence) in the task or project (Berger et al., 1985). Higher performance expectations develop for team members who are “resource rich” as opposed to those who are “resource poor” (Ridgeway, 1989). If there is, as this model assumes, a given structure for the allocation of incentives, that allocation serves as an initial assessment of expected differences in team members' contributions to goals.

Motivated by team need for a shared definition of the relationships between members to facilitate interaction and team activities, teams will develop shared consensual expectations about contributions and rewards. Thus, the differences in members' contributions to the attainment of goals will legitimize different allocations of incentives. That is, perceived complementary P–G fit, the aggregation of shared perceptions about the differential value of some members' contributions, will promote legitimacy of pay dispersions. On the other hand, perceived supplementary P–G fit, the aggregation of shared perceptions about contributions that are similar to those of other members in the team, will reduce the legitimacy of pay dispersions.

Additionally, the salience of these different types of contributions will reinforce the consensual strength of their impact on the legitimacy of pay dispersion.

P1a. Perceptions of P–G complementary fit will have a positive relationship with the legitimacy of team pay dispersion. Salience of P–G complementary fit information will moderate this relationship, so that increases in that salience will increase the legitimacy of pay dispersion.

P1b. Perceptions of P–G supplementary fit will have a negative relationship with the legitimacy of team pay dispersion. Salience of P–G supplementary fit information will positively moderate this relationship, so that increases in that salience will decrease the legitimacy of pay dispersion.

5. Effects of task interdependence on legitimacy of pay dispersion

The demands, structure, and design of a task have important implications for team work (McGrath, 1984). Interdependence is one such demand or characteristic of a task that is essential to the nature of

team work because it implies the need for more interaction between team members, fewer possibilities for evaluating individual efforts in isolation, and the need for coordination and cooperation to achieve outcomes. Task interdependence is the extent to which the effectiveness of team outcomes depends on the combined actions of members. Under situations of task interdependence, team members see the result of their efforts as dependent on others' behavior (Saavedra et al., 1993).

Because task interdependence increases the requirements of interaction and cooperation (McGrath, 1984; Wageman, 1995), it promotes in itself an enhanced perception of the complementary contributions of team members. More interdependent teams will have higher shared awareness of the complementary P–G fit of members, producing an effect similar to salience.

P1c. Perceptions of task interdependence moderate the relationship between the perceptions of P–G complementary fit and legitimacy of team pay dispersion, so that more task interdependence increases the strength of the relationship.

6. Task interdependence and social psychological distance

As task interdependence increases, individual contributions to performance will likely be more difficult to identify and isolate and inefficient to supervise and measure (Nickel and O'Neal, 1990), which creates a barrier to individual performance assessment and members are more likely to use them in justifying interdependent evaluations for the team. This process of justification of institutional order is consistent with Berger and Luckmann's (1966) conceptualization that legitimation explains the institutional order by assigning cognitive validity to its objective meanings. It can be used by team members as a valid explanation both for themselves and for others (Ridgeway, 1989). Therefore, we expect legitimacy of interdependent evaluations to result from the increase in shared perceptions.

Social psychological distance is a constituency attribute that distinguishes between those who are socially or psychologically proximal or distal to an individual (Barry and Bateman, 1996). This distance between team members interacts with perceptions of task interdependence in the development of legitimacy of interdependent evaluations. The mechanism for this prediction is the availability of both control and personal involvement to team members at low social psychological distance. Given traditional agency theorists acknowledgment of mutual monitoring as a core control process under conditions of high task interdependence (Fama and Jensen, 1983), team members at low social psychological distance have access to cognitions about others' characteristics (Van Lange and Liebrand, 1989), expectations about the behavior of others (Dawes et al., 1977), and direct experience of actual behaviors of other team members to control them (Fama and Jensen, 1983). Also, there is evidence of development of personal involvement with the fate of others' outcomes in teams with low social psychological distance, creating members' identification with team goals (Fleishman, 1973). These opportunities for control and identification reinforce the legitimacy of the interdependent evaluations.

P2. Perceptions of task interdependence will have a positive relationship with legitimacy of interdependent evaluations. Social psychological distance will moderate this relationship.

