

**INTEGRATING JUSTICE AND TRUST IN MANAGEMENT
CONTROL SYSTEMS: HOW TO GENERATE GOAL CONGRUENCE AND
LONG-TERM FAIRNESS COHERENT WITH THE FIRM'S MISSION**

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Abstract

Based on the conceptual model of Cugueró-Escofet and Rosanas (2013), which relates justice in the design and use of management control systems to different states of goal congruence, this article incorporates the role of trust as a crucial aspect of the informal organization. The article argues that trust in managers is a consequence of the informal justice of management control systems, with implications for fairness perceptions in the long run. Specifically, we conceptually derive and empirically test hypotheses to reach three conclusions. First, that trust is a consequence of informal justice of the informal management control system. Second, that trust and justice together generate effects in terms of goal congruence and long-term fairness. Third, that this model fills a gap in existing research into trust as a consequence of justice but also as a generator of justice because trust is shown to have both roles.

JEL Classification: I31, M14, M15

Keywords: justice, fairness goal congruence, trust, ethics of management control.

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Introduction

Promoting ethical management is crucial to generate trust in managers and business. This is even more urgent if we look at today's business world, where we find that mistrust in companies has been one of the main consequences of many recent scandals (e.g., Lehman Brothers and the subprime crisis). In the area of management control systems (MCS), the focus on "dysfunctional behavior" has been considered a relevant topic. In this area "dysfunctionalities" are defined as unintended consequences that occur once MCS designed for a specific purpose are implemented. Two of the most studied dysfunctionalities have been "short-term orientation" and "budgetary slack" (Merchant, 1985; Van der Stede, 2000). The literature focuses mainly on how to avoid dysfunctional behavior because it is thought to be often economically prejudicial for an organization. For instance, creating "budgetary slack" is considered to go against the best interests of the organization. However, we are interested mostly in dysfunctional behavior for ethical reasons – i.e., we want to look at dysfunctional behavior as a potential generator of unethical consequences and therefore we are interested in the role that justice and trust play in avoiding future unethical consequences by generating fairness at the same time. This would promote types of behavior that would help to bring about an organization that cared for the long run and thus could potentially survive in the long run.

Regarding strategy and MCS, some of the research focuses on the design and use of MCS, as these are the main tools used in companies to guarantee the accomplishment of objectives. We find that the main objective of MCS is assumed to be to help managers obtain good results for the firm and help them to define (and redefine) the organization's mission and strategies (Langfield-Smith, 1997; Simons, 1987). MCS are used to set objectives, evaluate performance and reward people accordingly, depending on performance or other informal variables (Cugueró-Escofet & Rosanas, 2015a; Speklé & Verbeeten, 2014; Wood, Bandura, & Bailey, 1990). Whether or not they contain ethical variables, MCS are a crucial aspect of recent research, in terms of both the formal and informal aspects of these systems. One of the main variables used to diagnose whether an MCS is appropriate or not is "goal congruence." Thus, an MCS should be designed in such a way that managers pursuing their own objectives pursue organizational objectives at the same time, so that the MCS helps to align the interests of both parties (Vancil, 1973).

Focusing particularly on goal congruence, some research has argued that justice is a necessary ethical requirement to be incorporated into MCS design and use (labeled formal and informal respectively), to generate greater alignment (goal congruence) between individuals' and organizations' goals and to increase the fairness perceptions of those experiencing the consequences of these systems (Cugueró-Escofet & Rosanas, 2013, 2015a). The informal justice of MCS has been seen as crucial to overcome the potential dysfunctional effects of MCS directed at rewarding people in organizations (Cugueró-Escofet & Rosanas, 2016). This research has argued that justice has two roles – ex ante justice and ex post justice. These aspects are preset (the system) and they are the consequences of a specific presetting in terms of perceptions (Goldman & Cropanzano, 2015). Ex ante justice has two dimensions. The formal one is defined as the provisions of the formal system in terms of justice. Informal justice concerns the managerial uses of some justice standards. Both types of justice, the formal and the informal, should be present in MCS design and use, to generate a long-term alignment of interests between people and the organization (Cugueró-Escofet & Rosanas, 2013). At the same time, having ex ante formal and informal justice and the alignment of interests would also increase future fairness in terms of the perceptions of those affected (Cugueró-Escofet & Rosanas, 2015a). In this regard, fairness perceptions are very important as unfairness can create significant dysfunctional ex post behavior (Cropanzano, 2001; Folger & Cropanzano, 1998; Thurston & McNall, 2010). As, broadly speaking, MCS are used to help organizational objectives to be achieved, they have been implemented using formal and informal controls (Anthony & Govindarajan, 2003, p.98) to promote and reward people or subunits according to certain criteria in order to achieve the greatest possible level of goal congruence. The fairness consequences these systems may generate are always an important issue in terms of people's motivation to pursue common goals.

