TRUST ON FIRE:
EXPLORING THE IMPORTANCE OF TRUST IN URGENT MOMENTS

By

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Many jobs possess an inherent duality: everyday, traditional actions, with punctuated instances of emergencies or crises. The purpose of my study was to examine how this duality affects trust at work. My study explicated two new constructs: routine trust and urgent trust. I examined the nomological network of these trust variables using a sample of firefighters. These two forms of trust are hypothesized to be differentially related to a set of organizationally relevant independent and dependent variables. Risk was posited to moderate the relationship between trust and the outcome variables of this study.

Some evidence was found that the two forms of trust are distinct, yet related constructs. Most of the hypotheses were not supported, possibly due to a lack of statistical power. Risk was not found to operate as a moderator. The results are encouraging for future research, assuming that the research is conducted using a larger
sample. Practitioners should be aware that these two forms of trust exist and that distinguishing between them may help them achieve organizationally relevant goals.
CHAPTER 1
INTRODUCTION

Trust is an important psychological variable related to key organizational outcomes. Kramer (1999) noted that “trust is moving from a bit player to center stage in contemporary organizational theory and research” (p. 238). The changing nature of work accentuates the importance of this construct. Popular press has called attention to a plethora of recent situations wherein large corporations have violated the trust of stockholders and also employees. The names Enron and Worldcom will forever be synonymous with tricky accounting, abject dishonesty, and vulgar deceit. These trust “violations” also occur in the opposite direction, as employees today feel less loyalty to their employers and may therefore be more willing to exploit the vulnerability of the companies for which they work. Employees steal time and effort by shirking and, in many cases, actually stealing money in both a literal sense and by pilfering merchandise and/or supplies. Whatever the reasons for these deeds, their prevalence does not make for an environment conducive to the fostering of trust.

Caudron (1996) provided the following examples of how trust breaks down within an organization: “Management touts open-book communication, for example, but employees hear about layoffs on the radio. The board talks about the need to cut costs while handing the CEO a multi-million dollar bonus. Managers promote long-term focus, but measure short-term goals. Teams are advocated, but individuals are rewarded” (p. 20).
In each of these examples, dissonance between what management says and does leaves employees with little basis for trusting their employers.

Additionally, the physical characteristics of today's work environment highlight the increased relevance of trust to organizations. For example, the demographic distribution of employees has become quite diverse, even in careers typically dominated by one gender or race. Further, self-managed teams have become a popular work unit. Management has little control over these teams and must therefore trust that they are functioning effectively. If in fact a team is shirking as a collective for example, management may not be privy to this fact until it is too late and a project has failed. Finally, the actual distribution of work within many firms has expanded to include not only different cities or states but, in some cases, different regions of the world. Obviously, in these cases, interdependent workers must often substitute trust for monitoring because of simple geographic differences that make face-to-face observation difficult to impossible.

In my study, trust is defined as a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another. This definition, put forth by Rousseau, Sitkin, Burt, and Camerer in the 1998 special issue on trust in the Academy of Management Review (AMR), has three key components. First is the idea that trust is an intention, not an act. Second is the idea of vulnerability. Without some sort of vulnerability, trust is unnecessary. There is little or no need to trust someone whose actions have no impact on the trustor. Third is the idea of "positive expectations" for the behavior or intentions of another.

In discussing these behaviors, this definition becomes deficient. Behaviors are multidimensional constructs themselves. One dimension on which they vary is how
urgent they are. Some behaviors are mundane in nature and involve everyday, normal actions performed at work. Other behaviors are far more urgent in nature and may include rarer actions, such as behavior in emergency situations. For example, a convenience store clerk engages in a different psychological event when he trusts the clerk working the next shift to show up on time, than when he trusts his coworker to behave properly in the event of an armed robbery. In a related manner, a person who works in assembly trusting a coworker in engineering to design a product that can in fact be assembled might be a psychological event quite distinct from that same person trusting that engineer to point out an critical design flaw that makes the product unsafe even after the product has gone to market.

