

Institutional Trust as a Multilevel Construct

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ABSTRACT

Institutional Trust as a Multilevel Construct

David Gearey

This thesis assesses individual perceptions of factors at three organizational levels of analysis (individual, interpersonal, and collective) in terms of their effects on institutional trust among organizational members (i.e. the degree to which organizational members perceive that the organization is predictable and benevolent). Past research is drawn upon to develop testable hypotheses concerning several organizational factors which are likely to be predictors of institutional trust in organizations. These include personal proclivity to trust and organizational identification at the individual level, perceptions of appropriate supervisory role enactment and perceptions of interference with performance or rewards at the interpersonal level, and perceptions of procedural and interactional justice as well as organizational legitimacy at the collective level. Faculty members and graduate students at a large university were studied using a survey methodology in order to test the hypotheses. Ultimately, organizational identification, perceptions of procedural justice and perceptions of organizational legitimacy were found to be significant predictors of institutional trust among faculty members, while only perceived organizational legitimacy is significant as a predictor among students. Implications for practitioners as well as for future research are discussed.

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INTRODUCTION

Over the past several years, the study of trust in organizational theory has gained significantly in importance, as attested to by the increased attention paid to it by researchers. Even as early as the 1990s, there had been a significant increase in the number of journal articles published on the subject of trust (Kipnis, 1996). The recent, continuing interest in trust is perhaps attributable in part to the large number of corporate and political scandals which have recently received so much media attention, such as the recent bank scandals which have been so widely publicized (e.g. Trovato, 2010), the Enron (Prentice, 2003) and Worldcom (Ackman, 2005) scandals, and public reactions to companies such as Nike who use child labour (Grein and Gould, 2007). Despite the added attention recently paid to the subject, however, there are certain aspects of trust and the mechanisms related to its development, maintenance, and destruction which certain researchers have pointed out as being relatively neglected. One such area is that of institutional trust (Maguire and Phillips, 2008), which deals with the feelings of trust held by individuals for organizations, as opposed to for other individuals. The purpose of this thesis will be to examine the conditions affecting institutional trust in organizations. This will be done in response to the calls of certain researchers (e.g. Maguire and Phillips, 2008; McEvily et al, 2003) for more research highlighting the bases upon which trust of different kinds (not just interpersonal trust) are founded. Specifically, institutional trust will be examined as a construct affected by factors at the individual, interpersonal, and collective levels in organizations. The thesis will begin with a review of the literature on interpersonal trust, since this area of research has so importantly informed the current thinking on institutional trust. This will be followed by a review of institutional trust. Theory development and research hypotheses will then be presented, drawing on literature from several disciplines including psychology, role theory, and

institutional theory. The research methods and analyses used to assess the thesis's hypotheses will then be presented, and the conclusions drawn from these analyses will be discussed.

For the purposes of this thesis, institutional trust is viewed as an individual's trust in a specific organization. Some theorists conceptualize institutional trust as an even higher-level construct than this (e.g. trust in the investment banking system in general), and use the term 'organizational trust' to refer to trust in specific organizations. Nevertheless, this thesis has adopted the conceptualization used by Maguire and Phillips (2008), which uses the term 'institutional' to describe this form of trust.

INTERPERSONAL TRUST: A REVIEW

Although the focus of this thesis is on institutional trust (discussed below), Maguire and Phillips (2008) have pointed out that since there is not currently an abundant body of research extant on that subject, it is useful to be familiar with the concepts designed for interpersonal trust, since it is from interpersonal trust that the thinking on institutional trust has evolved. To that end, some of the important thinking on interpersonal trust will be reviewed here.

Trust has been shown to be of great value to organizations. One of the most important benefits of trust is that it facilitates action during times of crisis. This is because, during crises, ambiguity is higher and dependence on others is increased (Webb, 1996). During such periods, if employees did not trust superiors, managers would have to constantly explain and justify their decisions, and much valuable time would be wasted, possibly entailing negative consequences for organizational effectiveness.

In addition to the importance of trust during times of crisis, it is also beneficial for organizational functioning in general. Putnam (1992) points out that trust facilitates cooperation

between organizational members (which incidentally, also facilitates further trust development). Trust is also necessary for subordinates to fully accept and defer to the decisions made by organizational authority figures (Tyler, 1998; Tyler and DeGoey, 1996): without it, high levels of monitoring and coercion would be necessary, which would negatively impact motivation, as well as incur unnecessary expenses (Pfeffer, 1992). Trust also has benefits in terms of conflict management, effective negotiation skills, job satisfaction levels, etc (McEvily et al, 2003). Trust is also important at the interorganizational level, as it can reduce transaction costs (Mishra, 1996), facilitate the advancement of certain industries and fields (Zucker et al, 1996) and establish 'ground rules' for competition between companies (Gambetta, 1988).

Despite its common use in everyday language, trust is a concept which defies simple definition, although most definitions comprise common conceptual threads. One such conceptual thread is risk. In questions of trust between two or more people or groups, there is always an implicit possibility that one party will act to take advantage of another. The definition of trust presented by Cummings and Bromiley (1996) for example, stipulates that trust involves the assumption that parties in trust-based relationships or transactions will 'not take excessive advantage of another [party] even when the opportunity is available (p. 303).' Similarly, Gambetta (1988) posits that trusting someone means believing that given the opportunity, that person (the trusted party) will not take advantage of the 'truster.' In addition, Coleman (1990) defines trust simply as the 'incorporation of risk into the decision of whether or not to engage in an action' (p.91). The risk of being taken advantage of is, therefore, an element inherent in any question on trust.

Given the importance of risk in trust questions, vulnerability to said risk is also a necessary condition for trust. Myerson et al (1996), for instance, describe trust as a mechanism

by which risk and vulnerability (among other things) are managed in social contexts. In addition, Baier (1986) has defined trust as ‘accepted vulnerability to another’s possible but not expected ill will (or lack of goodwill) toward one’ (p. 235). The importance of vulnerability to the concept of trust is highlighted by the fact that, in organizations, relationships of vulnerability are often characterized by imbalance in favour of management figures. In other words, employees are generally much more vulnerable to risk than managers or supervisors, which can exacerbate the effects of trust problems between them and authority figures: that is, employees are often more sensitive to trust-related issues than their managers, since employees feel that they are more vulnerable to being taken advantage of by management than management is to being taken advantage of by them (Kramer, 1994).

At the level of institutional trust, risk and vulnerability are likely to be even more important constructs than at the interpersonal level, especially for non-managerial employees. This is because such employees can be thought of as risking much more than the organization itself in the relationship between the two. If an employee fails in his or her tasks, the worst thing that could happen for the organization would be that an organizational objective may not be achieved. If the employee is terminated, he or she may lose their livelihood, they may be unable to support their families, etc.

Beyond the assumption that a trusting party will accept vulnerability to a trusted party, there is generally also an assumption that the trusting party will gain from transactions with the trusted party. Burt and Knez (1996) describe the importance of trust in relationships for which no written contracts can be drawn up, yet both parties still expect to receive some form of benefit from the other. Cummings and Bromiley’s (1996) definition of trust likewise stipulates that, in any transaction involving trust, an important defining characteristic is a belief that other parties

will act honestly and in accordance with any formally stated or implicitly understood expectations to benefit the 'truster'. At the institutional level, employees likely assume that they will be compensated in one or more ways for their time spent in the organization: otherwise, it is unlikely that they would continue to work there.

Trust, therefore, involves the risk of damaging behaviour on the part of others in a relationship, vulnerability to that risk, and the expectation that some benefit will be experienced as a result of the relationship. Ultimately it leads to a decision to engage in some kind of transactional behaviour with another individual or with other individuals. A comprehensive definition of trust might be, then, an estimation that another party will act with goodwill for the benefit of the trusting party, despite the fact that they have the opportunity to do otherwise, and that if they did otherwise, the consequences would be real and harmful for the trusting party. In short, trust involves an expectation of goodwill or benevolence despite the risk of being taken advantage of.

Another concept which characterizes much of the literature on trust is that of predictability. Myerson et al (1996) for instance, have stated that unpredictable (idiosyncratic) behaviour is likely to lead to reduced trust. Zucker (1986) and Maguire and Phillips (2008) both support this view. In addition, many researchers have made predictability an important dimension in terms of measuring trust between organizations. Zaheer et al (1998), for instance, define trust as the 'expectation that an actor can be relied on to fulfill obligations in a predictable manner, and will act fairly when the possibility for opportunism is present' (p.143). This definition incorporates both benevolence and predictability, as does that of Maguire and Phillips (2008). Young-Ybarra and Wiersema (1999) also consider predictability as one of three key dimensions of trust, the other two being dependability and faith. Other important characteristics

of trust include that it can be developed and maintained on one or more of several different bases such as calculus, knowledge, or identification, which will be discussed in more detail below (Lewicki and Bunker, 1996; Maguire and Phillips, 2008), that it is difficult to build and easy to destroy (Tyler and Kramer, 1996) and that it is difficult to repair once undermined (Gillespie and Dietz, 2009). Predictability is likely to be important at the level of institutional trust as well. If an employee comes in to work every day not knowing whether he or she will be fired, not knowing if organizational procedures might randomly change for no reason, or not knowing if organizational ethics policies will continue to protect him or her from unfair treatment from managers, then that employee is unlikely to trust the organization.

It is also important to note the suggestion that has been made by several researchers (e.g. Lewicki and Bunker, 1996; Rousseau et al, 1998; Sheppard and Tuchinsky, 1996) that trust tends to change form over time. Perhaps the most complete breakdown of how trust changes over time, and of the bases upon which trust is founded, has been provided by Lewicki and Bunker (1996). Early on in interpersonal relationships, according to this framework, trust (called ‘calculus-based trust’, at this point) is based largely on the perception that there will be negative consequences for the trustee if they act untrustworthily, and also on the perception that the possible positive consequences of trusting will outweigh the possible negative consequences. The second major form of trust, ‘knowledge-based trust’ is founded on predictability; one has developed the beginnings of a relationship with the trustee over time, and has come to be reasonably confident that he, she, or they will behave the same way that they always have. The third and most advanced form of trust, known as ‘identification-based trust’ is founded upon identification with the trustee, and the belief that one’s interests are the same as those of the trustee. It is interesting to note that these bases of trust represent a shift from a focus on the

individual trustor to a larger group. That is, it is no longer a question of one trusting person's interests being served by accepting vulnerability in a relationship: it becomes a question of one person trusting that others in a group will act in a way that will benefit the entire collective. This further highlights the importance of level considerations in trust-related questions, which will be discussed in greater detail in a later section.

Based on the above discussion, the definition of trust adopted for the purposes of this thesis will be that of Maguire and Phillips, which describes trust as 'the expectation that some other will act with predictability and benevolence' (p.374). This incorporates the most important dimensions of trust as identified by researchers.

INSTITUTIONAL TRUST

The definition of trust, cited above, synthesized by Maguire and Phillips (2008) has been extended by them to apply to organizations as a whole, since, as the authors point out, there is a limited amount of literature on institutional trust at this point in time, and the optimal thing to do is to simply apply concepts created for interpersonal trust to organizations. Institutional trust refers, therefore, to the expectation, held by an individual, that an organization will act predictably and with benevolence toward them (Maguire and Phillips, 2008).

Institutional trust is a concept on which there has not been an extensive amount of work done to date, despite the fact that McEvily et al (2003) have pointed out the need for more research on trust as a construct affecting 'the character and capacity of a network of stable and ongoing interaction patterns' such as organizations, rather than on the one-to-one interactions of individuals (p.100). This current lack of research is well illustrated by the fact that several individuals (all of whom are faculty members at a university) who were contacted about

participation in the current project sent messages to the author stating that it is not possible to trust an organization, only individuals within an organization. What work has been done, however, attests to the concept's importance. Rousseau et al (1998) for instance, demonstrated the possibility that institutional trust in organizations could facilitate the development of interpersonal trust as well in those organizations. In addition, the authors suggested that higher levels of institutional trust can help individuals in organizations to make the transition from the more basic forms of trust (such as the calculus- or knowledge- based trust commented upon by Lewicki and Bunker [1996]) to more advanced forms of trust (such as the identification-based form of trust).

Despite the current lack of literature which deals explicitly with the topic of institutional trust, further research on the subject can be profitably informed by an examination of other relevant literatures. One such literature is that of economics, since it focuses on the different types of interactions which occur between individuals and between organizations, as well as the nuances which categorize those interactions.

From an economic perspective, institutional trust can be seen as one factor affecting the way an individual (i.e. an employee) perceives the ongoing, transactional relationship between him or herself and the organization in which he or she is employed (the relationship can be characterized as transactional since both employer and employee benefit in certain ways from interacting with each other, and without those benefits, the relationship would be dissolved). This line of thinking is related to the ideas of Hardin (2006), who conceptualized two major forms of trust. The first is the trust that eventually results from the development of 'thick relationships' (i.e. interpersonal trust that develops based on repeated interactions and on the relationships that develop between individuals). The second is impersonal trust that develops based on perceptions

of the incentives of the other party to behave in a certain way, rather than on close relationships. Hardin (2006) uses the example of trust in a political leader (or governing body) to illustrate this form of trust. An individual citizen has no personal relationship to speak of with political leaders: however, trust develops because there is the perception that political leaders or groups have more to gain from acting in a trustworthy manner than from acting untrustworthily. From this perspective, the decision to trust or not becomes a purely economic calculation (similar to the calculus-based form of trust conceptualized by Lewicki and Bunker, 1996).

This economic conceptualization of trust has also been informed by the work of theorists such as Williamson (1981), who focused on transactions between organizations as the main unit of interest in economic analysis. Specifically, Williamson views the main problems that must be addressed in transactional relationships as being 1) the uncertainty associated with preventing opportunistic behaviour on the part of another party, and 2) the costs (i.e. transaction costs) associated with preventing such behaviours. Indeed, according to Williamson, adapting effectively to uncertainty is the basic problem with which organizations must contend (1981, pp. 568-569). Trust therefore becomes a salient issue, since it is so central to the resolution of questions of uncertainty (e.g. Rotter, 1980). Importantly, Williamson (1981) points out that formal contracts cannot be drawn up for all types of contracts within and between organizations. Thus, in order to reduce uncertainty, organizations must often operate on certain assumptions about how other organizations will behave. This is an example of the use of bounded rationality. Individuals are 'boundedly rational' when they make the best possible decisions using available – but incomplete – information (Simon, 1995). Since employees cannot predict with certainty how they will be treated by their organizations, they can only decide whether to trust them or not based on logical assumptions about the orientation of the incentives of the organization. An

employee might decide to trust that any personal information that he gives the organization will remain confidential, for example, because he knows that there is legal action that he could bring against the organization should it violate that confidentiality. The organization, therefore, has an incentive to behave in a trustworthy manner. Over time, this assumption will be either confirmed or disconfirmed. Thus, bounded rationality as it applies to institutional trust involves 'educated guesses' on the part of employees about the behaviour of organizations, which, over time and through repeated interactions, come to be taken for granted.

Bounded rationality is a concept which relates well to that of the psychological contract, which refers to 'employees' perceptions of what they owe to their employers and what their employers owe to them' (Robinson, 1996, p. 574). As such, psychological contracts are unwritten (as opposed to being formally codified) sets of assumptions that employees develop (in a boundedly rational way, since they lack comprehensive information) in order to understand the relationship that they have with their employing organization. Thus, the relationship of the idea of the psychological contract to earlier, economic thinking on uncertainty-reduction in transactional relationships is clear.

As in the transaction cost approach to economic analysis, psychological contracts involve 'taken-for-granted' assumptions about the relationship between an employee and the employing organization, which are subject to revision depending on the actions of that organization. Thus, they are subjective and exist in a state of flux (Robinson, 1996), and are likely to be affected by a variety of organizational actors (such as managers and other authority figures). Nevertheless, the psychological contract, as it has been studied empirically, generally refers to an employee's set of perceptions about what his or her relationship with an organization as a whole entails, despite the fact that this expectation can be impacted by dyadic interactions. This highlights the

important link between institutional trust and psychological contracts: they both focus on the relationship and interactions between an individual and an organization.

The relationship between trust and psychological contracts has been fairly well documented, and in at least two studies, the trust that was measured can be classified as institutional in nature, since trust was not measured as a construct that was felt in relation to a specific individual. This is despite the fact that the trust that was measured was never actually referred to, explicitly, as being institutional in nature. Rather, trust in an 'employer' was what was assessed, as can be seen from an examination of the measures used for the studies. The first study, carried out by Robinson (1996) examined the relationship between employee perceptions of psychological contract breach and trust in an organization. Perhaps unsurprisingly, it was found that employees who felt that the organization had breached the psychological contract also felt less trust towards the organization. The second study, carried out by Rigotti (2009) resulted in complementary findings: namely, that the presence of high levels of trust in an employer was negatively related to the likelihood of an employee perceiving that the psychological contract had been breached.