The focus has been on the informal part of management control systems, in terms of managers being informal just when using the systems, which may promote ethical development or learning focused on ethics (Cugueró-Escofet & Fortin, 2014; Cugueró-Escofet & Rosanas, 2016; Rosanas & Velilla, 2005). The aim of this research is to improve the incentive systems as they are partially responsible for generating unethical behavior because of the strong focus they pose on single metrics, which make people concentrate mainly on these to get the incentives instead of having a more long-term focus. A possible solution is to make the system aware of the importance of the informal aspects of MCS in terms of using the systems in a just way (Cugueró-Escofet & Rosanas, 2016).

The concept of trust has been considered crucial in organizations to make people work together for common goals (De Jong & Elfring, 2010) and from different cultural approaches (Ferrin & Gillespie, 2010). It has drawn a lot of attention in past decades, being defined also as the necessary glue to make organizations function (Arrow, 1974).

Mayer, Davis and Schoorman (1995) defined trust as the “willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer et al., 1995p 712). They consider this process as starting following the trustor's evaluation of three aspects of the trustee: ability, benevolence and integrity. In a later work, the same authors include the relevance of time, control systems, trust reparation and the role of emotions and cultural differences (Schoorman, Mayer, & Davis, 2007). Trust is important in organizations as it has the potential to align interests between people – if the interests between two people are perfectly aligned, it seems trust is not that crucial and therefore there is no problem that trust can solve (Spreitzer & Mishra, 1999).

Based on the existing literature on justice in MCS and trust in managers, we attempt to explain the ethical foundations of informal justice and trust in managers to generate long-term perceptions of fairness. Specifically we start with the concepts of justice and goal congruence presented in the model explained in Cugueró-Escofet and Rosanas (2013), which links justice in MCS design and use with several states of goal congruence. We also incorporate the role of trust in managers as a crucial aspect of the informal organization. We are going to show that trust in managers is a consequence of the informal justice of MCS, which in turn can have consequences for perceptions of fairness in the long run. We specifically expect to be able to demonstrate three conclusions. The first is that trust is a consequence of informal justice of the informal MCS. The second is that trust and justice together generate effects in terms of goal congruence and long-term fairness. The third conclusion is that this model fills a gap in existing research into trust as a consequence of justice but also as a generator of justice because trust is shown to have both roles: trust is a consequence of ex ante informal justice and, at the same time, trust helps to enhance the virtuous circle of ex ante justice and goal congruence to generate perceptions of ex post justice.

We proceed as follows. First, we present a hybrid structural model and we theorize about which are the specific links between the main variables that we have conceptualized, proposing specific hypotheses. Second, we test the overall model and the hypotheses and we include additional confirmatory analysis for these measurement models of the constructs that have not been tested in the literature before (as is the case for formal and informal justice and goal congruence). Finally, we show the managerial implications that are relevant for the justice and trust relationship, in terms of how organizations can benefit from greater understanding of informal MCS, which can be seen as a crucial aspect of the managerial control function. We also try to show the limitations of the proposed research, along with some potential extensions.

Theory and hypotheses

A model of management control systems with trust and justice

Starting with an existing model of management control systems that includes ex ante justice in its formal and informal elements (Cugueró-Escofet & Rosanas, 2013), we add concepts concerning ex post justice, to which are attributed many organizational consequences in terms of behaviors and attitudes (Cropanzano & Randall, 1993; Cugueró-Escofet, Fortin, & Canela, 2014; Greenberg, 1990; Greenberg, 2005; Miller, 2001; Vermunt, 2002), and trust in managers, based on existing concepts of trust that have been developed in the literature (Ahmad, Asgari, & Silong, & Abu Samah 2008; Colquitt & Rodell, 2011; Dirks & Ferrin, 2002; Frazier, Johnson, Gavin, Gooty, & Snow, 2010; Lewicki, Tomlinson, & Gillespie, 2006). We start with the model presented in Cugueró-Escofet and Rosanas (2013), as a conceptual model that shows a link between justice and goal congruence generation in MCS. The model includes ex ante justice (formal and informal) as a generator of several levels of goal congruence, which in their model has been considered a consequence. Based on this research, we try to add two dimensions that have remained unexplored: the specific role of trust in managers and the consequences that can be generated in terms of ex post fairness.