In other words, this definition leaves two important questions unanswered: First, willingness to be vulnerable during what kind of behavior and second, positive expectations that the person will engage in what type of behavior. These two questions are important because many jobs possess an inherent duality: everyday, traditional actions, with punctuated instances of emergencies or crises. Given this distinction, it seems that trust may take on different forms in these different situations. This form of trust may be urgent when emergencies occur, but has received very little research attention. Most research on trust has been conducted in samples (e.g., secretaries, public utility office employees, sales managers) where these emergency situations simply do not arise (Butler, 1983; Nicholson & Goh, 1983; Nooteboom, Berger, & Noorderhaven, 1997). As a consequence of this sampling, trust often is not studied in jobs where life or death situations are sometimes a reality of the workday. Workers faced with these situations include military personnel, police, and firefighters. Employees in these lines of
work must trust their coworkers in an everyday sense as well. These jobs involve situations distinct from those that occur in normal jobs.

Other jobs possess this duality as well, though perhaps not in a life or death sense. That is, most jobs have every day, traditional actions with punctuated urgent situations. For example, few jobs are as routinized as those performed by assembly-line workers. In these situations, each worker on the line must trust the preceding coworkers to do their jobs correctly in order for the product to be produced. These instances of trust are psychologically distinct from instances involving these same workers trusting each other to pull one another to safety should someone become entangled in the moving-parts assembly line machinery. Given this discussion of the inherent duality of trust, the purpose of my study was to reconceptualize trust as it is experienced in jobs that possess this important duality. More specifically, two types of trust were examined: urgent trust and routine trust.

The construct of trust has been of interest to researchers in a variety of disciplines. While disciplines differ in their views of trust, general agreement exists within different disciplines. Personality researchers see trust as an individual difference. Economists see trust as an institutional phenomenon. Sociologists see trust as embedded in relationships among people. Social psychologists see trust as an expectation of another party in a transaction (Bigley & Pearce, 1998).

Although trust appeared as a variable in the management literature as early as 1946, no work focused specifically on trust until the work of Mellinger (1959). Mellinger defined distrust as the feeling that another's intentions and motives are not always what he says they are, that he is insincere, or has ulterior motives. Millinger found distrust to influence communication among study participants in the following way: When a
communicator distrusts the recipient of that communication, the communicator will conceal his real feelings about the subject of the communication.

More influential than Mellinger's work was that of Deutsch (1958). Deutsch examined different motivational orientations (cooperative, individualistic, and competitive) as causes of trusting and trustworthy behavior on the part of participants in a two-person nonzero-sum game. Later, Deutsch (1960) defined trust as follows:

An individual may be said to have trust in the occurrence of an event if he expects its occurrence and his expectation leads to behavior which he perceives to have greater negative motivational consequences if the expectation is not confirmed than positive motivational consequences if it is confirmed. (p. 124)

Implicit in this definition is the idea that a person has more to lose than to gain by trusting another.

Research on trust then slowed more or less to a standstill until Rotter (1967) developed a scale to measure interpersonal trust. Rotter defined interpersonal trust as an expectancy held by an individual or group that the word, promise, or verbal or written statement of another individual or group can be relied on. In later research, Rotter showed that people higher in interpersonal trust were less likely to lie, cheat, or steal. Further, people higher in interpersonal trust were less likely to be unhappy or maladjusted, and more likely to be well-liked and sought out as a friend, than individuals low in interpersonal trust (Rotter, 1980).

While the early work of Rotter served as a springboard for research on trust in the literatures of personality and psychology, the work of Roberts and O'Reilly (1974) was similarly influential on research on trust in the management literature. The focal variable of these researchers was trust in superiors. Specifically, two articles by these authors in
1974 identified trust in superiors as a factor influencing upward communication within organizations.

Mayer, Davis, and Schoorman (1995) presented an integrative model of organizational trust. These authors justified the need for an integrated model by citing a host of problems in the literature on trust. Examples included definitional problems; uncertainty concerning the relationship between risk and trust; confusion concerning the referent of trust; and confusion between trust, its antecedents, and its outcomes. Their model showed that the perception of another's ability, benevolence, and integrity as well a person's general trusting propensity influenced how much trust a person extended to another. This trust determined how much risk the trustor was willing to take in the relationship. Their work was especially important because it distinguished between antecedents of trust internal to the trustor (i.e., propensity to trust) and those internal to the person being trusted (i.e., ability, benevolence, and integrity).