The results of these studies demonstrate how the presence or absence of institutional trust is determined, to a great extent, by whether or not employees' assumptions about how an organization is 'supposed' to behave are confirmed or denied by their experiences in interacting with that organization. Thus, when the behaviour of organized systems is predictable by individuals, those individuals are more likely to trust that system. Thus, the inclusion of predictability by Maguire and Phillips (2008) as one of the principal dimensions of trust seems to be well justified, in keeping with the economic and psychological contract literatures as they relate to trust.

Nevertheless, predictability alone is insufficient for conceptualizing institutional trust theoretically. This is a point which has been well illustrated by Mayer et al (2006). According to the authors, there has been a trend in the trust literature to equate predictability with trust itself. However, 'to equate the two is to suggest that a party who can be expected to consistently ignore the needs of others and act in a self-interested fashion is therefore trusted, because the party is predictable' (p.87). This idea would clearly violate all of the work which has been done on trust in the past, regardless of the specific type of trust in question. Among the most important elements which have been identified as being of importance to questions of trust which are not addressed by predictability alone include the willingness to be vulnerable to risk (e.g. Baier, 1986), the expectation to benefit from interactions with another party (e.g. Burt and Knez, 1996), and the expectation that another party will act honestly (e.g. Cummings and Bromiley, 1996).

In order to address this issue in fully conceptualizing institutional trust, inferences can be drawn from the area of social exchange theory. The main premise of social exchange theory is that when one individual provides another with a benefit of some kind, an obligation is felt by the receiving party to respond in the same way (Eby et al, 2005). Once again, the overlap between this area of research and that of psychological contracts is clear. Of special importance is the finding, from social exchange theory research, that when one party provides a benefit to another party, that benefit will be more highly valued if it was provided discretionarily on the part of the providing party: that is, the provider was under no formal pressure, such as that which might be exercised by a written contract, to provide the benefit (Eby et al, 2005). This has been demonstrated by several studies. For instance, Eisenberger et al (1986) found that perceived organizational support (i.e. employee perceptions that their organization is committed to and values them) is negatively related to absenteeism. This was found to be because organizational

support positively affected work attitudes, such as commitment. These work attitudes, in turn, have been found to be associated with higher trust in management (Cook and Wall, 1980). Other studies which have addressed the relationship between social exchanges and important organizational outcomes include Liden et al (1993), and Moorman (1991), which showed that effective exchanges between employees and organizations could improve leader-subordinate relationships and increase the likelihood of OCBs on the part of employees, respectively. In both cases, although trust was not measured specifically, its development was cited as a likely side effect of perceptions of exchanges that were significantly beneficial to employees (i.e. exchanges that were characterized by ‘benevolence’). Although these studies focused on interpersonal trust, it seems reasonable to assume that the presence of benevolence would also be required for the development of institutional trust, since it is still based on individual perceptions of an exchange relationship, albeit with an organization rather than with another individual. Thus, it would theoretically be possible for an organization to act with complete predictability, and even fulfill all of its formal contractual obligations to employees, and yet if it failed to communicate to employees that it valued them and was committed to them, those employees might still not feel trust for it. The inclusion of benevolence by Maguire and Phillips (2008) as the second major dimension of institutional trust, therefore, also seems very appropriate. Thus, this will be the definition of the concept that will be used for the purposes of this thesis. Therefore, institutional trust is defined here as an individual’s expectation that the organization of which he or she is a member will act with benevolence and predictability.

In the following section, literature from relevant disciplines will be examined, and hypotheses will be presented regarding institutional trust at different organizational levels. Trust

is modeled as an individual perception, which can be predicted by other individual perceptions of constructs that exist at different organizational levels.

THEORY AND HYPOTHESIS DEVELOPMENT

Individual Level

Proclivity to Trust

The concepts of interest to this thesis at the individual level are affected by the internal mental and emotional processes that govern the behaviour of organizational members. Thus, this section will draw on the psychological literature for insights into the development of institutional trust.

According to Rushton (1980) and Staub (1978), individuals are oriented toward society in a certain way based on psychological and/or moral development. As such, the likelihood of an individual to trust another person can be the result of factors such as parental influences, education, and religious background. Individual attachment styles developed during infancy, for instance (e.g. secure, ambivalent, or avoidant) have been shown to influence trust later in life. Specifically, individuals who display avoidant attachment to important people in their lives are less likely to trust (Feeney and Collins, 2001). Similarly, individuals who display narcissistic personality traits (which, again, often begin to develop during early childhood as a result of ‘parental rejection’) tend to trust less later on in life (Kernberg, 1980). In addition to purely parental influences, religious background and education has been shown to influence an individual’s proclivity to trust. For instance, it has been found that, in general, practitioners of Catholicism tend to be more inclined to display not only interpersonal trust, but also trust in governmental entities such as the military and the police (Branas-Garza et al, 2009).

Such conditioning experiences become very important during times of high uncertainty or crisis. During such times, individuals tend to abandon any 'appropriate' behaviours they may have learned regarding whatever situation they may find themselves in, and act instead as they have been conditioned to over their lifespan: that is, based on personal characteristics and disposition which are a result of psychological development (Rotter, 1980). Therefore, in an organizational context, individual conditioning and development are likely to play especially important roles in terms of how likely an individual is to feel trust during times of organizational uncertainty. This is very meaningful for organizational outcomes, since trust is perhaps most important during times of uncertainty. This is because trust is necessary for high levels of cooperation (Putnam, 1992), as well as for the efficient diffusion of information and decisions down the hierarchical 'chain of command,' and for the subsequent implementation of those decisions (Tyler and DeGoey, 1996).

Although most researchers agree that individual characteristics are insufficient to fully explain when and why individuals will feel trust and engage in trusting behaviour (Tyler and Kramer, 1996), there has nevertheless been a significant amount of work done on the topic of dispositional tendencies and their implications for trust. Much of this work involves individual reactions to uncertainty. Good (1988), for instance, has posited that individuals form 'theories' about the trustworthiness of others in general based on past experiences. If an individual experiences many instances of betrayal over the course of their development, for instance, that person is likely to develop a theory stating that people in general are untrustworthy. In times of uncertainty, people will selectively ignore information which would disconfirm their established theories (Good, 1988). This mechanism can lead people to have unrealistic expectations, either positive or negative, about how others will act towards them (Taylor and Brown, 1988;

Weinstein, 1980). Someone who is faced with overwhelming evidence that a co-worker is untrustworthy, for instance, might ignore said evidence during times of uncertainty in order to preserve established theories regarding trustworthiness. This would provide the untrustworthy co-worker with opportunities to take advantage of the truster. In short, people can be more or less trusting based solely on dispositional tendencies.

Dispositional tendencies can also be important for the interpretation of other people's actions 'after the fact'. Kramer (1994) discusses the importance of causal attributions that individuals make about what the behaviour of others is supposed to mean. Based on assumptions of trustworthiness made in advance about people in general, seemingly untrustworthy behaviour on the part of someone else can be interpreted in multiple ways. An individual in an organization, for instance, who had been promised a pay-raise which was subsequently denied by his or her manager, might interpret this to mean that the manager in question is a liar. Conversely, if the employee has a high proclivity to trust, he or she might rationalize the denied pay-raise by thinking that the manager wanted to give him or her the raise, but was unable to do so due to economic conditions beyond anyone's control. From the perspective of institutional trust, if an employee with a low proclivity to trust found out that his or her organization had been using child labour in a foreign country, he or she might interpret this to mean that the organization is morally bankrupt. An individual with a high proclivity to trust might rationalize the discovery by convincing him or herself that child labour is a perfectly natural phenomenon in the country in question, that the organization would have had no choice but to engage in such activities if it wanted to remain active in that country, and that the organization is treating the workers well.

What is important, in such situations, for trust and trusting behaviour to continue is that any behavioural attributions remain ‘non-personalistic’ (Bies and Tripp, 1996). In other words, as long as any potentially untrustworthy behaviour is seen as not actually being the other person’s (or organization’s) fault, trust will remain undamaged.

In sum, the psychological development and resulting dispositional and attributional tendencies of individuals plays an important part in how trusting they are. Recent research (e.g. Den Hartod, 2009; Johnson, 2009) has confirmed that psychological differences do make an important difference to individual’s tendencies to trust, despite the fact that (as mentioned above) such differences cannot explain trust in all cases. It is logical to surmise, therefore, that certain individuals are simply more likely to feel high levels of institutional trust than others, based on individual differences resulting from psychological development. For the purposes of this thesis, an individual’s likelihood to trust, based only on individual psychological differences, will be referred to as ‘personal proclivity to trust.’

Hypothesis 1a: Higher personal proclivity to trust will be predict higher levels of institutional trust.

Organizational Identification

A sociological concept which has been shown to be important to the development and maintenance of institutional trust is that of organizational identity. According to Whetten (2006), the identity of an organization refers to a set of characteristics which are thought to be central, enduring, and distinctive of the organization in question. Whetten (2006) provides a set of questions that can be asked in regard to any particular organizational characteristic to determine if, in fact, it is important to the identity of the organization. They include the following: ‘Does

this attribute reflect the organization's distinctive set of preferences/commitments? Would it be considered an organization-specific attribute? Is it a positive distinction? Is it an essential distinction?' (Whetten, 2006, p.222).

Organizational identity has been referred to by Scott and Lane (2000) as a 'collective frame within which organizational participants make sense of their world' (p.43). Thus, an organization's identity depends in large part on the organizational members to which it is communicated. It cannot be defined simply as a set of characteristics that define an organization: rather, it is a set of meanings that are associated with an organization upon which organizational members agree. Brown (2006) states that organizational identity results from 'stories about organizations that actors author in their efforts to understand, or make sense of, the collective entities with which they identify' (p.734). Thus, the concept refers to characteristics as well as to a specific process of social interaction. Thus, as Maguire and Phillips (2008) have pointed out, there is room in an organization's identity for 'multiple narratives' and different interpretations of an organization's nature and history (p.379).

Organizational identity can have important implications and outcomes at the organizational level. For instance, the concept of identity can be profitably used to achieve competitive advantages in certain cases. This is reflected in the ideas of Mintzberg (1978) who identifies three major types or organizational strategies, including strategies as plans (i.e. an organization is defined purely by its objectives), strategies as positions (i.e. objectives are developed only once certain important organizational characteristics have been defined, but the achievement of objectives is still the primary reason for an organization's existence), and strategies as perspectives (i.e. objectives are secondary to important organizational characteristics). It is this third strategic perspective which is most intimately related to identity:

the ‘what’ aspect of the organization is considered more important than the ‘why’ or ‘how’ aspects (Fairholm and Card, 2009). Emphasizing the identity of an organization can have benefits in terms of fostering legitimacy, and garnering support from important stakeholders (e.g. Selznick, 1957), which would not otherwise be available.

When considering organizational identity as it relates to individual organizational members, however, it becomes important to distinguish the term ‘identity’ from the term ‘identification.’ The term identity is essentially self-referential: it represents an answer to the question ‘who am I,’ and can meaningfully be applied to either organizations or individuals (Ashforth et al, 2008). Identity can be social in that individuals can draw conclusions about who they are based on their memberships in certain groups (Haslam and Ellemers, 2005), but it is ultimately a perception held in reference to the self. Identification refers more to the ‘perception of oneness or belongingness’ to a collective (Ashforth and Mael, 1989, p.21). Such identification becomes particularly important during times of uncertainty in individuals’ lives (Ashforth et al, 2008). As such, it has both cognitive and emotional components, such as the degree to which an individual cares about an organization and internalizes its goals, the degree to which an individual ‘believes in’ an organization and feels that they possess the knowledge, skills, and abilities necessary for membership in that organization, etc (Ashforth et al, 2008). According to Ashforth et al (2008), the main outcome of importance which is associated with a strong individual-level sense of organizational identification is enhanced organizational commitment (as well as increased cooperation and self-esteem). In addition, Ashforth (2001) highlights several other individual-level benefits of identifying strongly with an organization, including being able to express one’s valued identities meaningfully, being able to maintain a sense of wholeness and coherence (in terms of identity) over time, etc. Finally, stronger organizational

identification has been linked with greater employee self-esteem and perceptions of meaningfulness associated with work (e.g. Cheney, 1983; Dutton et al, 1994). All of these outcomes can ultimately have an impact on organizational effectiveness.

The relationship of organizational identification to trust has not been studied in depth, although the positive effect that identifying with an organization can have for employee attitudes (such as commitment, discussed above) suggests that the two constructs are likely to be related. One specific finding from the literature has been that employees who identify strongly with organizations are more likely to internalize the goals of the organizations (e.g. Cheney, 1983). Goal acceptance has also been shown to be positively related to trust (e.g. Locke and Latham, 1991). In addition, one study conducted by Maguire and Phillips (2008), has explicitly examined the relationship between organizational identification and institutional trust. In that study, the attitudes of employees who ‘survived’ a merger involving their company were assessed. It was found that institutional trust had been negatively impacted by the merger, and that this had been caused by a loss of identification with the organization, since the identity of the company had changed as a result of the merger. Institutional trust, therefore, can be based at least in part on identification with an organization. Based on these findings, organizational identification and institutional trust are hypothesized to be related in this study.

Hypothesis 1b: Higher individual identification with an organization will predict higher levels of institutional trust.

Interpersonal Level

Role Enactment

At the interpersonal level, it is logical to assume that institutional trust is affected by the dyadic relationship between an employee and his or her manager (i.e. trust is affected by relational factors). This is because employees often draw inferences about what they can expect from the company as a whole by how their managers treat them personally (Bies and Tripp, 1996). Very often, these inferences are characterized by the evaluations of the appropriateness with which managers carry out the activities associated with their positions (Myerson et al, 1996). This section, therefore, will draw on the area of role theory for insights into how manager-subordinate relationships can affect institutional trust.

Role theory is an area of research dealing with issues such as characteristic behaviours (Burt, 1982) and the 'parts' that are acted out by actors in certain social contexts (Winship and Mandel, 1983). According to Biddle (1986), there are several streams of research which characterize the area of role theory, yet they are linked by common conceptual threads. Biddle (1986) identifies three such threads when he points out that most of the work done on role theory involves three major concepts, including 'patterned and characteristic social behaviors, parts or identities that are assumed by social participants, and scripts or expectations for behavior that are understood by all and adhered to by performers' (p.68). 'Parts' refer to specified positions in social settings (e.g., in organizations) while scripts and expectations for behaviour are the specific actions associated with those parts. Lamertz (2006) refers to these constructs as positions and roles, respectively. The third concept, characteristic social behaviors, refers to the larger collection of standards of behavior which eventually comes to be associated with and

expected of a given position or role. This construct involves taken-for-granted assumptions about how actors in certain positions will conduct themselves: for instance, trustworthy behavior on the part of management is often considered a characteristic social behavior by employees who have recently begun working in a new organization, since an interpersonal history which could potentially provide evidence to contradict that assumption does not exist as yet (Galford and Drapeau, 2003). Managers, therefore, occupy a certain position (that of 'manager') to which is associated certain scripts and expectations of behavior, or more generally, roles (such as supervisor, evaluator, decision-maker, and others), as well as certain characteristic expectations (e.g., that managers will behave in a trustworthy manner). The example of a manager, used here to illustrate these concepts, is especially worthy of attention because, as has been pointed out by Bies and Tripp (1996), the social and moral expectations that develop around the positions and roles of authority figures tend to be more salient to subordinates than those which develop in association with other positions and roles. Bies and Tripp also point out that, when violations of these expectations occur, the motivation felt by subordinates to engage in retaliatory behavior is often much stronger than in situations where the violation was committed by a peer.

Much of the research on roles and role behaviour divides role behaviour into two broad categories: in-role behaviour, and extra-role behaviour. In-role behaviors refer to behaviours which are specified by formal job descriptions as being expected of organizational members, while extra-role behaviours refer to 'above and beyond'-type behaviors which go beyond formal expectation, often called organizational citizenship behaviours (Lamertz, 2006). A complication that arises from the distinction between in-role and extra-role behaviours is that organizational members very often, if not always, possess views of what is expected of themselves and of others in the organization that differ from the views of other organizational members. As Morrison

(1994) points out, most research on role definitions and behaviours focus on the perspective of supervisors in organizations (although Mantere [2008] does point out that in recent research, the focus of much research *has* moved downwards from senior to middle-and-lower level management. Nevertheless, the focus has remained on supervisory actors in organizations). The rank-and-file employee's perspective on what constitutes in-role versus extra-role behavior is, therefore, often neglected. In practical terms, the differences in the ways in which managers and subordinates perceive in-role versus extra-role behaviours is important because, as pointed out by Morrison (1994), employees tend to be more likely to perform behaviours that they categorize as in-role than behaviours which they categorize as extra-role. In addition, the consequences (i.e. rewards or punishments) of performing or of not performing certain behaviours will be different depending on how organizational authorities categorize the behaviours of their subordinates (Organ, 1990). This highlights the important part that employee perceptions play in role enactment issues.