We consider it important to separate ex ante justice and ex post justice, as the literature has recommended recently, because one is based on the provisions of the system's design and use (labeled justice) and the other is linked to the consequences of using this system and so to the

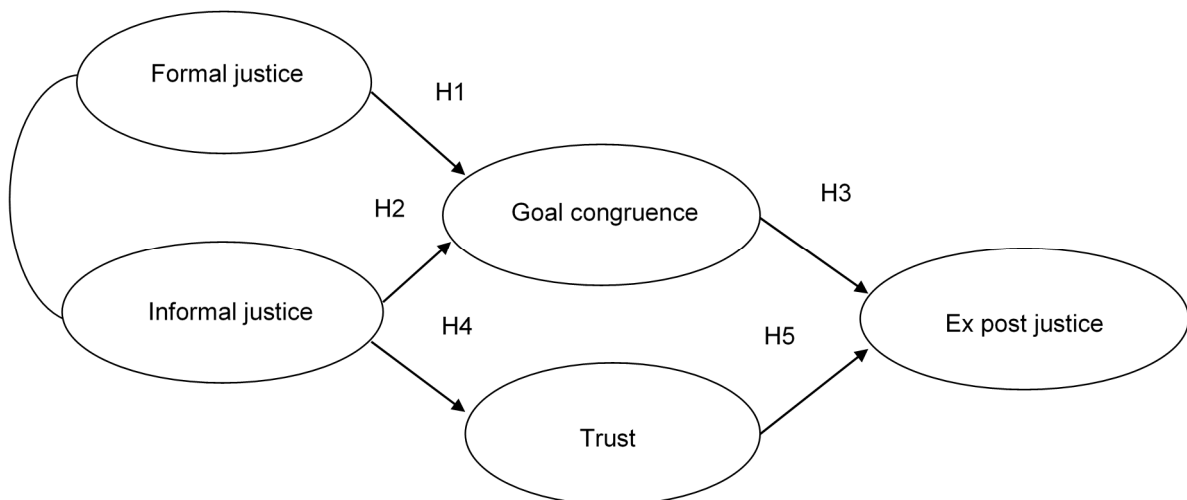
perceptions of those affected by the decisions made (labeled fairness) (Folger, 1998; Goldman & Cropanzano, 2015). Separating both concepts is also important because these two types of justice cover different aspects with diverse roles and consequences, which have been mixed in earlier literature on organizational justice. The types of justice include substantive justice and also perceptions of justice, as:

“Looking at perceptions may depict the real state of affairs, but does not necessarily lead to ways of managing these perceptions in a way that is ethically appropriate. Perceptions may show a picture of reality or possible ways of improvement, but ethical justice reasoning needs to set limits on the way those perceptions are to be managed, and may suggest even more radical ways of improvement by departing from the observable” (Cugueró-Escofet & Fortin, 2014, p.447).

Trust has also been presented as an important element of organizational relationships, in both directions, so managers trust employees (Spreitzer & Mishra, 1999) and employees trust managers (Whitener, Brodt, Korsgaard, & Werner, 1998). There are no models in the literature that present the concepts of ex ante justice, ex post justice and trust together. We are concerned here about investigating the point of view of employees as they are the ones who are affected by their managers’ use of MCS. We have found the trust process in organizations to be important, and we try to fill the gap between, on the one hand, ex ante justice and how this has implications for trusting managers and, on the other hand, how this, in turn, can have potential repercussions for future perceptions of ex post justice. We build an overall model, in which we integrate and bring together the literature on trust and justice, to understand the effects of ex ante justice, goal congruence and trust on the fairness that employees perceive. (See the model in Figure 1.)

Figure 1

Model of informal justice, formal justice, trust in managerial goal congruence and fairness



Next we are going to examine each of the hypothesized links between the variables in the model. We test the model partially (each measurement model alone) and as an overall model hybrid model, using structural equation modeling (as we will show in the following sections of results and hypothesis testing).