7. Effects of legitimacy of pay dispersion on individual motivation to perform

Discussions in the literature about pay dispersions have highlighted the tension between the positive effects of hierarchical or highly dispersed reward systems on individual motivation to perform (Milgrom and Roberts, 1992; Pfeffer, 1994) and support for coopera-

tive, team-oriented behavior derived from more compressed reward structures (Bloom, 1999; Pfeffer, 1994). Although the literature on pay dispersions usually refers to total compensation levels, similar positions could be argued for the dispersion of allocations in an interdependent team's incentive program.

However, the introduction of legitimacy of pay dispersion helps to develop predictions about its effect in the allocation of incentives. The legitimacy of a given pay dispersion structure promotes motivation to perform because of the implicit perception of distributive fairness (Adams, 1965). This will hold even for individuals who may disagree about the fairness of the dispersion in the incentive allocation. Legitimacy of pay dispersion exists as a socially accepted guide to behavior.

P3. Legitimacy of team pay dispersion will have a positive relationship with individual motivation to perform.

8. Effects of legitimacy of interdependent evaluations on cooperation

Research has traditionally supported the claim that the congruence between task interdependence and team-based rewards is likely to result in higher team performance (DeMatteo et al., 1998; Wageman, 1995). This model describes that relationship as mediated by the legitimacy of interdependent evaluations. We narrow team performance to cooperation in this relationship (i.e., collaboration, helping, and team-oriented behavior that contributes to team goals) and expect this more explicit formulation to provide further explicative power than previous conceptualizations. The process of legitimation will add validity to individual positive cognitions about the rewards plan and will be instrumental as a guide to behavior for those who disagree. These effects will add predictive power to the relationship.

Legitimacy of interdependent rewards will then lead to cooperative behaviors because it implies the development of a team norm or agreement regarding fairness. Additional support for this relationship is found in agency theory where a positive influence on the observed level of mutual monitoring is a shared belief in the fairness of the system among participating agents (Welbourne et al., 1995). Also, the fact that social psychological distance is already factored into legitimacy of pay dispersion adds support because some of the effects that result are monitoring and identification behaviors that are traditionally seen as promoting cooperative behavior.

Legitimacy of pay dispersion implies its shared acceptance by the team. Shortcomings produce effects similar to those that the literature associates with hierarchical pay distributions: feelings of inequity and "disincentives" to cooperation (Pfeffer, 1994). Legitimacy of pay dispersion, then, interacts with the legitimacy of interdependent evaluations, strengthening – or weakening – its cooperative relationship because of its implication of a shared acceptance of fairness – or unfairness. Under conditions of high legitimacy of task interdependent evaluations, decreasing levels in the legitimacy of pay dispersion will create acceptance of uncooperative behaviors allowing members who resent the given dispersion to reduce their cooperation to minimum maintenance of interdependent task relations and to eventually engage in damaging deviant behaviors. Contrarily, high legitimacy of pay dispersion will further promote helping and team-oriented behaviors.

P4. Legitimacy of interdependent evaluations will have a positive relationship with cooperation. Legitimacy of team pay dispersion will positively moderate this relationship.

9. Effects of individual motivation to perform and cooperation on team effectiveness

Applying rewards to teams as a whole is driven by the assumption that team rewards will do something qualitatively different than

individual rewards (DeMatteo et al., 1998). This “qualitative difference” is usually defined as the complementary nature of individual motivation to perform with cooperative behaviors. It is seen as supporting team functioning and promoting collective goals (DeMatteo et al., 1998). Goal setting theory suggests that incentive programs increase performance by inducing commitment to incentive goals (Locke and Latham, 1990). Because we conceptualize team effectiveness as the satisfaction of both functional (i.e., member satisfaction, capacity for continued operation) and performance (i.e., team output) criteria (Nadler et al., 1979), both individual motivation to perform and cooperation will be positively related to team effectiveness.

P5. (a) Individual motivation and (b) cooperation will be positively related to team effectiveness.

10. Discussion

Organizations and students of organizations are puzzled by the fact that organizations are becoming more thoroughly interconnected and yet more intricately partitioned. Technical and managerial knowledge has become ever more specific and differentiated over the past two decades, and organizations require concurrent effort of many diverse sets of employees to tackle increasing complexity. Thus, team-based work has become a priority of organizations and organizational researchers (Ilgen, 1999; Rau, 2006). Moreover, these teams have extended their time horizons beyond constrained project durations, developing a need for self-actualization and sustainability over time.