Perceived role enactment has been shown to be worthy of note in organizations for several reasons. Bies and Tripp (1996), for instance, showed that if an actor in an organization fails to fulfill his or her duties (defined by the position occupied by that actor) this could potentially be seen as an 'honour violation' (p.250), one of several types of untrustworthy behaviors identified by the authors. Such violations are likely to result not only in lower levels of trust, but also in acts of revenge which can vary in intensity from malicious fantasies to physical violence. Even when one does not shirk the responsibilities associated with one's position outright, it is still necessary, especially for individuals whose positions can be thought of as being of high importance in an organization or group such as managers, to enact one's roles in accordance with established, expected norms. Myerson et al (1996) found that organizational

actors who 'enact roles in an innovative, idiosyncratic manner could incur distrust' (p.173). Distrust, in turn, is associated with a host of organizational problems (Vlaar et al, 2007). In addition, it has been shown that constructs such as the reliability (Mishra, 1996) and competence (Kirkpatrick and Locke, 1991; Mishra, 1996) of managers, which involve the ability of managers to accomplish their tasks as well as the likelihood of their doing so (i.e. predictability), are important for establishing trust between hierarchical levels in organizations. Both competence and reliability can be seen as involving effective role enactment. Similarly, competence has been examined in-depth by Taylor et al (2002) as a basis for employee perceptions of the legitimacy of managerial authority. Specifically, the study suggests that, in order to be perceived as wielding authority legitimately, authorities must be able to model competent behaviour for employees. Managers must also be perceived as possessing credentials appropriate to their positions. Managers who do not meet both these criteria may not be perceived as being legitimately able to 'design work processes and set pay levels, based on perceptions of employee skill,' and fulfill other salient management roles (Taylor et al, 2002, p.551). Other research has highlighted the importance, in hierarchical relationships, of 'properly' executing one's expected duties. Kramer (1996), for instance, conducted a study of graduate students and their supervisors which provided support for the idea that acts of omission on the part of superiors are worse than acts of commission (which are viewed negatively by subordinates) in the opinion of subordinates. This suggests, therefore, that it is more important to subordinates that superiors do what they are supposed to do, given their dependence on them, than that superiors not do things that they are not supposed to do. Noteworthy work has also been done on the role of individuals in middle-management positions which has illustrated the importance of role enactment for achieving desired organizational objectives. For instance, Floyd and Woodridge (1999) pointed

out the importance of middle management positions in that their occupants often act as go betweens between senior managers and non-management employees. This is a responsibility with which they become charged by virtue of their positions (and the attendant roles of their positions), and it can have important implications – beyond simply communicating information, performance standards, etc. - for such issues as employee satisfaction and trust in their superiors (Hallier, 1997).

Based on this literature, and on the fact that managers can be seen as representative of the organization (Bies and Tripp, 1996), it seems logical that employee perceptions of managerial role enactment can affect institutional trust. If, for instance, an employee expects his or her manager to hold monthly one-on-one meetings in order to review the employees progress towards a certain objective, and the manager in question suddenly stops calling for such meetings (or begins to hold them only sporadically), this can be interpreted as idiosyncratic role enactment, and may result in lowered trust in the manager. This feeling of mistrust might generalize to the entire organization. There are multiple mechanisms through which this might occur. Employees might feel that the organization is to blame for hiring an incompetent manager, and is therefore not to be trusted (Bies and Tripp, 1996). Alternatively, employees might infer that, since the manager does not want to meet with them, there is information that the company is hiding from them, and is therefore not to be trusted. This could occur since, in the absence of detailed information about how organizations deal with individuals, those individuals often make inferences about how the company views them based on how they are treated by organizational authority figures (Tyler and Bies, 1990). Thus, managerial role enactment is likely to affect institutional trust.

Hypothesis 2a: Higher perceptions of appropriate managerial role enactment will predict higher levels of institutional trust.

Hierarchical Authority: Importance, Categories, and Sources

As has been pointed out by Gioia and Sims (1983) the use of power by organizational authority figures constitutes an especially salient and defining aspect of their positions. As such, legitimate power, described by French and Raven (1959) as a form of interpersonal power based on the hierarchical position of an individual in an organization, is an especially important aspect of role enactment for decision makers in organizations, given its importance in shaping subordinate perceptions. Complementarily, effective role enactment, if interpreted as fulfilling formal or official responsibilities to subordinates, can be seen as a major foundation upon which legitimate power is built (McNulty, 1975).

A widely-used and useful definition of power has been put forth by Pfeffer and Salancik (1977). It describes power as ‘the ability to get things done the way one wants them to be done’ (p.14). One of the first major analyses of interpersonal power was conducted by French and Raven (1959), and any discussion on power would probably be incomplete without mentioning their work. French and Raven identified five bases of interpersonal power in organizations. Namely, these bases include legitimate power (power based on hierarchical position), reward power (power based on an ability to distribute rewards for behaviour), coercive power (power based on an ability to punish behaviour), expert power (power based on special knowledge or skills), and referent power (power based on charisma or other special personal attributes). According to Gioia and Sims (1983) managers, at least to a certain extent, wield, or are at least perceived by their subordinates as wielding, all five types of power in some way or another (e.g.

they wield legitimate power when they exercise rights based on their positions, they wield reward power when they give pay raises or promotions, they wield coercive power when they issue reprimands, they wield expert power when they provide competent advice, and they wield referent power when subordinates attempt to emulate them). Gioia and Sims (1983) also point out that whether power is objectively held by an individual in an organization, or that individual is simply perceived as having power when in fact he or she has none, the results (in terms of the behaviour of other actors) are largely the same.

Hierarchical Authority: Problems With and Abuses of Power

Despite the fact that power and power relationships are a necessary and often very convenient and beneficial organizational reality, there are problems associated with the use of power in organizations. Perhaps most significantly, power is, by its very nature, accompanied by the opportunity for abuse. Astley and Sachdeva point out that managers have the opportunity to abuse power by virtue of their positions, which provide them with hierarchical authority and control over resource allocation. In addition, their network centrality affords them further opportunities to abuse power if they so choose (1984). According to Vredenburg and Brender (1998), abuses of power in organizations occur frequently because there are many incentives for those who wield power to commit such abuses. Such incentives include, but are not limited to, cultivating greater power or control than one already has (Manz and Gioia, 1983), trying to acquire personal favours or facilitate the achievement of personal or organizational objectives (Kipnis, 1984) or bestowing either preferential or unnecessarily harsh treatment on certain individuals (Vredenburg and Brender, 1998). Another problem associated with power is the fact that, over time, those who wield power over others often tend to feel less respect for, and to identify less with, those that they wield power over (Kipnis, 1972) (incidentally, it is interesting

to note that, in many cases, subordinates can often, over time, come to identify *more* strongly with their superiors, which, in situations involving the abuse of authority, can even lead them to selectively ignore information which might indicate that said superiors have acted inappropriately [Lewicki and Bunker, 1996]). Finally, according to House and Baetz (1979) certain uses of power can have unintended effects on subordinates, such as negative changes in attitude.

Vredenburg and Brender (1998) present two useful criteria for determining whether a particular exercise of power constitutes an abuse. Firstly, a manager is probably committing an abuse of power if he or she interferes with the ability of an individual or group to accomplish important goals. In other words, hindering effectiveness (for instance, by withholding valuable information, for whatever reason, which would be necessary for a subordinate to perform properly) is one condition which indicates that power is being abused. Secondly, if a manager interferes with a subordinate's access to deserved and desired rewards, it is likely that an abuse of power is taking place. An obvious example of such behaviour would be not giving a subordinate a pay-increase which would be given under normal circumstances. A less obvious example would be giving a pay-increase to one subordinate, but not to another, equally deserving one.

Other research has confirmed the importance of hindering performance and interfering with rewards as abuses of authorities. Wageman and Mannix (1998) for example, define 'misuses' of authority by powerful individuals in groups (in contrast to 'uses', which, in their terminology, constitute legitimate exercises of power) as any exercise of power which ultimately undermines the effectiveness of the group, although in that article the power in question is based purely on access to resources rather than on hierarchy. In addition, Vafai (2002) identifies

blackmail by supervisors based on confidential knowledge, which is clearly an instance of abuse of authority, and accepting bribes (unfairly distributing rewards) as important sources of hierarchical power abuse in organizations. Further, Suar and Khuntia (2004) as well as Dunn (2004) and Donoher et al (2007) have all examined fraudulent, unethical behaviour perpetrated by individuals positioned to engage in such activity (the way in which fraud can ultimately impact the performance of organizations is demonstrated by scandals such as the one involving Enron [Prentice, 2003]). There does seem to be general agreement, therefore, that hindering performance and interfering with the rightful distribution of rewards in organizations constitute two of the main categories of authority abuse. Since, as mentioned above, managers are representatives of the organization as a whole, abuses of power such as withholding pay raises or information that would help achieve success in a project are likely to undermine institutional trust.

Hypothesis 2b: Higher levels of perceived interference with performance or rewards will predict lower levels of institutional trust.

Collective Level

At the collective level, it is the fairness and acceptability of organization-wide policies and practices which are hypothesized to affect institutional trust. It is, therefore, perceptions of procedural and interactional justice which are thought to have an influence on institutional trust, as well as broader institutional forces. Although some aspects of managerial role enactment are still important at the collective level (such as abuses of authority and affronts to employee identity), the collective level is distinct from the interpersonal level in that these factors are observed *relative to other organizational members*. That is, employees make inferences about

institutional trustworthiness based not only on how they, themselves, are treated by management, but on how they perceive that everyone in the organization is treated by authority figures. The constructs of interest, therefore, are systemic in nature, rather than relational.

Procedural Justice

Procedural justice, according to Blodgett et al (1997), refers to ‘the perceived fairness of the policies, procedures, and criteria used by decision makers in arriving at the outcome of a dispute or negotiation’ (p.189). Such procedures are generally interpreted as being ‘fair’ when they are characterized by consistency, impartiality, and equity for all involved (Blodgett, 1997, p.189). According to an important piece by Leventhal (1980) there are six major rules which must be observed for implementing policies in such a way as to encourage perceptions of procedural justice. These include consistency (procedures must be implemented in the same way every time) ethicality (moral principles must appear to be followed in the implementation of all procedures), representativeness (all relevant information is considered when implementing procedures), correctability (the possibility of reversing or correcting decisions must exist), bias suppression (the self-interest of specific parties play no part in the implementation of procedures), and accuracy (procedures are implemented using the most reliable information possible). For the purposes of this study, perceptions of procedural justice are conceptualized as employee judgements about the fairness of organization-wide policies and practices (as opposed to the fairness of procedures in an employee’s specific unit or department). Framing it in this way makes it more relevant to the study of institutional trust, which focuses on judgements of an organization as a whole entity.

Perceptions of procedural justice among employees are conducive to organizational functioning in general, since, when such perceptions are absent, employees often feel angry, distrustful of management, and may entertain fantasies or carry out acts of revenge (Bies and Tripp, 1996). When present, perceptions of procedural justice are beneficial in that they are positively associated with OCBs, and other positive outcomes (e.g. Li et al, 2010). Procedural justice has also been shown to be an important factor related to many specific aspects of organizational functioning, two of which (performance appraisal and selection processes) are discussed here, since they are both formal systems which exist at the collective level in organizations. Trust can also be thought of as being especially important to these two aspects of organizational functioning. The following materials are, therefore, especially appropriate in terms of speculating on perceptions of the factors at the collective level which can affect institutional trust.

One of the main foci of the procedural justice literature has been performance appraisals. The extreme importance of effective appraisal and feedback systems is widely recognized by researchers (e.g. Levy and Williams, 2004; Locke and Latham, 1990). However, it is not enough to have such systems in place: they must be accepted and taken seriously by employees in order to be effective. Because of this, a great deal of research has focused on the characteristics of an effective appraisal system. Among the characteristics identified have been identified as being of importance are employee participation in the process, goal setting, supervisory style (Roberts and Reed, 1996), and trust in appraisers, feedback environment (Levy and Williams, 2004) and numerous others. Importantly, however, perceptions of various forms of justice (i.e. procedural, as well as distributive and interactional justice) have also been found to be of importance to the effectiveness of appraisal systems (e.g. Bartol, 1999). Procedural justice, however, can be

thought to be especially important to the effectiveness of appraisal systems and organizational functioning in general. This is because, even if an appraisal system incorporates positive elements such as employee ‘voice’ and participation, employees are unlikely to take these elements seriously if they believe that the practices and procedures used by the organization to implement and act upon them are flawed and/or unfair. Perceptions of procedural justice have been shown to have several important implications for the effectiveness of performance appraisals. For instance, higher perceptions of procedural justice in appraisal systems have been shown to result in higher levels of employee satisfaction; that is, less overall ‘frustration and dissatisfaction with [the] appraisal system, rater, and appraisal’ (Thurston and McNall, 2010; p. 208). Perceptions of procedural justice are also beneficial in that they help individuals react less negatively to negative feedback (e.g. Brockner and Wiesenfeld, 1996).

Another important focus of the literature on procedural justice has been on selection (and promotion) practices, areas of study which are of clear importance to organizational effectiveness. Perhaps most obviously, perceptions of procedural justice in selection practices are important in shaping applicant opinions of and reactions to organizations. Why this is an important issue for organizations to take into account may not be immediately obvious, but Smither et al (1993) point out three reasons why this is a relevant concern. First of all, applicant reactions can have a serious impact on organizational attractiveness, since disappointed applicants are likely to communicate their experiences to people they know. Second, if an applicant feels strongly enough that the processes used in considering them for employment were unfair, they are more likely to bring a lawsuit against the offending organization. Finally, applicant reactions to perceived unfairness can, in and of themselves, affect applicant performance in an interview, thus reducing the value of selection procedures. It is also worth

noting that applicants who perceive that a company uses fair selection procedures are more likely to accept an offer of employment from that company (Singer, 1992). In addition, the perceived fairness of selection procedures can impact employees already working at an organization. For instance, according to Gilliland (1994), employees who believe that that the organization of which they are members make use of procedurally just selection practices tend to display more positive attitudes (i.e. they tend to be more satisfied) and ultimately tend to perform better in their jobs.

Some of the work on institutional trust which has been done in the past has already addressed the concept of distributive justice. Distributive justice is distinct from procedural justice in that it focuses on the fairness of the distribution of resources and rewards within organizations, while procedural justice focuses on the fairness of policies used to resolve disputes, negotiations, etc. Nevertheless, the current discussion can benefit from mentioning the work that has been done on it. Specifically, Costigan et al (1998), contributed to providing bases for the development of institutional trust by studying the influence of organizational reward systems on the concept. According to their work, institutional trust was found to be higher when organizational members perceived that the reward system of the organization was equitable: that is, when organizational members perceived that the rewards that they received for their work were appropriate for the actual work that they had done. This can be likened to the calculus-based form of trust discussed above, given the importance of rewards to this line of thinking (since employees would be more likely to stay in the organization because they have more to gain from that course of action than by leaving). The importance of perceived equity, however, has also been demonstrated in the work on interpersonal trust of Tyler (1998), Vredenburg and Brender (1998) and Cremer and Tyler (2007), among others, suggesting that the justice-related

mechanisms for encouraging interpersonal trust and institutional trust are similar in nature. The consensus appears to be that higher perceptions of distributive justice lead to higher levels of trust and cooperation within organizations. Despite the fact that these authors focused on the effects of reward systems (i.e. distributive justice) on institutional trust, the focus was still on organization-wide systems. Costigan et al (2002) even point out the possible importance of an organization's performance appraisal system (among others) for establishing institutional trust, although this relationship has yet to be examined empirically. It is therefore very likely that perceptions of organization-wide systems which are unrelated to reward systems can also effect institutional trust, and an examination of this relationship constitutes one of the contributions of this thesis.

Based on this discussion, it is likely that perceptions of procedural justice will be related to feelings of institutional trust. However, given the fact that procedural justice is an issue which is important for many aspects of organizational functioning, it is hypothesized that the relationship will hold for perceptions of justice related to organization-wide policies in general, rather than only to perceptually just reward systems. This has yet to be demonstrated in the literature. If an employee feels that the organization in general is low in procedural justice, for example, he or she is unlikely to believe that any aspect of the organization, be it appraisal, selection, or otherwise, can be relied upon. It is hypothesized, therefore, that higher perceptions of organization-wide procedural justice will be associated with higher institutional trust.

Hypothesis 3a: Higher perceptions of procedural justice will predict higher levels of institutional trust.