Formal and informal justice and goal congruence in management control systems

Management control systems link the areas of social psychology and economics, with a greater focus on the former, as they established a discipline that focuses on people and their behavior in a way that derives more from social psychology than from economics, even though both disciplines are important (Anthony, 1988). The leading figure was Robert N. Anthony (Zeff, 2008). In the classic book *Management Control Systems*, Anthony, Dearden and Vancil define a control system as a tool used to attempt to foster trust and goal congruence between “bosses” (or “controllers”) and “subordinates” (or “controllees”) (Anthony, Dearden, & Vancil, 1972: chapter 2, and subsequent editions). This control system is intended to become a learning device for the organization. According to Anthony, the whole process of management control includes (1) establishing goals for the whole organization and for each of its subunits, possibly down to the level of each individual person, (2) communicating these to all the people in the organization, (3) evaluating the degree to which the objectives of each unit and subunit (and, indeed, even of each individual in the organization) have been achieved, and (4) selecting and applying a control action – that is, giving rewards and punishments in a way that is ‘good’ for the organization and for the individuals. It is important to notice that the words ‘evaluating’ and ‘selecting’ are crucial when any control action that relies on human judgment is being applied. The importance of judgment is also stressed, in terms of probability, in Flamholtz (1979). He defines control systems as systems that: “are intended to maximize the probability that people will be motivated to achieve organizational goals. Control is probabilistic rather than deterministic. Therefore it is not possible to guarantee that all people will behave in ways consistent with organizational objectives all the time” (Flamholtz, 1979, p.51).

Goal congruence has been considered “the central purpose of a management control system” in a definition of the control process, where “the actions people are led to take in accordance with their perceived self-interest are also in the best interest of the organization” or, in a more restrictive way, at least, these actions “should not encourage individuals to act against the best interests of the organization” (Anthony & Govindarajan, 2003). Vancil defines goal congruence indirectly, stating that “a good decision by any manager is also a good decision for the corporation as a whole” (Vancil, 1973). In a realistic setting, organizations achieve only a partial alignment between individual and organizational goals and, therefore, inducements are needed to make individuals contribute to the common goals (Barnard, 1938) as organizations become of an instrumental type (Otley & Berry, 1980). Other definitions of goal congruence focus on the alignment of interests – such as the construct of ‘organizational interest alignment,’ defined as “the degree to which the members of the organization are motivated to behave in line with organizational goals” (Gottschalg & Zollo, 2007). Following this, the model presented in Cugueró-Escofet and Rosanas (2013) explains that management control systems can achieve several states of goal congruence when justice is incorporated into their formal and informal aspects, in the form of formal and informal justice requirements. We can see which specific requirements should incorporate justice in the formal and informal systems. In this model, achieving goal congruence is therefore a consequence of there being formal and informal justice in the design and use of MCS. Thus, we hypothesize that:

H1: Formal justice has a positive effect on the goal congruence of management control systems.

H2: Informal justice has a positive effect on the goal congruence of management control systems.

Goal congruence and long-term fairness

As we have already stated, one of the crucial variables to determine whether or not an MCS is appropriate is the level of “goal congruence” achieved (Vancil, 1973). Vancil defines goal congruence in an indirect way, proposing that an MCS must be designed in such a way that managers pursuing their own objectives pursue organizational objectives at the same time, so goal congruence would mean that the interests of both parties are somehow aligned (Vancil, 1973). Goal congruence, as we have examined in the previous hypotheses, is a consequence of ex ante justice but goal congruence is also a possible predictor of future fairness, as a system that generates goal congruence, can help the decisions made using the system to be perceived as fairer (Cugueró-Escofet & Rosanas, 2015a). Goal congruence generates people who, while deciding over alternative courses of action, select those that are expected to benefit themselves and the organization at the same time, and this alignment also generates fairness perceptions from the point of view of those affected by the decisions. When a system generates goal congruence, this implies that managers perceive the decisions as generating greater overall fairness compared with cases in which the system and its use do not generate goal congruence between the parties.

The literature has recognized that rewards can be financial but also less tangible, and linked to the justice received (Martin & Harder, 1994). Forms of cooperation are due to the possibility of generating justice, or because justice is included in some part of the relationship (Niehoff & Moorman, 1993). Goal congruence generated by the inclusion of informal justice and formal justice requirements explain how human cooperation is made possible. A system that is formally just and is used justly encourages people to pursue aspects that can help improve their professional skills and ethical development so they are better aligned with the organization’s interests. At the same time, people focused on ethical development would be more aware of how the system is bringing them better personal rewards and recognition and so of how the system is generating fair consequences for them (Cugueró-Escofet & Rosanas, 2016). Actually these authors propose that justice in the formal and informal systems are more of a reward than simply extrinsic rewards, which contribute to the perceptions of fairness of how people are affected by the organization in terms of formal and informal rewards and recognition. Thus, we hypothesize that:

H3: Goal congruence has a positive effect on people’s perception of overall justice.