Legitimacy of pay dispersion is important to the team as well as to the organization. Legitimacy provides the opportunity for the organization to institute a normative process for different reward structures. As Ashforth and Gibbs (1989) tell us, this legitimacy is a double-edged sword. The organization or team is afforded legitimacy through the consensus of the membership, but pursuit of legitimacy can make the organization seem manipulative and illegitimate. There is then a fine line to walk in the pursuit of legitimacy, especially when it comes to the outcomes that one receives from the organization.

Team incentives or rewards have been widely studied during the last three decades. However, most of the research focuses on individual drivers for team performance; the complexity of the collective mechanisms that may affect team rewards has seldom been examined. An important contribution of this model is the use of legitimation as a framework to contextualize the mechanisms by which team rewards affect outcomes at the team level and may help outline empirical strategies to close the gap that casts doubt about when, how, and to what degree dispersion in pay and incentives help or constrain collective performance. Legitimation provides an explanation of individual behaviors in the context of teams and addresses processes that predict behaviors, which may help integrate some conflicting results from previous research on team rewards. It addresses the DeMatteo et al. (1998) call to address the question of how and why rewards should affect team functioning and under what circumstances they will be most effective.

Interaction between the allocation and evaluation components of team rewards is not clearly specified and studied in most of the team rewards research, which may also be a reason for some of the variability in findings. The guidance that the explicit description of this interaction and of the team mechanisms that affect it may be another contribution that this model provides to future research on team rewards.

Designs of incentive programs for teams may benefit from considering both interdependence and the need for individual differentiation of team members. Looking at the reference structures available for team members may help define team membership and roles in a more effective way (Humphrey et al., 2009), provide an economic balance to the distribution of available resources, and guide implementation in terms of the need to (a) promote the salience of

some specific referential structures and (b) explicitly manipulate social psychological distance in the team.

In summary, the current theorizing makes several contributions to the literature: (1) we enhanced research on team rewards and pay dispersion effects by integrating team-level theories of legitimacy and P–G fit in a predictive model of pay effectiveness, (2) we provided a generalizable model for analyzing team reward configurations across cultures and within the dynamics of team developments over time, and (3) we augmented the person–environment literature by modeling its possible contribution to the justice or legitimacy literature and therefore its additional value to models of team performance.