Interactional Justice

Another related form of justice which is likely to affect institutional trust is interactional justice. Interactional justice refers, in general, to the perceived fairness with which one party treats another, often during conflict-resolution scenarios (Blodgett et al, 1997). More specifically, interactional justice is generally concerned with the interpersonal treatment that employees receive, and ‘requires that employees be treated with respect and dignity and that managers avoid denigrating or disparaging comments’ towards them (Posthuma and Campion, 2008). According to Bies (2001) there are four main factors which influence perceptions of interactional justice, including deception, invasion of privacy, derogatory judgments, and disrespectful treatment in general. It has also been suggested that interactional justice is affected not only by interpersonal treatment, but by the perceived validity and usefulness of information provided in interpersonal interactions (i.e. managers explaining their decisions adequately to employees) (Greenberg, 1993). The concept of interactional justice as it is usually understood, then, is conceptually similar to the material discussed in the above section on role theory, and several useful insights into it can be drawn from that literature. However, for the purposes of this study, interactional justice is, like procedural justice, operationalized as a judgement made by employees about an organization as a whole. Thus, it is not perceptions about how individual employees are treated by their managers that is of interest, but how those employees perceive that management *in general* treats employees within the organization. This form of justice can be considered especially important for institutional trust, since, as mentioned previously, employees often draw inferences concerning how the organization feels about them from the actions of authority figures (Tyler and Bies, 1990), or more specifically in this case, their perceptions of how authority figures in general to treat employees in their organization.

It has been found that perceptions of interactional justice on the part of an individual increase when the other party involved is seen as showing truthfulness (Bies and Moag, 1986), friendliness (Clemmer, 1993), and empathy (Parasuraman et al, 1985) in their dealings with them. In terms of the general benefits to organizations of interactional justice being perceived to be present, Crompanzano et al (2002) as well as Masterson et al (2000) found that higher perceptions of interactional justice lead to better performance from employees, as well as higher-quality manager-subordinate relationships, and job satisfaction. Similar conclusions were also reached by Fernandes and Awamleh (2006). In addition, interactional justice has an effect on the likelihood of employees engaging in OCBs (Byrne, 2005; Masterson et al, 2000). Crompanzano et al (2002) also noted that higher perceptions of interactional justice are likely to be associated with higher trust in management.

Interactional justice has been studied in relation to a variety of specific organizational issues, and it can be reasonably claimed that the benefits of perceptions of interactional justice in organizations are not qualitatively very different from those associated with procedural justice. Indeed, some have even stated that interactional justice is best thought of as simply a subcomponent of procedural justice (Rahim et al, 2000), although for the purposes of this study it is appropriate to consider them separately. In general, however, there is less literature available on the subject than on procedural justice, and procedural justice is understood to have more of an effect on perceptions of organization-level outcomes, while interactional justice generally affects perceptions of more interpersonal-level outcomes (e.g. Fernandes and Awamleh, 2006; Jawahar, 2007). For convenience, the effects of interactional justice in terms of performance appraisals and selection are discussed here, to mirror the discussion of procedural justice above.

In terms of performance appraisal systems, Narcisse and Harcourt (2008) found evidence that interactional factors influenced employee ratings of the fairness of performance appraisals, although the relationship was not as strong as that for factors related to other forms of justice. Similarly, Jawahar (2007) found that perceptions of interactional justice influenced overall employee satisfaction with performance appraisers. In addition, it has been found that employees who perceive that performance appraisals are being carried out with low interactional justice are also likely to perceive that their organization is not fulfilling its expected role of training and developing them properly (Nurse, 2005). This is, perhaps, especially interesting, since overlaps with the concept of an organization violating a psychological contract; this has already been discussed as being very relevant to the study of institutional trust.

Theoretically strong research on interactional justice as it relates to selection processes is relatively sparse (Noon, 2006). Nevertheless, research has assessed the effects of interpersonal treatment on individual reactions to selection processes. According to Noon (2006), there are four major factors which affect the reactions of applicants to selection procedures, two of which (information provisions and applicant treatment) are clearly relevant to perceptions of interactional justice. The other two include characteristics of selection tests, and situational variables. Robertson and Smith (1989) proposed that selection methods can (based on these factors) influence the organizational commitment, turnover intentions, and performance once an applicant is hired. For applicants who are not hired, these factors are still important in terms of the reasons discussed above in the section on procedural justice. Schuler (1993) presented similar conclusions based on his social validity model, which holds that selection processes will be seen as socially valid (i.e. interactionally just) only if applicants are presented with sufficient information and feedback, if applicants are allowed to participate and perform in selection

processes without any abusive treatment, and the selection process itself is transparent. Finally, Bies and Moag (1986) found evidence that applicants will only react positively to selection procedures if communication is perceived to be honest and open during selection processes, respect and propriety are present, and adequate justifications are presented for any decisions made.

The rationale for a hypothesized relationship between interactional justice and institutional trust is as follows. Perceptions of interactional justice (in interpersonal relationships) are likely to influence psychological attributions made by individuals about whether or not an incident is the fault of another person, or is due to situational variables (Folkes, 1984). Thus, if someone is ‘betrayed,’ but feels that the betrayer treats them with a high level of interactional justice, they are more likely to assume that the betrayer was acting because of situational pressures rather than out of malice. In short, interactional justice is likely to be associated with higher interpersonal trust. This has been explicitly demonstrated by Werbel and Henriques (2009). In addition, it has been shown that employees also form opinions about how their organizations feel about them based on the actions of management figures (who, psychologically, often represent the organization as a whole) (Bies and Tripp, 1996). Thus, if there is a perception on the part of an individual that management in general has no concern for, or respect for the feelings of, employees, it is less likely that that individual will feel a high level of institutional trust.

Hypothesis 3b: Higher perceptions of interactional justice will predict higher levels of institutional trust.

Institutional Factors

At the collective level, institutional trust can also be affected by inter-organizational, industry-wide factors. Although a comprehensive analysis of this level is beyond the scope of this thesis, a brief review accompanied by a testable hypothesis will be presented as a partial foundation for future research.

Institutions, in this context, refer to ‘rules, codes of behaviour’ and ‘ways of categorizing and understanding that people use to define themselves and their behaviour’ (Strang and Sine, 2002, p.498). They also involve ‘taken-for granted’ ideas about what constitutes appropriate behaviour for people, based on their membership or exclusion from certain groups (Elsbach, 2002, p.37). They thus comprise both normative and cognitive components. In short, institutionalized processes are ideas about how things ‘should be done’ in organizations. As such, these processes come to be considered valuable in and of themselves (Elsbach, 2002), rather than for their role in achieving any specific organizational goals. Consequently, institutionalized processes can actually lead away from organizational effectiveness (Selznick, 1957; Zucker, 1987). These norms of behaviour are systematically transmitted to organizational newcomers through socialization (Zucker, 1987), and as such, become built into the social order over time (Strang and Sine, 2002). Institutionalized processes and procedures are highly resistant to change (except in cases of organizational failure or crisis), and operate on the behaviour of organizational actors without having to be consciously enforced by anyone else (once socialization has taken place) (Strang and Sine, 2002; Zucker, 1987). The defining characteristic of an institution is perhaps best summarized by Palmer and Biggart (2002) who state that ‘it is the increasingly non-rational basis for a structure’s durability that testifies to its institutionalization’ (p.263).

One area of study related to institutions is that of legitimacy, which deals with the ways in which organizations gain acceptance in the eyes of society at large, as well as from other organizations which serve similar purposes (Human and Provan, 2000), and upon which they might depend for support (DiMaggio and Powell, 1983). In general, legitimacy can be seen as a function of an organization's conformity to practices which have become institutionalized at the level of industries or fields (DiMaggio and Powell, 1983). In other words, organizations which do things the way they 'should' be done gain acceptance (legitimacy) and support from society and from other organizations. Legitimacy, in turn, tends to be associated with trust in organizations (Heugens et al, 2002; Kochan, 2004).

In general, procedures become institutionalized within and between organizations because they were originally put in place to maximize efficiency. Then, over time and with the repeated interactions of organizational members (Myerson, 1994) these practices simply become standard and any deviation from them is frowned upon (Elsbach, 2002). In the case of organizations, institutionalization generally occurs when an organization is put in place to embody certain values and ideals (for instance, in the case of the TVA studied by Selznick [1949], the organization in question was put in place to embody democracy and a 'grass-roots' approach to solving problems). Thus, the organization must make commitments consistent with the values that it embodies, and honour them; otherwise, it would face legitimacy problems.

Institutions and legitimacy are important to the study of trust in organizations. For instance, it has been shown that institutions, and whether or not they are respected by organizations, can seriously affect levels of trust not only in organizations, but in society in general (Batjargal, 2007). Institutionalized practices which are adopted by organizations inspire trust in those organizations, even when there is no evidence that those practices will make any

difference to organizational effectiveness (Busco et al, 2006). Often, in fact, if established institutions are not respected by organizations, trust can be reduced because of associated threats to identity perceived by employees (Nor-Aziah et al, 2007). Since identity concerns are important to trust (as discussed above), it stands to reason that institutional forces which threaten identity will also threaten trust. One interesting theoretical example of this is provided by Elsbach (2002). Elsbach illustrates identity concerns with the example of a White House employee during the Clinton administration who, having established a certain view of him or herself by virtue of working at the White House, might feel his or her identity threatened after the Lewinski affair. The White House might no longer symbolize the values important to the employee after the incident was made known. Further, the employee might feel that the White House has lost legitimacy (as an institution), and is therefore no longer worthy of trust.

Many insights related to institutional theory can be drawn from studies of interorganizational trust. Interorganizational trust has been described by Zaheer et al (1998) as an assumption, made by an organization as a whole, that another organization will act predictably and fairly on a consistent basis. Dyer and Singh (1998) point out that such assumptions are necessary for business situations for which it is difficult to write up formal contracts. Similarly to Zaheer and coauthors, Young-Ybarra and Wiersema (1999) describe interorganizational trust as being based on the dependability and predictability of an organization, as well as faith in the fact that the organization will continue to demonstrate these qualities. In this way, interorganizational trust is generally thought of by researchers as being based on dimensions similar to those upon which interpersonal trust (discussed above) is based. The main difference, of course, is that interorganizational trust involves individuals in one organization trusting groups of individuals who make up another organization (Blois, 1999), rather than one individual trusting another.

Often, the trust felt by an individual in organization 'A' for organization 'B' is determined almost exclusively by the actions of one or a few representative members of organization 'B' (e.g. Free, 2008).

The literature on interorganizational trust shows several significant links to institutional theory, and certain interesting insights can be drawn from a comparison of both literatures. This is perhaps because, since interorganizational trust involves trusting an organization rather than an individual (what Free [2008] refers to as 'system trust,' and describes as involving 'institutional phenomena,' [p.630]), the trust involved is based on the acceptability of procedures and practices in place in the organization in question, rather than on the acceptability of any specific behaviours carried out by individuals (i.e. trust is a function of legitimacy). This logic is supported by the work of Velez et al (2008), who discuss the ways in which certain practices and processes can be adopted by organizations in order to present an image of legitimacy to outside organizations, in the interest of fostering interorganizational trust. Trust is fostered because the practices adopted are institutional and confer legitimacy upon the organization adopting them. The link between institutions and interorganizational trust is further elaborated upon by Poppeo et al (2008), who have pointed out that routines and processes which have become institutionalized are necessary for the 'stability of exchanges' between organizations (p.42). Similarly, Gulati and Nickerson (2008) point out that the institutionalization of processes is largely responsible for expectations about how organizations will act becoming fixed over time, which is necessary for the development of trust. This is a process which, it must be noted, is similar to the process of interpersonal trust development over time based on repeated interactions (for the importance of history in building trust, see Kahneman and Tversky, 1984, and Kramer et al, 1990). Given that some of the primary dimensions of interorganizational trust have been identified as predictability

and consistency (Young-Ybarra and Wiseman, 1999; Zaheer et al, 1998) which are clearly also related to the stability of interorganizational interactions, it follows logically that institutionalized practices are important for the development of trust. Poppo et al (2008) also point out that institutionalized processes facilitate cooperation between organizations, as well as the development of perceptions (held by one organization) of justice and equality as characteristics of other organizations with which they do business. This also highlights the relationship between institutions and interorganizational trust, since cooperation (Putnam, 1992) and procedural justice are both important trust-related concepts (Kramer, 1996).

While these studies deal mainly with the trust felt by one organization for another, it is logical to speculate that institutional forces would also affect institutional trust within an organization. An accountant who works in an organization which refuses to use GAAP, for example, may feel reduced institutional trust. It is also likely that societal institutions would have a similar effect. Individuals working for Nike, for example, may have felt reduced institutional trust when child labour allegations became an issue for that organization.

Hypothesis 3c: Higher perceptions of organizational legitimacy will predict higher levels of institutional trust.

MULTILEVEL ISSUES IN TRUST RESEARCH

Although this thesis focuses on institutional trust as an individual perception which is affected by factors at different organizational levels (as opposed to, for instance, a collective construct affected by interactions between specific groups) it should be noted that there are many ways in which the construct could be conceptualized. This is, indeed, because of the multilevel nature of organizations, which require certain theoretical decisions and assumptions to be made

when examining any organizational construct. This is a fact that has been highlighted by several researchers, yet multilevel research has only recently begun to be recognized for its importance to research in practice (Brass, 2000).

Klein et al (1994) have made the important observation that all theoretical frameworks explicitly or implicitly make certain assumptions about individuals and the groups in which they are embedded: namely, individuals in groups are homogeneous (the members of a group are sufficiently similar that taking an average for the entire group is sufficient to draw relevant conclusions), independent (individuals in groups are completely independent of any influence of the group in which they are embedded) or heterogeneous (individuals in groups respond to measures as a function of the characteristics of the group). Klein and coauthors stress that theorists must be clear about which of the above assumptions they are making, and develop their research designs accordingly.

The level-related assumptions discussed above can be usefully applied to the study of institutional trust. For the purposes of the current thesis, an assumption of independence is made: that is, individual perceptions constitute the dependent variable of interest, and those perceptions are not seen as being a function of membership in any particular group. Independence has been chosen in this context since what is being measured are individual feelings of institutional trust based on perceptions of constructs such as managerial authority use, procedural justice, etc, rather than on any objective conceptualization of those constructs. A model which tested for assumptions of heterogeneity and homogeneity as well as for independence would provide a more comprehensive view of institutional trust, but is beyond the scope of the current project. Nevertheless, it must be noted that several different theoretical conceptualizations of institutional trust are possible.

METHODOLOGY

Research Site

A large Montreal University was chosen for the site of the research project. This particular university was considered an ideal site for the study of institutional trust because it has recently been experiencing difficulties with several trust-related issues, including collective bargaining, perceived unethical behaviour by authority figures, and pay-equity issues. The target sample was, therefore, considered appropriate for evaluating individual reactions to such events in terms of institutional trust, as well as for synthesizing principles relevant to trust repair in different situations.

Participants

Data were collected from two distinct target samples within the university: faculty members and graduate students. These two particular subsamples were chosen since interpersonal relationships with superiors are particularly important to the development of trust-related perceptions among them, and they are also affected by constructs of interest at other organizational levels. In addition, the dynamics of trust within the university which affect these two groups can be thought of as being sufficiently different that between-group differences can be meaningfully analyzed (for instance, graduate students and faculty members can reasonably be expected to interact differently with authority figures within organizations, to interpret organization-wide policy changes and such in different ways, etc). It was believed that this would allow broader analyses to be carried out, which in turn would allow more accurate conclusions to be drawn.

A total of 1301 faculty members, both full and part time, from each of the university's four academic faculties were contacted for the study, comprising 774 (59.5%) from the faculty of Arts and Science, 264 (20.3%) from the faculty of Engineering, 149 (11.4%) from the faculty of Fine Arts, and 114 (8.8%) from the faculty of Commerce. A total of 118 responses were received from faculty, for a response rate of nine percent. There are several possible reasons for this low response rate. Rogelberg et al (2000) for instance, have pointed out that compared to respondents, non-respondents to surveys in organizational research often have lower levels of organizational commitment, greater intentions of quitting, and less job satisfaction. Given that the university has recently been experiencing issues with collective bargaining, pay equity, etc, it is possible that such factors as low satisfaction played a part in producing the low response rate. Indeed, several emails were received about the study which specifically mentioned low levels of satisfaction with the university and its policies.

Another possible reason for the low response rate may have been that the subject of the study was somewhat sensitive (e.g. respondents were asked for their personal opinions on how well their superiors were performing in their roles). Jobber and O'Reilly (1998) have stated that surveys which ask for sensitive information often receive lower response rates than other, more neutral questionnaires, unless rewards are offered for participation. Again, several emails were received from respondents and non-respondents, some of which complained about the sensitive nature of some of the questions. It is therefore likely that the response rate was affected by this issue.