Informal justice, trust in the manager and overall justice

As we have already seen, the MCS literature has evolved toward a focus mainly on the system’s formal aspects (measurement of variables, incentive formulas), overlooking the informal aspects. The informal organization, which is a concept first analyzed by Chester I. Barnard in his classic book *The Functions of the Executive* (Barnard, 1938), is nevertheless crucial for the functioning of organizations. If formal organizations have their counterparts in informal organizations, formal management control systems must have their counterparts in informal control systems. Informal management control systems are linked to management decision-making processes and, in general, include all the intangibles that have influence in terms of how managers are perceived by their subordinates. These processes also depend on the context in which these decisions are made, and are part of the context in which the MCS are implemented. This context has been considered an interesting area of scrutiny in organizational justice (Greenberg & Wiethoff, 2001).

The literature on justice and trust has been prolific. A chapter of the *Handbook of Organizational Justice*, published in 2005, summarizes research on trust and justice from the point of view of justice research and the chapter authors show that trust has been investigated as an antecedent

and an outcome of justice (Lewicki, Wiethoff, & Tomlinson, 2005). Being an outcome of justice, trust has also been studied as a mediator of some relationships between justice factors and relevant outcomes such as outcome favorability (Brockner, Siegel, Daly, Tyler, & Martin, 1997) and several work attitudes, such as job satisfaction, organizational commitment and turnover intentions (Aryee, Budhwar, & Chen, 2002). Trust has also been studied as a moderator, it being demonstrated that, if there is a trusted party, then people believe more in the process that is set up. As an antecedent of justice, trust is considered a requirement for justice, and this has been studied in two models: the self-interest model (starting with Blau, 1964) and the group value model (starting with Lind & Tyler, 1988).

Interestingly there is also research that shows that trust and justice codevelop, which means that trust can be an outcome of justice but at the same time an antecedent of justice because, as the situation becomes stable, expectations increase for a specific treatment (Brockner & Wiesenfeld, 1996). The relationship between control systems and trust have been studied from the point of view of managers, as managers trusting employees can be a real substitute for formal control (Spreitzer & Mishra, 1999). We can consider this aspect of trusting employees as part of the informal control system. We are interested here in the proactive part of the informal system. Aspects of the informal justice displayed by the manager in the process of controlling the employees can be seen also as a part of leadership. Direct leaders are an important reference for trust from the point of view of employees. In a meta-analytic review of trust in leadership, Dirks and Ferrin (2002, p. 613) show that some “leader actions and practices” lead to “trust in leader” and this in turn may create consequences in terms of performance, satisfaction and commitment, among others. We consider the supervisor as a reference point, as we are interested in the informal aspect of control systems – meaning using the system with justice, and how this helps employees to trust their managers (Colquitt & Rodell, 2011). Thus, we hypothesize that:

H4: Informal justice has a positive effect on trust in managers.

H5: Trust in managers has a positive effect on the overall justice perceived.

Methods

Sample and procedures

The participants in our study are working people who were recruited via executive education programs and partnerships with institutions. The only requirements for participating were that they had a minimum of three years' experience of work. Participation in the survey was fully voluntary and no compensation was given to encourage participation. We preserve the anonymity of all the participants. The sample size is 226, with 36% being women and 64% men. The average age of participants is 45 and the average work experience is 14 years. Of the people in the sample, 72% have managerial experience. All the participants have a degree and 60% have a master's degree.

Measures

We use measures of ex ante justice (both formal and informal), goal congruence, ex post justice and trust in managers. We try to use scales that are already used in other research. An exception is ex ante justice, which is a new concept that has not been tested before, and this is presented

in a theoretical paper. In the case of trust, we use measures of two previously used constructs. In the case of goal congruence, we base our scale on an existing measure but we add other aspects – more informal ones that we consider important and that have not been developed in the literature. (A summary of descriptive statistics is shown in Tables 1 and 2.)

Table 1

Descriptive statistics for all the final variables (n = 226)

	No. of items	M (SD)	Alpha
Ex ante formal justice	5	3.41 (1.54)	0.82
Ex ante informal justice	3	3.78 (1.94)	0.94
Goal congruence qualitative	6	3.51 (1.12)	0.96
Goal congruence quantitative	2	3.57 (1.09)	0.81
Trust in management	7	3.46 (1.20)	0.97
Ex post fairness	6	2.96 (1.15)	0.95

Table 2

Correlations among latent variables and scale composites (sample of n = 226)

Construct	1	2	3	4	5	6
Ex ante formal justice	—	0.844	0.637	0.504	0.670	0.783
Ex ante informal justice	0.932	—	0.675	0.509	0.693	0.854
Goal congruence qualitative	0.698	0.709	—	0.771	0.599	0.708
Goal congruence quantitative	0.608	0.589	0.876	—	0.542	0.537
Trust in management	0.720	0.720	0.617	0.617	—	0.779
Ex post fairness	0.863	0.899	0.733	0.631	0.816	—

Note: Correlations below the diagonal are among latent variables. Correlations above the diagonal are among scales created from averaging the items. The reliability of those scales is shown in the last column.