Hosmer (1995) conducted a cross-disciplinary review of the trust literature in an attempt to find a unifying definition of trust. Hosmer identified several basic conclusions that are accepted across the multiple disciplines examined. First, he found that trust was, for the most part, expressed as an optimistic expectation concerning the outcome of an event or the behavior of a person. Second, trust tended to occur under conditions of vulnerability. Third, trust was associated with uncoerced cooperation and was difficult to enforce. Finally, trust was usually extended with an implicit assumption of an accepted duty to protect the rights and interests of others. Given these conclusions, Hosmer extended the following definition of trust:

Trust is the reliance by one person, group, or firm upon a voluntarily accepted duty on the part of another person, group, or firm, to recognize and protect the
rights and interests of all others engaged in a joint endeavor or economic exchange. (p. 392)

As discussed earlier, trust possesses an inherent duality. For the purposes of my study, I refer to these two types of trust as urgent trust and routine trust.

- Routine trust is the intention to accept vulnerability based on positive expectations of the intentions or behavior of another in situations that have established rules, procedures, or precedents governing actions. This is not to say that these situations are unimportant—merely that they are more frequently encountered and have well-established histories.

- Urgent trust is the intention to accept vulnerability based on positive expectations of the intentions or behavior of another in situations that are novel or less common and pose more serious threats to collective interests.

An example may help illustrate this distinction. Police officers must have routine trust in their fellow officers. A precinct would not function effectively if officers could not trust one another to engage in routine behaviors such as showing up for work, following the appropriate chain of command, and completing paperwork in a timely fashion. These are all examples of behaviors that are frequently encountered and, as such, are driven by rules and precedents. Interestingly, these are the same behaviors that coworkers trust one another to exhibit in almost any organization.

The urgent form of trust is also prevalent in a police officer’s career. In fact, routine events are often punctuated with novel, more serious situations in which one officer’s life is literally in the hands of another. This punctuation often occurs without warning and can be quite precarious. For example, two patrolling officers might pull over a vehicle for having an expired tag. This type of occurrence is certainly routine for a patrolling officer. In situations such as these, the officers trust one another to handle the stop appropriately in terms of following protocol (calling in the tag, watching each other’s back, etc.). However, if during the course of the stop, the driver of the vehicle
brandishes a weapon, the officers must trust one another to diffuse the emergency, disarm the driver, and protect each other’s lives. The type of trust needed changes rapidly in a situation such as this. What began as a commonplace event where routine trust was key is now a dangerous and uncertain situation wherein urgent trust has moved to center stage. In this example, both forms of trust must be present; and it would be difficult to argue that one is more important than the other.

My intention is not to suggest that urgent trust is only present in life-or-death situations. In fact, urgent trust is necessary in many situations that are uncommon and pose serious threats to collective interests. Take the example of burglary suspects and their lawyers. In these situations, the accused must trust their lawyers in different ways. At a very basic level, the defendants trust their lawyers to follow proper protocol in terms of filing all necessary paperwork in a timely fashion, familiarizing themselves with the facts of the case, and examining case histories to further their understanding of precedents related to the cases. The defendants thus engage in routine trusting.

Additionally, however, the defendants must trust their lawyers in other fashions. For example, the suspects must trust their attorneys to act appropriately in novel situations such as the discovery of surprising and damaging evidence against the accused. In the face of such situations, the defendants must engage in urgent forms of trust and believe that their attorneys will handle appropriately these unexpected and serious occurrences. As before, both forms of trust must be present and are likely equally important.

In the case of firefighters, the type of trust acting at the moment also can change rapidly. Each firefighter in a company trusts the other firefighters, in much the same way that police officers trust one another. That is, each trusts the others to show up for work and follow the rules. Again, when urgent situations arise, the form of trust operating
changes. For example, in the event of an unexpected equipment failure (e.g., a ladder breaking), firefighters may quickly become dependent on the actions of others to save their lives. In this way, urgent trust becomes key.