References

- Adams JS. Towards an understanding of inequity. *J Abnorm Soc Psychol* 1963;67:422–36.
- Adams JS. In: Berkowitz L, editor. *Inequity in social exchange. Advances in experimental social psychology*. vol. 2. New York: Academic Press; 1965. p. 267–99.
- Ashforth BE, Gibbs BW. The double-edge of organizational legitimation. *Organ Sci* 1989;1:177–94.
- Bacharach P, Baratz M. *Power and poverty, theory and practice*. New York: Oxford University Press; 1970.
- Barry B, Bateman TS. A social trap analysis of the management of diversity. *Acad Manage Rev* 1996;21:757–90.
- Beersma B, Hollenbeck JR, Humphrey SE, Moon H, Conlon DE, Ilgen DR. Cooperation, competition, and team performance: towards a contingency approach. *Acad Manage J* 2003;46:572–90.
- Berger P, Luckmann T. *The social construction of reality*. New York: Doubleday; 1966.
- Berger J, Cohen BP, Zelditch M. Status characteristics and social interaction. *Am Soc Rev* 1972;37:241–55.
- Berger P, Berger B, Kelner H. *The homeless mind*. New York: Random House; 1973.
- Berger J, Fisek MH, Norman RZ, Wagner DG. The formation of reward expectations in status situations. In: Berger J, Zelditch M, editors. *Status, rewards, and influence: how expectations organize behavior*. San Francisco: Jossey-Bass; 1985. p. 215–6.
- Bloom JM. The performance effects of pay dispersion on individuals and organizations. *Acad Manage J* 1999;42(1):25–40.
- Brockner J, Elkind M. Self-esteem and reactance: further evidence of attitudinal and motivational consequences. *J Exp Soc Psychol* 1985;21:346–61.
- Burt RS. *Structural holes: the social structure of competition*. Cambridge, MA: Harvard University Press; 1992.
- Burt RS. The contingent value of social capital. *Adm Sci Q* 1997;42:339–65.
- Chebat J, Slysarczyk W. How emotions mediate the effects of perceived justice on loyalty in service recovery situations: an empirical study. *J Bus Res* 2005;58:664–73.
- Colquitt JA, Conlon DE, Wesson MJ, Porter C, Ng KY. Justice at the millennium: a meta-analytic review of 25 years of organizational justice research. *J App Psychol* 2001;86:425–45.
- Dawes RM, McTavish J, Shklee H. Behavior, communication, and assumptions about other people's behavior in a commons dilemma situation. *J Pers Soc Psychol* 1977;35:1–11.
- DeConinck JB, Stilwell CD. Incorporating organizational justice, role states, pay satisfaction and supervisor satisfaction in a model of turnover intentions. *J Bus Res* 2004;57:225–31.
- DeMatteo JS, Eby LT, Sundstrom E. Team-based rewards: current empirical evidence and directions for future research. *Res Organ Behav* 1998;20:141–83.
- Enslin MD, Pearson AW, Sardeshmukh SR. The negative consequences of pay dispersion in family and non-family top management teams: an exploratory analysis of new venture, high-growth firms. *J Bus Res* 2007;60:1039–47.
- Fama EF, Jensen ML. Separation of ownership and control. *J Law Econ* 1983;26:301–25.
- Fleishman EA. Twenty years of consideration and structure. In: Fleishman EA, Hunt JG, editors. *Current developments in the study of leadership*. Carbondale, Ill: Southern Illinois University Press; 1973.
- Granovetter MS. The strength of weak ties. *Am J Psychol* 1973;6:1360–80.
- Greenberg J. Determinants of perceived fairness of performance evaluations. *J Appl Psychol* 1986;71:340–2.
- Guzzo R, Dickson MW. Teams in organizations: recent research on performance and effectiveness. *Annu Rev Psychol* 1996;47:307–38.
- Habermas J. *Legitimation crisis* (transl. by Thomas McCarthy). Boston: Beacon Press; 1975.
- Homans GC. *Social behavior: its elementary forms*. New York: Harcourt Brace; 1961.
- Humphrey SE, Hollenbeck JR, Meyer CJ, Ilgen DR. Trait configurations in self-managed teams: a conceptual examination of the use of seeding to maximize and minimize trait variance in teams. *J Appl Psychol* 2007a;92:885–92.
- Humphrey SE, Nahrgang JD, Morgeson FP. Integrating motivational, social, and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature. *J Appl Psychol* 2007b;92:1332–56.
- Humphrey SE, Morgeson FP, Mannor MJ. Developing a theory of the strategic core of teams: a role composition model of team performance. *J App Psychol* 2009;94:48–61.
- Ilgen DR. Team embedded in organizations: some implications. *Am Psychol* 1999;54:129–39.
- Jackson SE, Brett JF, Sessa VI, Cooper DM, Peyronnin K. Some differences make a difference: individual dissimilarity and group heterogeneity as correlates of recruitment, promotions and turnover. *J Appl Psychol* 1991;76:675–89.