Finally, it is also possible that faculty members at universities are simply over-surveyed, which can often cause individuals to ignore requests for participation in research studies (Weiner

and Dalessio, 2006). Since faculty members may be even more over-surveyed than individuals in other types of organizations, it is likely that this was an issue.

Of the faculty respondents, 63 were male, 45 were female, and 10 declined to specify their gender. The average number of years of experience possessed by this sample was 16.9. Twenty respondents occupied the position of assistant professor, 39 occupied the position of associate professor, 26 were full professors, four had limited term appointments (LTA), five had extended term appointments (ETA), 20 were part-time lecturers, 19 reported that they were operating in an administrative capacity within the university (which usually overlapped with holding another position at the university), and four declined to specify a position. Ultimately, faculty position was categorized only according to whether or not a respondent was full-time (of which there were 77), part-time (of which there were 19), administrative (of which there were 19) or unknown (of which there were three). Sixty-four respondents (54.2%) were from the university's faculty of Arts and Science (out of 774 contacted from that faculty, for a response rate of 8.2% from that faculty), seven (5.9%) from the faculty of Engineering (out of 264 contacted, for a response rate of 2.6% from that faculty), seven (5.9%) from the faculty of Fine Arts (out of 149 contacted, for a response rate of 4.6% from that faculty), ten (8.4%) from the faculty of Commerce (out of 114 contacted, for a response rate of 8.7% from that faculty), and 30 (25.4%) declined to specify in which faculty they were employed.

Exact figures for the number of graduate students studying in each faculty at the university are unavailable, making an exact response rate from this sample impossible to calculate. According to the university's website, however, there is an approximate total of 6000 graduate students studying at the university. In theory, most of these should have received the email notification sent out through the association of graduate students' directory, although it is

highly likely that a good deal of students may have removed themselves from the mailing list since beginning their studies. In total, 50 student responses were received, comprising seven (14%) from Arts and Science students, five (10%) from Engineering, one (2%) from Fine Arts, 34 (68%) from Commerce, and three (6%) who declined to specify a faculty. In all likelihood, the disproportionate percentage of Commerce student responses received is due to the fact that many of the graduate students in the faculty of Commerce are peers of the researcher, who were trying to support the research project.

It was possible that there may have been systematic differences between respondents who indicated certain information and those who declined to do so. In order to assess whether any relevant variables may have influenced this issue, a comparison of means was run between faculty members based on whether or not they reported their faculty or position. Independent-samples t-tests were also run. No systematic differences of any significance were found between respondents who reported faculty and/or position and those who did not. The same tests were run for students based on faculty membership, with the same result (the results of the t-tests can be seen in Tables 1 and 2). The decision to provide demographic data or not seems, therefore, to be attributable to random forces. Thus, for the correlational analyses described below, it was appropriate to delete all missing data pairwise, in order to use the maximum amount of data available.

Table 1: Independent-Samples t-tests results for Faculty Responses

Variable	By Faculty Response	By Position Response
	t	t
Institutional Trust	.15	-.46
Proclivity to Trust	.38	1.27
Identification	.08	.33
Role Enactment	1.29	.75
Perceived Interference	-1.44	-.99
Procedural Justice	.10	-.85
Interactional Justice	.66	-.15
Organizational Legitimacy	.73	-.74
Dyadic Trust	.88	.36
Contract Breach	-.40	.05

Notes: †p<.1, *p<.05, **p<.01.

Table 2: Independent-Samples t-tests results for Student Responses

Variable	By Faculty Response
	t
Institutional Trust	1.27
Proclivity to Trust	-.22
Identification	.64
Role Enactment	-.61
Perceived Interference	.81
Procedural Justice	.48
Interactional Justice	1.38
Organizational Legitimacy	.80
Dyadic Trust	.36
Contract Breach	.05

Notes: †p<.1, *p<.05, **p<.01.

Procedure

A survey methodology was employed to collect data from participants. The survey itself was electronic in format, and accessible by URL. Two versions of the survey were created for both target samples (i.e. faculty and graduate students at the university). The wording of each

version was tailored to the appropriate target sample. Both surveys were powered using a survey-software hosted by the university being studied.

Faculty members were contacted using the university's publicly available email directory, accessible via the university's website. Initially, a courtesy email was sent explaining the study and giving participants an opportunity to be removed from the mailing list. This was followed several days later by a second email providing an electronic link to the faculty version of the survey. A reminder email was sent a month later, which also provided a link to the survey.

Graduate students were contacted in cooperation with the university's association of graduate students, as well as through snowball-sampling. In the case of email contacts, graduate students were forwarded an email explaining the study and containing a link to the student survey through the association's email directory. Graduate students were also recruited using online social tools (i.e. student Facebook groups) soliciting participation and requesting that students forward the link to their own acquaintances (who would also have to be graduate students at the university).

Informed consent was obtained using an electronic consent form with an 'I consent' option, which had to be selected before the participant could begin the survey. The consent form also informed participants of their right to discontinue participation at any time. The anonymity of each participant was ensured, since at no time were they required to supply any information which could be used to identify them. In addition, participants were provided with an electronic address with which they could access a report detailing the findings of the study once it was complete.

Measures

The survey was made up of measures published previously in the literature, borrowed or adapted from a variety of sources, all of which have demonstrated reliability. All measures employed 5-point Likert scales, with anchors specifically tailored to the questions being asked.

The items were phrased in ways intended to specifically capture the constructs of interest as they have been operationalized for this study (this will be commented upon further below). In general, the real name of the university has been included in each item used in the actual survey (as opposed to having the items refer to ‘my organization’ or ‘my university’), since some participants may be affiliated with other universities (e.g. some faculty members are employed only part-time at the research site, and some students may be taking classes elsewhere as well). All of the measures are included in the Appendix, including both faculty and student phrasing, although the name of the university has been omitted in the version included here. When the constructs being assessed are interpersonal in nature, the term ‘academic/administrative head’ is used for faculty, while the term ‘supervisor’ is used for students. ‘Academic/administrative head’ is the most appropriate term for the faculty version, since faculty members at different levels of the organizational hierarchy are being targeted (i.e. faculty chair would be inappropriate, since some of the participants may well occupy those positions). It is also appropriate for administrative personnel. The term ‘supervisor’ had been chosen for the student version, since it can refer to academic supervisors, teaching assistant supervisors, or program coordinators. It was necessary to provide this type of flexibility, since it was possible that not all of the students contacted would have an academic/thesis supervisor as yet (e.g. if they had just begun their graduate studies). Students were instructed, in the survey, to specify and focus on whichever of

the three they had when answering survey items designed to assess interpersonal relationships. Sample items given below use the phrasing from the faculty version.

Dependent Variable: Institutional Trust

To measure institutional trust, a seven-item scale adapted from Robinson (1996) was used. This scale was chosen because it refers to an impersonal system (an employing organization) rather than to any specific organizational authority figure. In addition, the dimensions of institutional trust referred to above (predictability and benevolence) are well captured by this measure: a sample item, for instance, is ‘I can expect my university to treat me in a consistent and predictable fashion.’

The measures for the independent study variables described below are discussed in order of level; that is, first the measures discussed will be those that pertain to individual perceptions (e.g. personal proclivity to trust), followed by measures dealing with constructs at the interpersonal level (e.g. perceptions of appropriate role enactment), followed by measures dealing with constructs at the collective level (e.g. procedural justice).

Independent Variable: Personal Proclivity to Trust

Personal proclivity to trust was measured using a 25-item scale developed by Rotter (1967). The measure is intended to assess how trustworthy an individual believes the world around him or her to be, as opposed to how much that individual actually trusts the people and systems in his or her environment. This distinction is subtle, but important: theoretically, an individual would be able to feel that an organization (for example) is trustworthy in general, without actually feeling that he or she can personally trust the organization. However, since individuals are more likely to trust others whom they perceive as trustworthy (e.g. Baier, 1985),

a measure of perceived trustworthiness is appropriate in this context. This is in contrast to the measure of institutional trust, which is intended to assess how much an individual actually does trust a specific organization. Sample items include ‘the judiciary is a place where we can all get unbiased treatment’ and ‘most sales people are honest in describing their products.’ Thus, the likelihoods of an individual feeling both personal and impersonal (institutional) trust are covered by this scale.

Independent Variable: Organizational Identification

To measure organizational identification, a six-item scale was chosen from Mael and Ashforth (1992), since it effectively captures the perception of ‘oneness’ with an organization that characterizes this concept (Ashforth and Mael, 1989, p.21). In addition, the items assess both the cognitive and emotional components of organizational identification referred to in an above section. Sample items, for instance, include ‘when someone criticizes this school, it feels like a personal insult’ and ‘this school’s successes are my successes.’

Independent Variable: Perceived Appropriate Role Enactment

In order to assess perceptions of appropriate role enactment, a four-item scale was adapted from Tyler and DeGoey (1996). The measure, designed to measure perceptions of ‘competence’ as conceptualized by the authors, is appropriate for use in this context because it reflects an individual’s perceptions about how well a superior is fulfilling his or her duties in an appropriate way. For instance, since managers are often representative of organizations in the minds of employees, a manager who acts in a perceptually appropriate way is likely to give employees the impression that the organization itself can be relied upon. The presence of an incompetent manager may also indicate that the organization itself is unreliable, since it either

did not select properly, or selected someone for reasons other than competence. Thus, a measure of the competence of an authority figure is appropriate for assessing the effects of interpersonal relationships on institutional trust. The items are phrased in such a way that perceptions about individual superiors are captured, since for hypothesis 2a, the construct being examined is interpersonal in nature. A sample item includes ‘my immediate superior is doing a good job.’

Independent Variable: Perceived Interference with Performance or Rewards

The same general type of phrasing was used for the measures chosen for perceived interference with rewards or performance, a seven-item scale adapted from (Vredenburg and Brender, 1998), since this construct also operates at the interpersonal level. A sample item from this measure includes ‘my immediate superior allocates rewards arbitrarily.’ The items from this measure effectively capture employee perceptions related to their superiors’ actions which affect access to important resources and rewards. This is an aspect of managerial role enactment which has been identified as being among the most important (if not *the* most important).

Independent Variable: Procedural Justice

Procedural justice was measured using a six-item scale adapted from Niehoff and Moorman (1993). This scale has been chosen because it captures individual perceptions of the fairness of the procedures which are in place in an organization. The items have been phrased in such a way that they refer to perceptions of procedures as they have been implemented throughout an entire organization (as opposed, for example, to how procedures are implemented within one department), since this is how the concept of procedural justice has been operationalized in this study. It also discourages organizational members from focusing too narrowly on their own department. This is appropriate in this context, since institutional trust is

more likely to be affected by the fairness of policies throughout the entire organization (i.e. asking about the fairness of departmental policies would be inappropriate for testing hypotheses about an individual's trust in an entire organization). Thus, phrasing the items in this manner raises the level of analysis to the level at which institutional trust is thought to exist in the first place. A sample item is 'at this university, decisions about jobs or policies are made in an unbiased manner.'

Independent Variable: Interactional Justice

The phrasing of the items used to assess interactional justice was similar to the phrasing used for procedural justice, since again, the concept has been conceptualized as operating at an organization-wide level. Thus, the items refer to an individual's perceptions about the fairness with which organizational authority figures treat organizational members in general, rather than how that individual personally is treated. Items are included which cover perceptions of how well information is shared with employees, as well as perceptions of how well employees in general are treated interpersonally, since these have been identified as being two of the defining characteristics of interactional justice. Sample items include, for instance, 'at my university, when decisions are made about employee's jobs by their superiors, adequate justification is given for those decisions' and 'at my university, when decisions are made about employee's jobs by their superiors, people's personal needs are taken into account.' The measure itself consists of nine items, and was also taken from Niehoff and Moorman (1993). For both justice measures, the term 'employee' was used in the items for the faculty version, since faculty members may have opinions about how both faculty and staff members are treated in the organization. For students, the term 'student' was used in the items, since students are unlikely to have such information about employees.

Independent Variable: Perceived Organizational Legitimacy

In order to assess perceptions of organizational legitimacy, a 12-item scale was adapted from Elsbach (1994). The original scale was phrased to capture perceptions about an organization in the cattle industry, and has been reworked to reflect the post-secondary education industry. Sample items, for instance, include ‘this university has one of the lowest rates of employee turnover in the post-secondary education industry’ and ‘this university’s leaders believe in playing by the rules and following accepted operating guidelines.’ The measure is appropriate because it effectively captures perceptions about how well an organization conforms to general, institutionalized practices within a given industry (i.e. legitimacy), which, if violated, could reduce trust in that organization.

Control Variables: Dyadic Trust in Supervisor and Perceived Breach of Psychological Contract

Measures were also included for two control variables, namely, dyadic trust and perceptions of psychological contract breach. These are both variables which, based on the current literature on trust, are likely to affect institutional trust. Since their effects have already been documented, however, they are included here as control variables in order to test the independent effects of the other study variables on institutional trust. This will contribute to the current literature by testing for as-yet unknown relationships between institutional trust and other organizational factors.

In order to measure perceptions of an organizational member’s dyadic trust in a direct supervisor, an eight-item scale from Tyler and DeGoey (1996) was chosen. This is an appropriate measure in this context because it captures feelings of trust that an organizational member has

specifically for his or her direct superior. This is an important variable to be controlled for, since it is entirely possible that feelings of dyadic trust might help explain feelings of institutional trust independent of any other organizational factors. For instance, if a faculty member no trust whatsoever in his or her supervisor, he or she may report lower feelings of institutional trust simply because supervisors are often seen as representative of entire organizations. A sample item includes ‘my academic/administrative head tries hard to be fair to me.’ The measure is appropriate because it captures perceptions of many of the elements which have been identified as being important for the presence of interpersonal trust, including honesty, fairness, and benevolence.

Finally, in order to assess perceptions of psychological contract breach, a nine-item scale was adapted from Robinson (1996). This is, again, an important control variable, since perceptions related to psychological contract breach have been shown to be related to institutional trust (Robinson, 1996), and such perceptions most likely have independent effects on institutional trust. A sample item includes ‘so far, this university has done an excellent job of fulfilling its promises to me.’ The measure is considered appropriate because the items capture perceptions of how well an organization has followed through on expectations (held by organizational members) that were never formally codified. It effectively assesses the ‘taken for granted’ quality of such expectations, and also captures the emotional components of contract breach, such as anger.

RESULTS

Reliability Analyses

Reliability coefficients were calculated for each of the measures used, for both faculty and students. For some of the measurement scales (specifically, those of Institutional Trust, Personal Proclivity to Trust, and Organizational Identification) the wording used for both versions of the survey was identical, so student and faculty responses were combined for the purposes of reliability analyses. For those scales, the analyses yielded the following Cronbach's α figures: .88 (Institutional Trust), .86 (Personal Proclivity to Trust), .83 (Organizational Identification). These scales can, therefore, safely be considered reliable. For the remaining scales, it was deemed appropriate to calculate Cronbach's α s for the faculty and student versions separately, to ensure that the different wording of the two versions did not adversely affect reliability. These analyses yielded the following Cronbach's α s: Perceived Appropriate Role Enactment: .93 (students); .95 (faculty), Perceived Interference with Performance or Rewards: .91 (students), .70 (faculty), Procedural Justice: .87 (students), .86 (faculty), Interactional Justice: .95 (students), .95 (faculty), Perceived Organizational Legitimacy: .90 (students), .80 (faculty), Dyadic Trust in Supervisor: .90 (students), .95 (faculty), and Perceived Breach of Psychological Contract: .96 (students), .95 (faculty).

Intra-class Correlation Coefficients

In addition, because the members of each target sample were all members of several overlapping organizational groups, analyses were carried out in order to ensure that membership in these groups had no systematic effect on participant responses. This was an important step to take in order to verify the assumption made in the research design that individual perceptions of

higher level constructs, and their influence on feelings of institutional trust, would be independent of issues such as group membership. Bliese (2000) discusses the usefulness of the intra-class correlation coefficient (ICC) for such purposes. The ICC(1), calculated from an ANOVA output, represents the percentage of variance in an individual participant's responses that is attributable to membership in a particular group. This figure therefore allows one to assess whether or not any systematic differences in responses exist due to group membership. The formula used here was provided by Bliese (2000, p.355), and is as follows:

$$ICC(1) = \frac{MSB - MSW}{MSB + [(k - 1) * MSW]}$$

where *MSB* is the square of the between-group means, *MSW* is the square of the within-group mean, and *k* is either group-size, or the average of the group sizes involved when these group sizes are not the same.