These examples and the preceding discussion generated several interesting questions that became the guiding research questions for my study. First and most obvious is the question, “Are urgent and routine trust truly distinct from one another?” That is, “Are the two types of trust simply different levels of some greater construct of trust or are they psychologically distinct concepts?” Assuming they are, in fact, distinct constructs, do both urgent and routine trust guide key attitudes and behaviors? In other words, do both forms of trust act as important independent variables driving important outcomes?

Further research questions arise from the inherent presence of risk in most discussions of trust. According to most of the literature in this domain, trust need not be present in situations where there is no risk. Given this, are the two forms of trust differentially moderated by the level of risk present in a situation? Assuming again that the two forms of trust are distinct from one another, are they differentially predicted by various dimensions of trustworthiness? For example, do perceptions of ability have a stronger impact on urgent or routine trust? Similarly, are the two forms of trust differentially predicted by the propensity to trust?

I argue that urgent and routine trust are psychologically distinct constructs that are differentially affected by independent variables (such as trustworthiness and propensity to trust) that explain separate variance in key attitudes and behaviors, while being differentially moderated by the level of present risk. The specifics of these predictions are presented in Chapter 2.
CHAPTER 2
HYPOTHESES

My study tested the model shown in Figure 1. Urgent and routine trust were predicted to be distinct constructs that have unique, independent effects on a set of outcome variables. Those effects also were predicted to vary according to the risk level experienced by the individuals. Moreover, urgent and routine trust were predicted to have different antecedents in terms of relevant trustworthiness facets and individuals' propensity to trust. This chapter presents a link-by-link discussion of this model and presents explicit hypotheses.

Figure 1. Model of hypothesized relationships

**Differentiating Urgent and Routine Trust**

Hypothesis 1. Routine trust and urgent trust are distinct concepts

Trust is an inherently evaluative construct. Trust does not exist in a physical manner, but rather is itself an evaluation. When people evaluate trust, they think, “Do I
trust that person to do ___?” or “To what extent do I trust that person to do ___?” Like any evaluation, trust evaluations must be created. To describe the process by which trust evaluations are created, it is helpful to examine the literature on creating of performance-appraisal evaluations. DeNisi, Cafferty, and Meglino (1984) defined performance appraisal as the process by which an observer (such as a peer or supervisor) rates the job performance of an employee. Performance ratings formed by this process play an important role in enhancing organizational effectiveness. As a result, a large volume of literature has been produced wherein the intricacies of this cognitive process are analyzed and theory is put forth (Cooper, 1981; DeNisi et al., 1984; Ilgen & Feldman, 1983).

DeNisi et al. (1984) theorized that the performance-appraisal process is the product of a set of cognitive operations including the acquisition, organization, storage, retrieval, and integration of information. Their model is laid out as follows. First, the rater observes behavior. Next, the rater formulates some cognitive representation of that behavior and stores it in memory. Later this stored information is retrieved, reconsidered, and integrated with other available information. Finally, the rater uses this information to assign a formal evaluation to the ratee.

Supervisors often evaluate two separate types of performance either explicitly or incidentally. These two types are maximum performance and typical performance. Borman (1991) referred to maximum performance as the “can do” aspects of performance. Maximum performance is determined by the technical proficiency and/or cognitive ability of job-holders, which in turn determines the highest level of performance they are capable of achieving. Typical performance, on the other hand, refers to what Borman called the “will do” aspects of performance. This domain of
performance represents the typical behavior of the job-holder over time and is best predicted by that job incumbent’s level of motivation. Each of these types of performance is important, and each is predicted by distinct independent variables.

I hypothesized that evaluations of trust operate in much the same manner as evaluations of performance. When an individual is deciding whether to trust someone else, the individual must enact cognitive processes similar to those enacted by individuals appraising performance. As with performance evaluation, trust evaluation requires the acquisition, organization, storage, retrieval, and integration of information. First, an individual evaluating the trustworthiness of another must acquire information about that person’s behavior through some form of direct observation or by listening to others. A cognitive representation of this behavior must be organized and stored. That is, the evaluator must decide which behaviors are relevant to an evaluation of trust, and which are not. At the moment when one individual decides whether to trust another, this previously stored, relevant information must be retrieved and integrated with other information. Upon this integration, the individual must ultimately decide whether to trust the other.