- Jehn KA, Northcraft GB, Neale MA. Why differences make a difference: a field study of diversity, conflict and performance in workgroups. *Adm Sci Q* 1999;44:741–63.
- Komorita SS, Parks CD. Interpersonal relations: mixed-motive interaction. *Annu Rev Psychol* 1995;46:183–207.
- Kristof AL. Person–organization fit: an integrative review of its conceptualizations, measurement, and implications. *Pers Psychol* 1996;49:1–49.
- Landau S, Leventhal GS. A simulation study of administrators' behavior toward employees who receive job offers. *J App Soc Psychol* 1976;6:291–306.
- Laughlin PR, Branch GL, Johnson HH. Individual versus triadic performance and unidimensional complementary task as a function of initial ability level. *J Pers Soc Psychol* 1969;12:144–50.
- Leventhal GS. What should be done with equity theory? New approaches to the study of fairness in social relationships. In: Gergen MGK, Willis R, editors. *Social exchange: advances in theory and research*. New York: Plenum Press; 1980. p. 27–55.
- Locke EA, Latham GP. *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall; 1990.
- McGrath JE. *Groups: interaction and performance*. Englewood Cliffs, NJ: Prentice Hall; 1984.
- Milgrom P, Roberts J. *Economics, organization, and management*. Englewood Cliffs, NJ: Prentice Hall; 1992.
- Nadler DA, Hackman JR, Lawler III EE. *Managing organizational behavior*. Boston: Little Brown; 1979.
- Nickel JE, O'Neal S. Small group incentives: gain sharing in the microcosm. *Comp Beh Rev* 1990;22(2):22–9.
- Parsons T. *Structure and process in modern societies*. Glencoe, IL: Free Press; 1960.
- Pfeffer J. *Competitive advantage through people: unleashing the power of the work force*. Boston: Harvard Business School Press; 1994.
- Price ME. Monitoring, reputation and greenbeard reciprocity in a Shuar work team. *J Organ Behav* 2006;27:201–19.
- Rackham H. *Translator. Aristotle's Nicomachean ethics*. Cambridge, MA: Harvard University Press; 1934.
- Rau D. Top management team transactive memory, information gathering, and perceptual accuracy. *J Bus Res* 2006;59:416–24.
- Renn RW. Participation's effect on task performance: mediating roles of goal acceptance and procedural justice. *J Bus Res* 1998;41:115–25.
- Ridgeway C. Understanding legitimation in informal status orders. In: Berger J, Zelditch M, Anderson B, editors. *Sociological theories in progress — new formulations*. Newbury Park, CA: Sage Publications, Inc.; 1989. p. 131–59.
- Ridgeway C, Berger J. Expectations, legitimation, and dominant behavior in task groups. *Am Soc Rev* 1986;51:603–17.
- Ridgeway CL, Boyle EH, Kuipers K, Robinson D. How do status beliefs develop? The role of resources and interaction. *Am Soc Rev* 1998;63:331–50.
- Ruef M, Scott WR. A multidimensional model of organizational legitimacy: hospital survival in changing institutional environments. *Adm Sci Q* 1998;43(4):877–904.
- Saavedra R, Earley PC, Van Dyne L. Complex interdependence in task performance. *J App Psychol* 1993;78(1):61–72.
- Shaw ME. *Group dynamics: the psychology of small group behavior*. 3rd ed. New York: McGraw-Hill; 1981.
- Suchman M. *Managing legitimacy: strategic and institutional approaches*. *Acad Manage Rev* 1995;20:571–610.
- Trice HM, Beyer JM. *The cultures of work organizations*. Englewood Cliffs, NJ: Prentice Hall; 1993.
- Van Lange PAM, Liebrand WBG. On perceiving morality and potency: social values and the effects of person perception in a give-some dilemma. *Eur J Pers* 1989;21:273–92.
- Vroom V. *Work and motivation*. New York: Jossey-Bass; 1964.
- Wageman R. Interdependence and group effectiveness. *Adm Sci Q* 1995;40:145–80.
- Wagner D, Berger J. Status characteristics theory: the growth of a program. In: Berger J, Zelditch M, editors. *Theoretical research programs: studies in the growth of theory*. Stanford, CA: Stanford University Press; 1993.
- Walker HA, Thomas GM, Zelditch M. Legitimation, endorsement, and stability. *Soc Forces* 1986;64:620–43.
- Walker HA, Rogers L, Thomas GM, Zelditch M. Legitimizing collective action: theory and experimental results. *Res Polit Soc* 1991;5:1–25.
- Weber M, editor. *Economy and society*. Berkeley, CA: University of California Press; 1968.
- Weinberger TE. A method for determining the equitable allocation of team-based pay: rewarding members of a cross functional account team. *Comp Bene Manage* 1998;14(4):18–26.
- Welbourne TM, Balkin DB, Gomez-Mejia LR. Gainsharing and mutual monitoring: a combined agency-organizational justice interpretation. *Acad Manage J* 1995;38(3):881–99.
- Weldon E, Weingart LR. Group goals and group performance. *Br J Soc Psychol* 1993;32:307–34.
- Zelditch JM. Legitimacy theory. In: Burke PJ, editor. *Contemporary social psychological theories*. Stanford, CA: Stanford University Press; 2006.
- Zenger TR, Marshall CR. Determinants of incentive intensity in group-based rewards. *Acad Manage J* 2000;43(2):149–63.