Ex ante justice: Informal and formal justice

We base our scale on the propositions concerning formal and informal justice presented in Cugueró-Escofet and Rosanas (2013), in which they propose five items for formal justice and three items for informal justice. For the survey, we adapt their original wording (which they write in the form of propositions), with a view to how they would be answered by those surveyed, focusing on the actual working situation of those surveyed. We present the exact wording of the items used in Appendix 1. There is a two-factor scale in which we directly carry out a confirmatory factor analysis (CFA), finding a likelihood ratio test, of the model compared to the saturated model of $\chi^2(19) = 29.66$ with $p = 0.0563$. This means that our model is better than the saturated one. The fit indices are $\chi^2/df = 1.56$, RMSEA = 0.05, CFI = 0.992 and TLI = 0.998.

We compare this two-factor scale with a single-factor scale. Our scale has a better fit with our data – with one single factor, $\chi^2(20) = 53.86$, $p = 0.000$, $\chi^2/df = 2.56$, $RMSEA = 0.087$, $CFI = 0.975$ and $TLI = 0.965$.

We allow a correlation between the two factors, these being informal justice and formal justice, and we estimate it to have a value of 0.87. This value is high but we consider both aspects of justice as different because we have already shown that the model with a single factor has a worse fit. Moreover we are going to show in the final model that the effects of the two types of ex ante justice are different, as we have already stated in our hypotheses. Descriptive statistics are in Tables 1 and 2.

Goal congruence

We base our study of goal congruence and the extension of the measure on a paper by Supeli and Creed (2014), which measures perceived goal congruence. We add other aspects to their scale to create a more comprehensive measure aligned to the model proposed by Cugueró-Escofet and Rosanas – they propose overcoming limitations of the existing concepts of goal congruence so that goal congruence has quantitative and qualitative aspects (Cugueró-Escofet & Rosanas, 2015b). The complete scale is shown in Appendix 1.

We consider there to be two types of goal congruence. One of these is more qualitative and it has been taken into account in the Supeli and Creed scale. We add two items to account for a more quantitative approach, as this approach has been the classical one in accounting and management control disciplines. This is consistent with our findings. There is a two-factor scale in which we directly carry out a CFA, finding a likelihood ratio test, of the model compared with the saturated model of $\chi^2(19) = 29.30$, with $p = 0.06$. This means that our model is better than the saturated one. The fit indices are $\chi^2/df = 1.54$, $RMSEA = 0.049$, $CFI = 0.994$ and $TLI = 0.991$.

We compare this two-factor scale with a single-factor scale. Our scale has a better fit with our data – with one single factor, $\chi^2(20) = 51.55$, $p = 0.000$, $\chi^2/df = 2.57$, $RMSEA = 0.084$, $CFI = 0.982$ and $TLI = 0.975$.

We allow a correlation between the two factors, these being goal congruence qualitative and goal congruence quantitative, and we estimate it to be 0.86. Descriptive statistics are in Tables 1 and 2.

Trust in managers

The measure of trust in managers was created using trustworthiness and trust items that appeared in Robinson (1996) and Spreitzer and Mishra (1999). The results of a CFA for our measurement model are $\chi^2(14) = 37.03$, $\chi^2/df = 2.66$ and $p = 0.0007$. The fit indices are $RMSEA = 0.08$, $TLI = 0.983$ and $CFI = 0.989$. Descriptive statistics of this construct are in Tables 1 and 2.