It should be noted, however, that there were very large differences in the number of participants in several of the groups (e.g. Commerce graduate students greatly outnumber students from other faculties). Bliese (2000) has commented on the potential problems associated with ignoring such group differences. Fortunately, an alternative formula for 'k' in the above equation has been put forth by Bliese and Halverson (1998, p.168) which can be used effectively for situations in which group sizes differ drastically. The equation is as follows:

$$N_G = \frac{1}{k - 1} \left(\sum_{i=1}^k N_i - \frac{\sum_{i=1}^k N_i^2}{\sum_{i=1}^k N_i} \right)$$

where N_i is the number of participants in each group, and *k* is the number of groups. Thus, 'k' in the original ICC(1) equation is replaced with the newly calculated N_G , and a new ICC(1) value is calculated. This formula was used to calculate *k* in the present context, in order to assess within

and between group differences for faculty members based on faculty (i.e. Arts and Science, Engineering, Fine Arts, and Commerce) and position (i.e. full-time, part-time, or administrative). Differences for students were assessed based on faculty and program (i.e. Master's vs. Doctoral program). In addition, differences in the variables were assessed based on whether or not respondents were faculty members or students. The results can be seen in Tables 3 through 7:

Table 3: ICC(1) Values (Faculty by Faculty)

Variable	ICC(1)
Institutional Trust	-.04
Identification	-.03
Role Enactment	-.02
Perceived Interference	.05
Procedural Justice	-.05
Interactional Justice	-.08
Organizational Legitimacy	-.05
Dyadic Trust	.04
Contract Breach	-.05

Notes: †p<0.1, *p<0.05, **p<0.01.

Table4: ICC(1) Values (Faculty by Position)

Variable	ICC(1)
Institutional Trust	-.03
Identification	-.01
Role Enactment	-.02
Perceived Interference	.03
Procedural Justice	-.01
Interactional Justice	-.02
Organizational Legitimacy	.07*
Dyadic Trust	-.01
Contract Breach	0

Notes: †p<0.1, *p<0.05, **p<0.01.

Table 5: ICC(1) Values (Students by Faculty)

Variable	ICC(1)
Institutional Trust	.16†
Identification	.02
Role Enactment	.51**
Perceived Interference	.51**
Procedural Justice	.33**
Interactional Justice	.23*
Organizational Legitimacy	.18*
Dyadic Trust	.46**
Contract Breach	.08

Notes: †p<0.1, *p<0.05, **p<0.01.

Table 6: ICC(1) Values (Students by Program)

Variable	ICC(1)
Institutional Trust	-.04
Identification	-.05
Role Enactment	.22*
Perceived Interference	.01
Procedural Justice	.12
Interactional Justice	-.05
Organizational Legitimacy	-.08
Dyadic Trust	.23*
Contract Breach	.07

Notes: †p<0.1, *p<0.05, **p<0.01.

Table 7: ICC(1) Values (Students vs. Faculty)

Variable	ICC(1)
Institutional Trust	-.01
Identification	.13**
Role Enactment	-.01
Perceived Interference	0
Procedural Justice	0
Interactional Justice	.01
Organizational Legitimacy	.03 [†]
Dyadic Trust	-.01
Contract Breach	.13**

Notes: [†]p<0.1, *p<0.05, **p<0.01.

For faculty members, then, no systematic differences exist in any of the variables based on membership in a specific faculty, and only a very small difference (7%) in perceptions of organizational legitimacy exist based on position. Graduate student responses, however, do seem to have been affected by faculty and program type. Since all of the significant values are positive, the differences are entirely between-group in nature (Bliese, 2000), as opposed to being examples of within-group or ‘frog-pond’ effects (e.g. Dansereau, Alutto, and Yammarino, 1984). Nevertheless, these differences are likely to have been caused by the drastic differences in the number of respondents per faculty, especially since the differences are less dramatic when comparing program-types. There are also differences between faculty and student responses for organizational identification, perceptions of psychological contract breach, and to a lesser extent perceptions of organizational legitimacy, but this is perhaps to be expected since these two groups have such different relationships with the organization.

The results of these analyses indicate that any aggregation of faculty responses would be inappropriate, since there are no real differences in these responses based on group membership. Thus, an assumption of independence is appropriate for this sample.

For student responses, on the other hand, there do appear to be important differences in responses based on group membership. Specifically, over half (51%) of the variance in student responses for perceptions of appropriate role enactment and perceived interference with performance or rewards is attributable to faculty membership. In addition, 46% of the variance in student responses regarding dyadic trust in supervisor is attributable to faculty membership. Any inferences which can be drawn for the purposes of this study about students and their interpersonal relationships with their supervisors must, therefore, take into account the important differences that faculty membership make. This is because the above analyses strongly suggest that there are differences in the ways in which faculty members from different faculties interact with their students, which affect student perceptions of interpersonal constructs within the university in systematic ways. This applies also, to a lesser degree, to any inferences about students regarding their perceptions of collective-level constructs, since the variance in responses pertaining to perceptions of procedural justice, interactional justice, and organizational legitimacy were also importantly contributed to by faculty membership (at levels of 33%, 23%, and 18% respectively). Program type also contributed to the variance in student responses regarding interpersonal factors, since 22% of the variance in perceptions of appropriate role enactment and 23% of the variance in dyadic trust in supervisor were attributable to this variable. These analyses justify the inclusion of the demographic variables in the correlational and regression analyses which follow.

In addition, the differences in ICC structure between faculty and student responses strongly suggest that the two samples be analyzed separately.

Correlations and Hypothesis Testing

Descriptive statistics and correlations for all of the study variables for each target sample are provided in Table 8 and Table 9. As would be expected in keeping with the research hypotheses above, all variables of interest are significantly correlated with Institutional Trust, with the exception of Personal Proclivity to Trust. This holds true for both the faculty and student samples (although the strength of the correlations varies between the two samples.) Other correlations of interest will be discussed in the following section.

In order to test the predictive significance of each variable, a series of linear regressions was run, using Institutional Trust as the dependent variable. Initially, Institutional Trust was regressed only on the demographic variables which were used for the study, including faculty, position, and years of experience for faculty members, and faculty, program type, and year-in-program for students. Faculty and position (i.e. full-time, part-time, or administrative) were deemed important demographic variables since individuals from different faculties or in different positions might interpret (or be affected by) organization-wide events and policies differently from individuals in other faculties or positions. This in turn might affect institutional trust. For these same reasons, faculty and program type (i.e. Master's vs. Doctoral degree) were included for students. Years of experience (for faculty) and year in program (for students) were included since greater experience with an institution is likely to influence an individual's perception of how trustworthy that institution is.

After running these regressions on only the demographic variables (Model 1), Institutional Trust was regressed on the demographic variables as well as on both of the control variables in the same model (Model 2). Then, a series of seven other regressions was run, with

Institutional Trust regressed on the demographic variables, the control variables, and one of the individual predictors being studied (proclivity to trust, organizational identification, etc) (Models 3 through 9). A final regression was then run, incorporating all of the demographic, control, and predictor variables in one linear equation, resulting in 10 separate regression models (Tables 10 and 11).

Before discussing individual hypotheses, it will be useful to discuss the conditions under which the demographic and control variables considered in the study (i.e. Dyadic Trust in Supervisor and Perceived Breach of Psychological Contract) were significant, since these variables represent important aspects of the larger organizational environment in which the other study variables operate. A preliminary discussion of them will, therefore, provide context.

In terms of faculty responses, none of the demographic variables were found to be significant except in Models 9 and 10 (the regressions run on Perceived Organizational Legitimacy and on all of the study variables simultaneously). In Model 9, being a part-time faculty member is weakly and negatively related to Institutional Trust ($p < .1$), and Experience is a significant negative predictor ($p < .05$). The same applies for both of these variables in Model 10. Perceived Breach of Psychological Contract is always a significant negative predictor of Institutional Trust at the $p < .01$ level, and Dyadic Trust in Supervisor is never significant.

In terms of student responses, being in the faculty of Fine Arts sometimes had a significant or partially significant negative effect on Institutional Trust, but this was most likely due to the fact that there was only one respondent from that faculty in the student sample. Year in program was only partially negatively significant ($p < .1$) when regressed with only the other demographic variables, and therefore most likely does not account for any significant portion of

the variance in institutional trust when other variables are taken into account. Dyadic Trust in Supervisor and Perceived Breach of Psychological Contract are all significant in Models 2 through 9, positively and negatively respectively (although Dyadic Trust is only significant at the $p < .1$ level in Model 5). Perceived Breach of Psychological Contract continues to be negatively significant in Model 10 ($p < .01$), while Dyadic Trust in Supervisor is no longer significant in this model.

While all of the variables were significant under certain circumstances during the regression analyses (with the exception of Personal Proclivity to Trust, which was never significant under any circumstances or at any level of 'p'), the amount of variance attributable to the study variables was changed drastically depending upon which combination of independent variables was used, and upon whether or not control variables were included in the regression equations. While the effects of each of these variables on institutional trust in organizational settings may have important implications and should not be ignored, this study's hypotheses will only be considered to have been supported (for the purposes of this study) if the relevant variables were significant when regressed in combination with all of the other study variables, including controls (i.e. if the variable in question is shown to be significant in Model 10). This is because all of the variables studied, including demographics and controls, are ever-present realities that organizational members must deal with on a daily basis, and the variance in institutional trust for which they account cannot be ignored. Thus, in the final analysis, only Organizational Identification, Procedural Justice, and Perceived Organizational Legitimacy will be considered significant, positive predictors of Institutional Trust among faculty members, meaning that Hypotheses 1b, 3a, and 3c were all supported by the results of these analyses. For students, only Perceived Organizational Legitimacy was positively significant in Model 10,

meaning that only Hypothesis 3c was supported by the results. Thus, organization-level constructs are the most important predictors of institutional trust that were assessed by this study.

Table 8. Descriptive statistics and correlations of study variables (Faculty)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Institutional Trust	3.16	.80	(.88)														
2. Proclivity to Trust	3.05	.45	.09	(.86)													
3. Identification	3.41	.71	.34**	.06	(.83)												
4. Role Enactment	3.68	1.02	.42**	.11	.06	(.95)											
5. Perceived Interference	1.51	.64	-.31**	.02	.03	-.70**	(.70)										
6. Procedural Justice	2.52	.72	.60**	-.03	.16	.35**	-.21*	(.86)									
7. Interactional Justice	2.80	.82	.54**	.03	.22*	.32**	-.28**	.69**	(.95)								
8. Organizational Legitimacy	3.25	.54	.66**	-.01	.25**	.38**	-.29**	.59**	.53**	(.80)							
9. Dyadic Trust	3.80	1.01	.40**	.11	.29**	.67**	-.61**	.36**	.43**	.31**	(.95)						
10. Contract Breach	2.25	.95	-.70**	-.09	-.24**	-.35**	.27**	-.51**	-.52**	-.57**	-.38**	(.95)					
11. Engineering	.08	.27	-.07	.04	0	-.10	.19	.05	-.01	.01	-.14	.02					
12. Fine Arts	.08	.27	.04	-.01	0	-.09	.12	-.03	.02	-.02	-.09	-.10	-.09				
13. Commerce	.10	.30	.09	.07	.03	.08	-.02	.10	-.02	.12	.16	.04	-.10	-.10			
14. Part-time	.17	.37	.03	-.03	-.08	.04	-.17	.10	.06	.23*	.08	-.05	.01	.23*	.07		
15. Administrative	.17	.37	-.06	0	.09	-.09	.11	-.03	-.05	-.01	-.10	-.10	.22*	.08	-.16	-.20*	
16. Experience	16.91	11.91	-.10	-.05	.07	-.03	.02	-.05	-.11	.10	-.13	0	.07	.04	.02	-.05	.03

Notes: N= 88 with missing values deleted pairwise; reliability coefficients are shown in parentheses for each scale; *p<.05, **p<.01.

Table 9. Descriptive statistics and correlations of study variables (Graduate Students)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Institutional Trust	3.13	.80	(.88)													
2. Proclivity to Trust	3.26	.38	-.10	(.86)												
3. Identification	2.99	.76	.44**	-.02	(.83)											
4. Role Enactment	3.65	1	.50**	-.02	.45**	(.93)										
5. Perceived Interference	1.63	.98	-.52**	-.06	-.39**	-.71**	(.91)									
6. Procedural Justice	2.38	.80	.76**	-.19	.30*	.47**	-.40**	(.87)								
7. Interactional Justice	2.90	.92	.62**	-.16	.43**	.44**	-.36**	.79**	(.95)							
8. Organizational Legitimacy	3.08	.60	.78**	.02	.39**	.43**	-.47**	.65**	.49**	(.90)						
9. Dyadic Trust	3.81	1.19	.57**	-.08	.44**	.87**	-.69**	.52**	.47**	.49**	(.90)					
10. Contract Breach	2.80	1.02	-.80**	.24	-.23	-.37**	.46**	-.74**	-.59**	-.70**	-.42**	(.96)				
11. Engineering	.11	.31	-.21	.02	-.06	-.40**	.40**	-.38**	-.28	-.34*	-.46**	.19				
12. Fine Arts	.02	.15	-.29*	-.15	-.23	-.27	.39**	-.25	-.30*	-.04	-.22	.09	-.05			
13. Commerce	.72	.45	.30*	.02	.23	.56**	-.51**	.37*	.24	.31*	.46**	-.27	-.56**	-.24		
14. Doctoral	.16	.37	.10	-.34*	.09	.30*	-.16	.23	.08	0	.31*	-.20	-.16	-.07	.28	
15. Year	2.24	1.17	-.26	-.14	-.23	-.24	.39**	-.11	-.15	-.24	-.13	.23	-.08	.09	-.14	.19

Notes: N= 47 with missing values deleted pairwise; reliability coefficients are shown in parentheses for each scale; *p<.05, **p<.01.

Table 10: Regressions of Institutional Trust on Study Variables (Faculty)

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B	t	B	t	B	t	B	t	B	t
Engineering	-.12	-.35	.01	.04	.01	.03	0	0	.02	.07
Fine Arts	.15	.44	.03	.13	.03	.13	.02	.09	.06	.24
Commerce	.24	.80	.24	1.15	.25	1.16	.23	1.14	.25	1.22
Part-time	-.01	-.03	-.12	-.66	-.11	-.65	-.08	-.46	-.11	-.65
Administrative	-.08	-.30	-.24	-1.34	-.24	-1.33	-.27	-1.54	-.22	-1.25
Experience	-.01	-.92	-.01	-1.16	-.01	-1.14	-.01	-1.42	-.01	-1.30
Dyadic Trust			.09	1.26	-.56	1.22	.05	.71	0	0
Contract Breach			-.56	-7.85**	.09	-7.78**	-.54	-7.69**	-.55	-7.63**
Proclivity to Trust					.035	.25				
Identification							.21	2.26*		
Role Enactment									.14	1.68†
Perceived Interference										
Procedural Justice										
Interactional Justice										
Organizational Legitimacy										
R ²	.03		.54		.54		.57		.56	

Notes: N=88 with missing values deleted pairwise; †p<.1, *p<.05, **p<.01.

Table 10: Regressions of Institutional Trust on Study Variables (Faculty, continued)

Variable	Model 6		Model 7		Model 8		Model 9		Model 10	
	B	t	B	t	B	t	B	t	B	t
Engineering	.05	.83	-.08	-.34	-.02	-.10	-.02	-.08	-.03	-.15
Fine Arts	.07	.77	.08	.34	.03	.12	.18	.82	.21	1
Commerce	.27	.21	.17	.87	.27	1.31	.12	.66	.15	.80
Part-time	-.15	.41	-.15	-.92	-.11	-.67	-.32	-1.97†	-.28	-1.73†
Administrative	-.24	.18	-.20	-1.22	-.20	-1.16	-.24	-1.50	-.24	-1.55
Experience	-.01	.21	-.01	-1.12	0	-.98	-.01	-2.05*	-.01	-2.23*
Dyadic Trust	.04	.50	.049	.73	.05	.65	.06	1.01	-.09	-1.01
Contract Breach	-.56	-7.79**	-.451	-5.97**	-.50	-6.36**	-.37	-4.91**	-.33	-4.31**
Proclivity to Trust									.10	.83
Identification									.21	2.48*
Role Enactment									.06	.69
Perceived Interference	-.12	-.97							-.16	-1.24
Procedural Justice			.33	3.39**					.24	2.09*
Interactional Justice					.19	2.10*			-.04	-.38
Organizational Legitimacy							.62	4.72**	.43	2.92**
R ²	.55		.60		.57		.64		.70	

Notes: N=88 with missing values deleted pairwise; †p<.1, *p<.05, **p<.01.