Ex post fairness

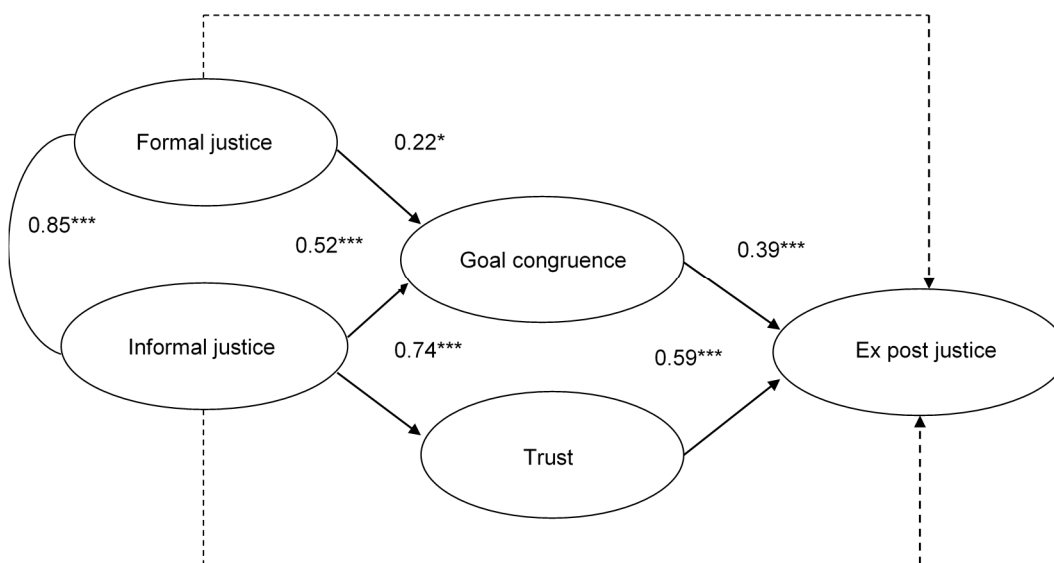
The measure of ex post fairness is based on the measure of overall fairness in an organization that was used in Ambrose and Schminke (2009). The scale is reliable in our dataset, and it is measured using a Chronbach alpha of 0.95. The CFA in our dataset has inconsistent results: $\chi^2(9) = 52.79$; $\chi^2/9 = 5.86$ and $p = 0.000$. The fit indices are $RMSEA = 0.147$, $CFI = 0.968$ and $TLI = 0.947$. Summary statistics are shown in Tables 1 and 2.

Results

Our hypotheses are tested together using a single hybrid model (structural equation model). We perform path analysis and use the latent measurement constructs at the same time. This allows us to test an overall comprehensive model including all the measurement models together with all the hypothesized paths. We proceed by testing the overall model and all the hypotheses at the same time. We test several models with partial and complete mediations. (See the partial mediations in Figure 2, including the direct effects of formal and informal justice on ex post justice.)

Figure 2

Model of informal justice, formal justice, trust in managerial goal congruence and fairness



We show the results and the significance of all the paths hypothesized in Figure 2. The results are confirmed in our data set for all the hypotheses. For the goodness-of-fit indicators of the models we test, we compare a total mediation model with the partial mediation model. We test two partial mediation models to see whether there is total mediation of goal congruence for ex ante justice, for both types of justice or only for one of the two. The complete mediation model has the following fit indices: $\chi^2(426) = 762.81$, $p = 0.000$, $RMSEA = 0.059$, $CFI = 0.952$ and $TLI = 0.954$. Performing likelihood ratio tests comparing total mediation and several partial mediations, we reach the conclusion that the direct paths are not significant in our data set, so the model with direct paths is worse. This is not the same for both partial mediations, as the direct effects of formal justice are less significant than is the case for informal justice. This is promising but of course we should be aware that the two models are not really different in terms of fit indices.

In general, high levels of ex ante justice can create greater levels of goal congruence, and the informal aspect of justice in MCS is the aspect that drives greater trust in managers. We also confirmed that there are two generators of greater ex post justice. First, greater levels of trust in managers generate greater perceptions of overall ex post justice. Second, goal congruence has a positive effect in generating ex post justice. These results fill a gap in the literature that explained the role of MCS and justice, the literature that examined the role between trust and justice, and the literature that differentiated between ex ante and ex post justice.

Discussion, managerial implications and limitations

In this paper we have tried to understand the role of trust and justice in management control systems to generate fairness perceptions. In the literature, both trust and justice have been seen as important for making people pursue common goals. Justice is important because it is linked with how rewards are perceived, with whether these are seen as appropriate or not. In turn this has consequences in terms of the dysfunctional behaviors and undesired consequences that injustice may bring. Justice therefore is crucial to attain goal congruence. Trust is important because it is a consequence of justice in terms of MCS use and at the same time it generates fairness perceptions, so it is an antecedent of justice. Both roles of trust and justice, those of antecedent and consequence, have been examined together in the literature but they have not been included at the same time in a more comprehensive model separating ex ante and ex post justice, and with the explicit inclusion of the two types of ex ante justice associated with management control system design and use (formal and informal, respectively).