Table 11: Regressions of Institutional Trust on Study Variables (Students)

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B	t	B	t	B	t	B	t	B	t
Engineering	-.46	-1.03	.06	.21	.06	.21	-.02	-.06	.07	.23
Fine Arts	-1.39	-1.72†	-.95	-1.97†	-.92	-1.87†	-.87	-1.85†	-.96	-1.96†
Commerce	.15	.46	-.03	-.16	-.03	-.18	-.06	-.30	-.01	-.06
Doctoral	.18	.56	.27	-1.35	-.25	-1.19	-.25	-1.34	-.26	-1.31
Year	-.18	-1.77†	-.02	-.35	-.02	-.32	-.01	-.13	-.03	-.40
Dyadic Trust			.20	2.79**	.20	2.76**	.15	2.02*	.22	1.87†
Contract Breach			-.54	-7.45**	-.54	-7.21**	-.54	-7.63**	-.54	-7.33**
Proclivity to Trust					.05	.28				
Identification							.17	1.81†		
Role Enactment									-.04	-.27
Perceived Interference										
Procedural Justice										
Interactional Justice										
Organizational Legitimacy										
R ²	.21		.75		.75		.72		.75	

Notes: N=47 with missing values deleted pairwise; †p<.1, *p<.05, **p<.01.

Table 11: Regressions of Institutional Trust on Study Variables (Students, continued)

Variable	Model 6		Model 7		Model 8		Model 9		Model 10	
	B	t	B	t	B	t	B	t	B	t
Engineering	0	.01	.23	.82	.10	.34	.20	.81	.18	.61
Fine Arts	-1.11	-2.15*	-.64	-1.35	-.84	-1.64	-1.07	-2.52*	-1.01	-1.93†
Commerce	-.01	-.05	-.01	-.07	-.01	-.06	-.05	-.28	-.05	-.25
Doctoral	-.27	-1.37	-.28	-1.51	-.25	-1.26	-.09	-.51	-.17	-.86
Year	-.05	-.68	-.03	-.50	-.02	-.35	-.01	-.16	-.03	-.47
Dyadic Trust	.23	2.87**	.17	2.55*	.19	2.57*	.14	2.16*	.16	1.45
Contract Breach	-.55	-7.45**	-.39	-4.09**	-.51	-5.98**	-.35	-4.20**	-.31	-2.79**
Proclivity to Trust									-.02	-.14
Identification									.12	1.22
Role Enactment									.04	-.27
Perceived Interference	.10	.89							.06	.58
Procedural Justice			.30	2.31*					.26	1.64
Interactional Justice					.06	.66			-.10	-.88
Organizational Legitimacy							.53	3.57**	.41	2.37*
R ²	.75		.78		.75		.81		.84	

Notes: N=47 with missing values deleted pairwise; †p<.1, *p<.05, **p<.01.

DISCUSSION

This study attempted to assess the effects of several variables, at different levels of analysis, on institutional trust in a large organization. This was done for two separate samples, both of which could be thought of as having qualitatively different relationships with the organization in question (i.e. faculty member vs. student). Ultimately, most of the variables of interest to the study were found to be related to institutional trust in this organization. This represents an important finding in and of itself. However, under the particular conditions imposed for this study (i.e. including all independent and control variables in the regression equation) only organizational identification, perceptions of procedural justice, and perceptions of organizational legitimacy were found to be important predictors of institutional trust among faculty members, while only organizational legitimacy was found to be a significant predictor among students. In this section, the important similarities and differences between the two samples that were studied will be discussed, in order to put the rest of the discussion in context. The hypotheses which were supported by the results of the study will then be discussed, as well as their practical implications. The section will conclude with suggestions for future research and a discussion of the limitations present.

Faculty vs. Students

The results of the current study show some important similarities and differences between faculty and students that may warrant such further attention. In terms of the correlations between the variables, for instance, institutional trust is associated with the other variables in exactly the same pattern for faculty and students. Likewise, personal proclivity to trust is not associated with anything else among either sample. In addition, the general direction of relationships (in terms of

significant correlations and regression coefficients) is the same for faculty members and students. The most important difference between the two samples was that, among faculty, institutional trust was predicted by three variables (organizational identification, procedural justice, and perceived organizational legitimacy) while among students, it was predicted by only one (perceived organizational legitimacy). In addition, among students, perceptions of appropriate role enactment, interference with performance or rewards, and procedural justice were correlated with organizational identification among students, but not among faculty. These differences suggest that the way in which students view the relationship between themselves and the university is qualitatively different from the way in which faculty members view their own relationships with the university. Specifically, it would appear that interpersonal interactions are more important to perceptions of the individual-organization relationship among students than among faculty members. This is also suggested by the fact that dyadic trust in supervisor predicts institutional trust among students in most of the regression models discussed above. This difference in the way organizational members of different types view their relationship with the organization has potentially important theoretical implications, which will be discussed below.

Supported Hypotheses

The hypotheses which were ultimately supported by the study's results yield some interesting conclusions. The variables which have been shown to be most strongly associated with institutional trust deal with collective-level constructs, which is to be expected since this is the level at which institutional trust exists.

Firstly, this study has confirmed quantitatively what other studies (e.g. Maguire and Phillips, 2008) have heretofore demonstrated only qualitatively: that is, that identification with

an organization is a predictor of institutional trust (at least, in this context, among faculty members at the university in question). This is one way in which the current study has expanded upon past trust research. Thus, as Maguire and Phillips (2008) have stated it: ‘institutional trust can be identity-based; its creation, maintenance and loss depend upon organizational identity and identification of organizational members’ (p.387). Threats to organizational identification (be they through mergers, corporate scandals, etc) are therefore likely to undermine institutional trust among organizational members. An empirical demonstration of this conclusion represents one contribution of this study.

In addition, this study has demonstrated that perceptions of procedural justice among faculty members have a direct relationship with feelings of institutional trust, a relationship that has been speculated upon in the past (e.g. Ellonen et al, 2008) but never, to the knowledge of the author, quantitatively demonstrated.

The last hypothesis supported by the study stated that higher perceived organizational legitimacy will predict greater institutional trust. This held true among both faculty members and students. Therefore, institutional trust among organizational members is significantly linked to how acceptably an organization operates according to the norms of specific industries or societies in the eyes of those organizational members; in other words, how legitimate the organization is perceived to be (Human and Provan, 2000). Legitimacy has already been shown to have implications for interorganizational trust (e.g. Gulati and Nickerson, 2008; Poppo et al, 2008). Once again, however, a contribution of this study has been to show that individual perceptions of organizational legitimacy among an organization’s members can affect trust within institutions, as well as between them. This has several implications for organizations and organizational decision makers. Firstly, organizations need to be aware of their members’

perceptions of the 'form' of the organization, as well as what are perceived to be the 'natural' ways for that form to organize and operate, if they wish to be perceived as legitimate (Baum and Oliver, 1992). For instance, an organization operating in the financial services industry must be sure that their employees believe they are using industry-standard financial practices if they wish to foster institutional trust among those employees. If for some reason it is not feasible to operate according to industry standards, organizations must find some way to influence the legitimacy perceptions of their members. In addition, when changes are made to policies or operating procedures, organizational decision makers must ask themselves whether those changes will violate institutional norms, which often conflict with maximizing such effectiveness (Zucker, 1987). If the answer is 'yes,' they must weigh the benefits with the potential costs of reducing institutional trust, such as increased ambiguity during times of crisis (Webb, 1996), reduced interpersonal trust and communication within organizations (Rousseau et al, 1998), etc., although a comprehensive understanding of the effects of low institutional trust within an organization would require more research. Of course, organizations must also be aware of exactly what institutionalized norms and practices are being transmitted to newcomers (Zucker, 1987), and change them if they are found to be a hindrance to organizational effectiveness, although this would be much easier said than done, and would most likely be a very gradual process, since according to Strang and Sine(2000), institutional norms are highly resistant to change and act on the behaviour of organizational members without their conscious knowledge. It is also important to note that the violation of institutional norms can threaten the organizational identity of an organization's members (Nor-Aziah et al, 2007), which, as this study has confirmed, can in turn lead to reduced institutional trust.

It should also be noted that there were certain variables which were shown to be related to institutional trust under certain regression models, even though their hypotheses were not ultimately supported. There are several possible reasons for this. Several of the scales, for example, include items which are fairly similar to items in other scales (e.g. procedural and interactional justice), and this raises the possibility of common method variance. It may also be that certain variables account for the same variance in institutional trust as others, and therefore simply do not appear to be significant in the regression results. Nevertheless, it will be worth discussing the variables that were significant when regressed individually. Among faculty, for instance, perceptions of appropriate role enactment were weak predictors of institutional trust, and perceptions of interactional justice were significant when institutional trust was regressed on it individually. This again demonstrates how interpersonal factors can have an effect on perceptions of higher-level constructs, since the appropriateness with which authority figures carry out their roles as well as the quality of interpersonal treatment received by organizational members in general can affect institutional trust. In addition, among students, identification and procedural justice become significant predictors of institutional trust when individual regressions are carried out: thus, although the specific relationships need to be studied further to comprehensively understand them, the relationships of these variables to institutional trust discussed above (for faculty members) may hold for students as well under certain circumstances. In the context of this particular study, however, other variables simply account for a greater portion of the variance in institutional trust.

The control and demographic variables which were found to be significant are also worth mentioning. Specifically, dyadic trust in supervisor was a significant predictor of institutional trust among students under most of the regression models, suggesting that interpersonal

interactions may be more important to students in terms of evaluating the trustworthiness of an organization than to faculty. Perceptions of psychological contract breach were always significant predictors of institutional trust, which suggests that perceived promises from an organization are very important in determining how trusting a member will be of that organization, whether or not those promises were ever actually consciously made or not by an organization. Finally, years of experience was shown to be a significant predictor of institutional trust among faculty members, suggesting that greater experience with an institution causes individuals to trust that institution less.

Practical Implications

There are several practical implications which can be inferred from the results of this project. The most important of these are related to perceptions of procedural justice and organizational legitimacy.

Perceptions of procedural justice have been shown by this study to affect institutional trust among organizational members. Thus, in order for organizations to foster feelings of institutional trust, it is essential for them to be sure that the policies and practices which they implement adhere to certain 'justice-criteria,' which have been shown to foster perceptions of procedural justice among organizational members. Specifically, the rules synthesized by Leventhal (1980) should all be in place, i.e. consistency, ethicality, representativeness, correctability, bias suppression, and accuracy. In addition, during processes such as performance appraisal, issues such as feedback systems, employee 'voice,' and employee participation must be considered. These are all important issues for the reasons discussed in an earlier section. It must be borne in mind, however, that it is individual perceptions of procedural fairness that

influence institutional trust, rather than some objective standard of fairness. Fostering institutional trust as it relates to procedural justice is, therefore, more a question of managing perceptions than anything else. An objectively fair procedure which might, in reality, be to the benefit of organizational members will still be detrimental to institutional trust if they do not perceive it as fair. For instance, in a unionized organization, certain procedures might be made fairer to employees, objectively, if the union were removed. However, if employees in that organization view the union as something valuable in and of itself, then removal of the union would result in employees perceiving procedures as less fair, rather than more so. This would result in reduced institutional trust, demonstrating that the same procedures can be perceived as fair or unfair depending on the circumstances. It is therefore very important for organizations to be aware of how procedures and practices are viewed by their members.

In terms of legitimacy perceptions, it is especially important to note that certain demographic variables become predictors of institutional trust when regressed with organizational legitimacy. Specifically, these include years of experience and part-time status. Both part-time status and years of experience are negatively associated with institutional trust among faculty members when the effects of perceptions of legitimacy are taken into account. These are important findings, which represent a contribution of this study to the literature. Legitimacy perceptions, therefore, are especially important among part-time faculty, as well as faculty members with greater experience, and must be fostered in order to improve feelings institutional trust.

There are several things that university administrators must take into account when attempting to encourage perceptions of organizational legitimacy. Firstly, it is important to consider the legitimacy-related messages which are being communicated to organizational

members about the operations of the organization, for instance, in terms of the university's adherence to accreditation regulations, administrative decisions regarding tuition increases, etc. Communications about such issues should be numerous and frequent.

It must, however, be borne in mind that one-way communications from an organization's top management to its members do not take into account the way in which information is interpreted by organizational members. This is a point that has been raised by Schultz and Wehmeier (2010) in order to criticize 'symbolic' and 'ceremonial' methods of building legitimacy. The same authors recommend the 'dialogic' approach as a more effective model. The dialogic approach involves communicating legitimacy-related messages to organizational members, and then taking member-feedback into account in order to make appropriate changes to policies as well as to future communications. It is generally regarded as among the more effective means of building legitimacy and trust (e.g. Bentele, 1994; Morsing and Schultz, 2006.) It is, therefore, recommended for academic institutions in order to foster perceptions of legitimacy among their members. Most importantly, salient issues related to such perceptions must be identified, and then communications (e.g. advertisements, the language used by administrative figures in speeches and memos, etc) must be prepared which reflect the organization's commitment to dealing effectively with these issues in a perceptually legitimate way.

One immediately apparent way in which organizations could identify such issues is through the use of surveys on trust, or on other attitudes related to legitimacy. While the current study was being carried out, for instance, several legitimacy-related issues were raised (by respondents and non-respondents alike) in emails addressed to the researcher. These issues were raised without any encouragement on the part of the researcher, which suggests that members of

the particular university being studied may feel that their opinions have heretofore gone more or less unnoticed (i.e. they may feel that there are currently ‘asymmetrical’ communication strategies being used by the university’s top administrators [Schultz and Wehmeier, 2010, p. 19]). In fact, one issue in particular which came up several times was the perception that there is not currently enough effective communication between administrative figures in the university (e.g. the provost) and the academics which make up the faculty. Beyond that, there is currently a perception among certain faculty members that the needs of academics in the university, although known, are often ignored, either for ‘political’ reasons, or for the personal gain of certain administrative figures. In addition, certain faculty members expressed dissatisfaction with the way in which the university is, as they see it, being run as more of a ‘corporation’ than as a school. This is an issue which has already been identified in the literature as something with which numerous academic institutions may struggle (e.g. Gioia and Thomas, 1996). Other issues raised by faculty and students included tuition hikes and sustainability commitments.

Based on all of this unsolicited feedback to one survey, it would appear that it is not especially difficult to collect opinions on legitimacy-related issues from members of academic institutions (at least not in the institution studied for this project). Academic institutions, therefore, should collect information on such issues from both faculty and students, and prepare communications which reflect an intention to initiate changes which will be acceptable to all (or most) concerned stakeholders in the organization, using a symmetrical (‘dialogic’) style of communication (allowing for further feedback and correctability). This would be especially important for encouraging institutional trust among part-time and experienced staff members.

Such initiatives could also be useful for fostering institutional trust in that they might help organizational members to identify more strongly with the organization. If faculty members feel

that a key characteristic of their university is a focus on the issues which are important to its members, this will most likely contribute to the attractiveness of the organizational identity, which has been shown to be important for encouraging identification with an organization (Maguire and Phillips, 2008). This would be useful for encouraging feelings of trust in the organization.

Directions for Future Research

This study has contributed to the literature on trust in several ways. However, it has raised many questions about the nature of both trust in general as well as institutional trust specifically.

Firstly, future research could profitably address differences between different types of organizational members (i.e. students vs. faculty and employees vs. volunteers) in terms of factors related to the maintenance, destruction, and repair of institutional trust among them. In this study, it was found that organizational identification and perceptions of procedural justice affect institutional trust among faculty members but not among students. There are several possible reasons for this. One such reason may be that the livelihoods of students do not generally depend upon the university which they attend. It is therefore possible that organization-level constructs such as procedural justice are less salient to them in terms of their evaluation of the organization's trustworthiness. Dyadic trust in supervisors, on the other hand, is an important predictor of institutional trust among students under many circumstances, which is never the case for faculty members, suggesting that interpersonal interactions are more important to students in terms of deciding whether or not to trust an organization. This may be because, as mentioned above, the relationship between faculty members may not be a superior-subordinate relationship

in the strictest sense of the term, since this relationship often constitutes an association between a junior department chair and a senior faculty member, or between faculty member peers. The way in which faculty members and students view the relationship between themselves and the university is therefore likely to be very different. Again, this may be for several reasons. Faculty members, for instance, may feel that they have greater access to corrective interventions from the university administration in cases where they feel unjustly treated by supervisors than students do because of faculty associations, union memberships, and the like. In addition, students are likely to feel that the degree to which they can trust their supervisors is likely to influence the grades, letters of recommendation, and ultimately the degrees that they obtain from the university, making interpersonal trust a salient issue in terms of what they can expect to receive from the university. In short, perceived outcome dependence depending on an individual's standing in an organization most likely affects institutional trust. The exact nature of this relationship should be addressed by future research. Specifically, a study on trust focusing exclusively on the interpersonal level in academic institutions might further illuminate the dynamics involved in these relationships. Further work on this subject could also take into account different types of power in university relationships (e.g. reward power versus coercive power). Department chairs who operate based mostly on reward power may damage trust more than those who operate based on referent power, for example, since this would make outcome-dependence a more salient issue for subordinates. The opposite might hold trust for faculty-student relationships. The subtleties of these different types of power-use may illuminate relationships between institutional trust and interpersonal interactions which were not considered by the current project.

Secondly, the relationship between perceptions of psychological contract breach and institutional trust requires more attention in order to be fully understood. Since the psychological contract that exists between organizations and their members consists, basically, of a set of assumptions regarding what is owed to organizational members, it differs in important theoretical ways from the concept of institutional trust, which is an evaluation of the predictability and benevolence of an organized system. The important difference between these two constructs is in how they originate. Institutional trust is an expectation, which can be influenced by myriad sources, e.g. the media, stories from friends, personal experience, etc. A psychological contract is a set of beliefs about what an organization has implicitly promised in exchange for membership. Robinson (1996) discusses the important differences between expectations and psychological contracts. Specifically, ‘although psychological contracts produce some expectations, not all expectations emanate from perceived promises, and expectations can exist in the absence of perceived promises or contracts’ (p.575). Based on the results of the current study, however, any violation of a perceived promise to an organizational member from the organization is likely to undermine that member’s expectations regarding institutional trust, an expectation which can be thought of as originating more or less independently of any psychological contract, since individuals are likely to base their evaluations of an organization’s trustworthiness on multiple sources, such as advertising and scandals. Perceived organizational promises are, therefore, an important basis for predicting institutional trust, and future research on the subject must take this into account. For instance, it may be interesting to assess the importance of various sources of information pertaining to an organization’s trustworthiness (e.g. media reports) relative to perceptions of psychological contract breach. It is possible that one incident of perceived contract breach would be found to

undermine an individual's feelings of institutional trust regardless of any other reason that individual might have to trust the organization. If this were the case, it would be an important finding. Another possibility worth addressing is whether perceptions of contract breach might predict institutional trust, as well as the reverse (which this study demonstrated); that is, does reduced institutional trust lead to increased perceptions of contract breach? For instance, an employee who feels that he cannot trust the organization of which he is a member might selectively focus upon incidents which prove to him that the psychological contract between him and the organization is being violated. He may even adjust his assumptions about what it is that the organization owes him (or vice-versa) in order to feel more victimized. Further work into this potential relationship might yield important implications for organizational behaviour, institutional theory, etc.

Thirdly, the results of this study have suggested several possible relationships which may exist between institutional trust and other organizational variables, since institutional trust is correlated with these variables. Dyadic trust in supervisors is correlated with institutional trust among both faculty and students, meaning that they are not altogether unrelated. It is possible, for example, that having greater institutional trust causes individuals to trust supervisors more. Perceived appropriate role enactment and interference with performance or rewards are also correlated with institutional trust among both samples, which also suggests that interpersonal variables may be related to institutional trust in some way other than as direct predictors. Perhaps higher levels of institutional trust cause individuals to perceive their superiors as more effectively enacting their roles. Or perhaps, at least among students, perceived appropriate role enactment causes higher levels of dyadic trust in supervisors, which in turn affects institutional trust. This may be suggested by the high correlations between interpersonal variables and dyadic

trust in supervisors. The same situation may exist for interactional justice among students: although this variable did not predict institutional trust, it is possible that the reverse relationship exists, i.e. being more trusting of an institution might give individuals the impression that members of that institution are particularly well treated, even when this is not necessarily the case. These are questions that future research may address.

It is also interesting to note certain of the inter-correlations between the variables in the study other than institutional trust. Some of these relationships (e.g. the association between perceived appropriate role enactment and perceived interference with performance or rewards) make intuitive sense and are to be expected. Others very effectively demonstrate the presence of cross-level relationships which are so important in organizational research. For instance, perceived appropriate role enactment is related to perceptions of procedural justice. It is therefore possible that an organizational authority figure who acts in a way that employees feel is inappropriate can undermine the perceived fairness of the policies within that organization. Alternatively, it is possible that perceptually unfair policies can enhance employee perceptions of inappropriate role enactment. The presence of several such possible relationships has been demonstrated by this study, since perceived appropriate role enactment and perceived interference with performance or rewards are both also associated with interactional justice, perceived organizational legitimacy, and perceived breach of psychological contract. These are constructs which assess the relationship between individuals and organizations, employee perceptions of which have been shown to be influenced by interactions at the interpersonal level. In addition, dyadic trust in supervisor is also associated with perceived organizational legitimacy. There are, thus, many unanswered questions raised by this study about the exact nature of the relationships between these variables, and it may be useful for future research to address them.

In addition, personal proclivity to trust was found to be unrelated to institutional trust. One implication of this finding is that an individual's tendency to trust impersonal systems is unrelated to his or her psychological development in terms of general willingness to trust. Thus, future research on the development of a personal proclivity to trust *institutions* might well prove very interesting. However, it must be borne in mind that personal proclivity to trust was not correlated with any of the other study variables, including dyadic trust in supervisor. Given that the measure used for this variable is intended to measure general willingness to trust, there should have been at least some relationship between these two variables. It is possible, therefore, that this measure was not entirely valid as a predictor of personal proclivity to trust. It is also possible that this variable did not appear significant because the respondents were not experiencing any kind of crisis or high uncertainty which would have caused that trait to be an important predictor of trusting behavior (Rotter, 1980). Thus, future research on this variable may wish to study an organization under conditions of crisis or upheaval of some kind.

Limitations

While this study did contribute to the current literature on trust, it must be borne in mind that it had certain important limitations. The first of these involves sample sizes. The faculty samples cannot really be considered representative of the entire university, since the response rates from each faculty are quite low (some possible reasons for this are discussed above). This also holds true for the student sample, the results for which must be interpreted with a certain level of caution due to the presence of between-group differences made apparent by the ICC(1) values. In addition, since participation was purely voluntary and since every faculty member whose email address was available was contacted, it may have been that faculty members who had a special interest in voicing their opinions on the university were overrepresented (some

emails received from faculty members by the author suggested that this may have been the case). Thus, it is unlikely that either the faculty or student samples can be considered truly representative of the populations targeted.

In addition, a comprehensively multilevel investigation of the constructs of interest was beyond the scope of the project. Although multilevel issues were considered in the research design (e.g. verifying for ICC(1) values), it would have been beyond the parameters of the project to design a framework which would satisfactorily take into account the assumptions of variability and implications for multilevel theory design such as those proposed by Klein et al (1994). A more comprehensive project may, for instance, have included analyses for networks of respondents in the same academic departments or reporting to the same supervisor (among both faculty and students) to control for within-group differences so that the homogeneity, independence, or heterogeneity of organizational groups could have been definitively established. It will be important for future research on institutional trust to take these issues into account, since it is fairly certain that cross-level factors do indeed influence this construct.

There may also have been method variance issues which influenced the results. Specifically, since respondents filled out the questionnaire all at once in sequence, it is possible that their responses to items on one measure may have influenced their responses to items on other measures. In addition, many of the anchors for the scale items were quite similar, and this may have introduced some common-method bias in and of itself.

It should also be noted that the results of this study are most likely not generalizable to all types of organizations, since academic institutions can be considered quite different from other organizations in several ways. The hierarchical structure of universities, for instance, is quite

different from that of other organizations in that department chairs are chosen from among academics who work closely together within departments. The relationship between a professor and his or her department chair, therefore, can be considered more of an association between peers than as a true superior-subordinate relationship. This would be different in a corporation, where more traditional authority relationships might have more of an impact on institutional trust. Faculty members and students are also likely to have different ideas about what constitutes appropriate behaviour for a university than for a profit-seeking corporation. Since universities are supposed to exist for the purpose of developing and creating knowledge, people may be less likely to interpret certain behaviours on their part as untrustworthy, while the same behaviours on the part of corporations might be interpreted as dishonest. Thus, differing levels of confidence based on organizational forms might play an important part in the institutional trust felt by organizational members. This might be one reason why perceived legitimacy was such an important predictor of institutional trust in this context: universities which are seen as operating the way that they 'should' be may cause them to appear more trustworthy, since universities may be perceived as having different (perhaps more trustworthy) organizational goals than other types of organizations. Thus, in other types of organizations, interpersonal relationships (among other factors) might play a more important part in terms of institutional trust than perceptions of legitimacy.

Finally, since participation in the survey was on a purely voluntary basis, it is possible that only respondents with particular motivations to respond did so, which may have skewed the results. There are three possible ways in which this may have affected the results. It is possible, for instance, that individuals who were highly trusting of the university were disproportionately represented in the results, since such individuals may have felt compelled to participate out of a

sense of loyalty to the university. This would indicate that the mean level of trust, identification, etc shown in the results may have been higher than in the university as a whole. Alternatively, it is possible that the exact opposite situation occurred: individuals with low levels of trust in the university may have been disproportionately represented, since they may have felt compelled to respond out of a need to vent their frustrations about the university (several emails received suggest that this may have been the case). In this case, mean levels of trust and related variables may have been lower than in the university as a whole. Both of these situations may have skewed the results in opposite directions. It is also possible, however, that both high-trust and low-trust individuals responded (i.e. that both of these situations occurred to the same degree) in which case any extreme scores would have cancelled each other out, and the results actually did reflect the university as a whole. In any case, these possibilities represent a potential limitation of the study, since participation was voluntary and since response rates were so low.

CONCLUSION

In conclusion, this study attempted to assess the effect of multiple organizational variables on institutional trust among organizational members. To that end, individual perceptions of factors at the individual, interpersonal, and collective levels were assessed in terms of their relationships with institutional trust. It was found that three of the variables assessed (individual perceptions of organizational identification, procedural justice, and organizational legitimacy) had significant effects on perceptions of institutional trust in the organization studied. Despite certain limitations, the study contributed to the current literature on trust in several ways, and has laid a partial foundation for future research.

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APPENDIX: MEASUREMENT SCALES

Institutional Trust (Robinson, 1996) (Strongly agree-Strongly Disagree):

1. I believe that this university has high integrity.
2. I can expect this university to treat me in a consistent and predictable fashion.
3. This university is not always honest and truthful.
4. In general, I believe that this university's motives and intentions are good.
5. I don't think this university treats me fairly.
6. This university is open and up-front with me.
7. I am not sure I fully trust this university.

Personal Proclivity to Trust (Rotter, 1967) (Strongly agree-Strongly Disagree):

1. Hypocrisy is on the increase in our society.
2. In dealing with strangers one is better off to be cautious until they have provided evidence that they are trustworthy.
3. This country has a dark future unless we can attract better people into politics.
4. Fear and social disgrace or punishment rather than conscience prevents most people from breaking the law.
5. Using the honour system of not having a teacher present during exams would probably result in increased cheating.

6. Parents can usually be relied on to keep their promises.
7. The United Nations will never be an effective force in keeping world peace.
8. The judiciary is a place where we can all get unbiased treatment.
9. Most people would be horrified if they knew how much news that the public hears and sees is distorted.
1. It is safe to believe that in spite of what people say most people are primarily interested in their own welfare.
11. Even though we have reports in the newspapers, radio, and T.V., it is hard to get objective accounts of public events.
12. The future seems very promising.
13. If we really knew what was going on in international politics, the public would have reason to be more frightened than they now seem to be.
14. Most elected officials are really sincere in their campaign promises.
15. Many major national sports contests are fixed in one way or another.
16. Most experts can be relied upon to tell the truth about the limits of their knowledge.
17. Most parents can be relied upon to carry out their threats of punishment.
18. Most people can be counted on to do what they say they will do.
19. In these competitive times, one has to be alert or someone is likely to take advantage of you.

2. Most idealists are sincere, and usually practice what they preach.
21. Most sales people are honest in describing their products.
22. Most students in school would not cheat even if they were sure of getting away with it.
23. Most repair-people will not overcharge even if they think you are ignorant of their specialty.
24. A large share of accident claims filed against insurance companies are phony.
25. Most people answer public opinion polls honestly.

Organizational Identification (Mael and Ashforth, 1992) (Strongly Agree-Strongly Disagree):

1. When someone criticizes this university, it feels like a personal insult.
2. I am very interested in what others think about this university.
3. When I talk about this university, I usually say 'we' rather than 'they.'
4. This university's successes are my successes.
5. When someone praises this university, it feels like a personal compliment.
6. If a story in the media criticized this university, I would feel embarrassed.

Appropriate Role Enactment (Competence) (Tyler and DeGoey, 1996) (Strongly Agree-Strongly Disagree):

1. My academic/administrative head / supervisor makes good decisions.
2. My academic/administrative head / supervisor is doing a good job.

3. When problems arise, my academic/administrative head / supervisor tries hard to solve them.

4. When problems arise, my academic/administrative head / supervisor tries hard to find a solution that is satisfactory to all of the people involved.

**Perceived Interference with Performance/Rewards (Vredenburg and Brender, 1998)
(Always-Never)**

1. My academic/administrative head / supervisor makes arbitrary personnel selection or policy decisions/ decisions about academic projects or policies.

2. My academic/administrative head / supervisor assumes credit for subordinates'/students' work deceptively.

3. My academic/administrative head / supervisor deprives subordinates/students of resources necessary for task performance.

4. My academic/administrative head / supervisor discriminates regarding performance appraisals.

5. My academic/administrative head / supervisor allocates rewards arbitrarily.

6. My academic/administrative head / supervisor attributes his or her own poor performances to subordinates/students.

7. My academic/administrative head / supervisor requires attendance at This university's social events.

Dyadic Trust in Supervisor (Tyler and DeGoey, 1996) (Always-Never):

1. My academic/administrative head / supervisor is honest in what he/she tells me.

2. My academic/administrative head / supervisor does things that are dishonest or improper.
3. My academic/administrative head / supervisor tries hard to be fair to me.
4. My academic/administrative head / supervisor gives me the real reasons for the decisions that he/she makes.
5. My academic/administrative head / supervisor takes my needs into account when making decisions.
6. My academic/administrative head / supervisor tries very hard to be fair.
7. My academic/administrative head / supervisor deals with me honestly and ethically.
8. My academic/administrative head / supervisor shows a real interest in trying to be fair to me.

Procedural Justice (Niehoff and Moorman, 1993) (Always-Never):

1. At this university, decisions about jobs or policies/decisions about academic projects or policies are made in an unbiased manner.
2. At this university, all employee/student concerns are heard before job or policy/academic or policy decisions are made.
3. At this university, before job or policy decisions/decisions about academic projects or policies are made, accurate and complete information is collected.
4. At this university, job or policy decisions/decisions about academic projects or policies are clarified, and additional information is provided when it is requested.

5. At this university, all job or policy decisions/decisions about academic projects or policies are applied consistently across everyone who is affected.

6. Employees/students are allowed to challenge or appeal decisions made by this university.

Interactional Justice (Niehoff and Moorman, 1993) (Always-Never):

1. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, they are treated with kindness and consideration.

2. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, they are treated with respect and dignity.

3. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, people's personal needs are taken into account.

4. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, people are dealt with in a truthful manner.

5. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, concern is shown for their rights as employees/students.

6. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, the implications are discussed with them.

7. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, adequate justification is given for those decisions.

8. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, they are offered explanations that make sense to them.

9. At this university, when decisions are made about employees' jobs/students' projects by their superiors/academic and TA supervisors, the decisions are explained very clearly to them.

Psychological Contract Breach (Robinson and Moorman, 2000) (Strongly Agree-Strongly Disagree):

1. Almost all the promises made by this university during the recruitment/admission process have been kept so far.

2. I feel that this university has come through in fulfilling the promises made to me when I was hired/accepted.

3. So far, this university has done an excellent job of fulfilling its promises to me.

4. I have not received everything promised to me from this university in exchange for my work.

5. This university has broken many promises to me even though I've upheld my duties to it.

6. I feel a great deal of anger toward this university.

7. I feel betrayed by this university.

8. I feel that this university has violated the contract between us.

9. I feel extremely frustrated by how I have been treated by this university.

Perceived Organizational Legitimacy (Elsbach, 1994) (Strongly Agree-Strongly Disagree):

1. The general public approves of this university's operating procedures.

2. This university follows government regulations for operating procedures in the post-secondary education industry.

3. Employees/students support this university's operating decisions.
4. Most of this university's employees/students would recommend working for/studying at the university.
5. Most of the general public would approve of this university if asked their opinion.
6. This university is committed to meeting education-industry standards in its operations.
7. Most employees/students would continue working/studying at this university even if they could get a job with/get accepted to any other university.
8. This university is concerned with meeting acceptable post-secondary education industry standards.
9. This university is viewed as one of the top organizations in the post-secondary education industry.
1. This university's leaders believe in 'playing by the rules' and following accepted operating guidelines.
11. This university has one of the lowest rates of employee turnover/dropout rates in the post-secondary education industry.
12. Most of the general public would approve of this university's operating practices.