The double role of trust and the specific link with one aspect of justice – namely, the informal aspect – adds great importance to the managerial control function, which cannot be entrusted to the system. Therefore, this makes managers important for companies that seek to use systems in an appropriate and thus ethical way. Managers are made aware of the importance of delegating decision-making to others, as an MCS implies using the system justly and learning to be just. This leads to important consequences in terms of determining that an MCS is suitable: increasing goal congruence and, at the same time, increasing trust in the manager, both of which have implications for how fairness is generated for people eventually. In the end, virtuous circles are created that will reinforce ex ante justice, and future designs and uses of MCS are adapted.

We think that the approach taken by management control scholars – particularly the one based on the classical approach – already includes a concept of trust and fairness. However, both of these have not been contemplated, as fairness has been seen as mainly controllability, and trust as based on common sense. Trust and fairness account for the importance of the informal aspects of MCS because a focus only on improving the formal parts may mean there is too much focus on incentives based on measurable variables, which are not flexible enough to be used realistically.

Thus, here we enhance aspects of the virtue of justice, which helps to generate long-term fairness. This informal dimension of MCS is also particularly suitable for generating long-term fairness through trust in authority, so that authority exists because the person that has it is perceived as just. This confirms in part the framework that began with Cugueró-Escofet and Rosanas (2013), in which the authors show that informal justice is a sufficient condition in the dynamics of a control system: it preserves formal justice if this exists or, if there is no formal justice, then informal justice helps in the development toward formal justice. Here we have not used the whole framework but have tested in greater detail the four states of goal congruence explained in Cugueró-Escofet and Rosanas (2013). Justice, therefore, is a starting point for developing other virtues, thus promoting an ethical development of managers that at the same time helps to fulfill the firm's mission.

Not surprisingly, the inverse is also true: informal injustice is always a sufficient condition for a negative evolution of the system. No matter how just the formal system is, the repeated application of informal injustice makes the system deteriorate in such a way that it will go from perverse to minimum goal congruence. Of course, if the system is formally unjust from the beginning, informal injustice will make it remain that way.

There are some limitations in our study that can serve as a starting point for future research. First, future research could look into whether our model also holds when the counterproductive effects of injustice are considered, and it could study the extent to which this is the case for the several variables that we have found crucial: trust, ex ante justice and goal congruence. Second, future research could include all types of goal congruence so that, apart from distinguishing between the qualitative and the quantitative, it could find ways to measure the four states proposed in the model in Cugueró-Escofet and Rosanas (2013). Third, future research could look into other ways of measuring trust, while also taking trust in employees into account because this has also been shown to be a substitute for closer control by managers. And finally, it is important to understand other virtues that can be considered within the framework of justice – for instance, prudence, as prudence has been crucial for judging courses of action, deciding between options, and avoiding managerial risks.

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Appendix

Items for measuring goal congruence and ex ante justice (formal and informal)

Formal justice

In my organization the goals are set in a way that integrates individual goals.

In my organization resources and responsibilities are distributed among subunits and evaluated according to the real achievements of each subunit and the competences of its staff. The rules of the game are explicitly established ex ante.

In my organization managers are evaluated only on elements over which they have some influence.

In my organization there is a minimum reward to be received by all participants, and there is a limited difference between the highest and lowest salaries.

In my organization there is a formal way to remedy injustices, and there are ways to improve the system design to make it more just.

Informal justice

Here, managers care about the justice of their decisions when using the organization's management control systems.

In this place managers propose changes for management control systems to improve them in terms of correcting for future injustice.

Here it is important to make explicit any difference between employees in terms of reward and recognition; attempts should be made to base these on well-argued criteria so as to avoid arbitrariness.

Goal congruence (Supeli and Creed, 2014)

My personal goals match the goals of this organization.

Achieving this organization's goals also means attaining my personal goals.

My personal goals are consistent with the goals of this organization.

The goals of this organization are similar to my work-related goals.

My personal goals are compatible with this organization's goals.

This organization's goals give me the opportunity to achieve my personal goals.

Goal congruence (added items)

I am willing to lose some personal payoffs if the company makes bigger profits.

I make decisions based on what is best for the company and me economically.

Decisions are aligned when I calculate my payoffs and the benefits for the company and both are positive.

My personal goals are basically getting positive results for me and the company.

I always see achieving results for the company as achieving results personally.

The organization's long-term goals are compatible with my own long-term goals.