Additionally, trust evaluations, like performance evaluations, may involve evaluating distinct forms of the same dependent variable. The focus of the evaluation may be routine trust, urgent trust, or both. As with maximum and typical performance, evaluations of routine and urgent trust may be driven by different factors. I hypothesize that routine trust evaluations are driven by typical, repetitive, everyday observed behaviors, while urgent trust evaluations are driven by novel, less common, and more serious observed behaviors.
As in the example of performance evaluation, a person evaluating trust acts as a human information processor. Given this, trust evaluations can be difficult to make because, as an information processor, humans have limited cognitive capacity for acquiring, encoding, and storing sensory information (Newell & Simon, 1972). Even given this limitation, people must process vast amounts of information in order to evaluate trust and also to function effectively in their social environments. In other words, this wealth of information must be processed somehow, but perhaps in a manner less cognitively complex than that described above. One popular explanation of how humans overcome this cognitive limitation is that they use cognitive shortcuts to deal with the onslaught of information for which they are responsible (Abelson, 1976; Hastie, 1981; Tesser, 1978).

This use of cognitive shortcuts is what further distinguishes the process by which individuals evaluate routine trust from the process by which individuals evaluate urgent trust. To clarify this distinction, the concept of category prototypes must first be discussed. A category is a cognitive structure that represents knowledge about a particular stimulus, including its features and the relationships among those features. These categories allow individuals to efficiently process information about familiar objects, persons, situations, and behaviors. If a stimulus is similar enough to an existing category, this stimulus is treated as a category member, and relationships in that category are assumed to hold true for that particular stimulus. For example, rude behavior may be a category for an individual. Within this mental category is a multitude of examples of rude behavior, as well as reactions to this behavior. If this individual encounters someone making an obscene gesture, his or her “rude behavior” category will likely be enacted. This individual will consider this behavior rude and will react much as he would react to
any other behavior falling into this category. Routine stimuli are often treated in this way to conserve cognitive energy.

In the case of routine trust evaluations, common observed behaviors tend to activate either the "trustworthy behavior" category or "untrustworthy behavior" category. This is possible because the same or similar behaviors are repeatedly observed and do not need to be deeply processed repeatedly. In fact, these routine behaviors are what allow the creations of categories because the knowledge about a stimulus, including its features and relationships among those features, is based on repeated encounters with that stimulus. This is why routine trustworthy behaviors are important; they allow the creation of these prototypes used in routine trust evaluations.

The evaluation of urgent trust operates somewhat differently. Like any evaluation, the urgent trust evaluation is the product of a set of cognitive operations including the acquisition, organization, storage, retrieval, and integration of information. What distinguishes this urgent trust evaluation from routine trust evaluation is that category prototypes cannot be used for urgent trust evaluations. An urgent event is uncommon or novel; thus categorization is either impossible or inaccurate. The literature on cognitive shortcuts further supports this contention. Hastie and Kumar (1979) suggested that the more distinct a stimulus from previous mental representations, the more deeply it is cognitively processed. Other researchers have found that recognition and recall memory are better for atypical than typical actions (Graesser, Gordon, & Sawyer, 1979; Graesser, Woll, Kowlski, & Smith, 1980). Further, Lord (1985) argued that while typical stimuli are encoded generically using existing cognitive categories, atypical stimuli cannot be equated with existing categories, and thus they must be encoded by using a unique symbolic representation.
The preceding discussion shows how routine trust and urgent trust may be psychologically distinct constructs. Additionally, these two types of trust are predicted by different independent variables and are evaluated by distinct psychological processes. As additional support that these two concepts are distinct from one another, I argue that they explain separate variance in a variety of important organizational and psychological outcomes. These outcomes include job satisfaction, task performance, citizenship, and counterproductive behavior. I suggest that each of these outcomes is a reaction to routine and urgent trust evaluations.

**Urgent and Routine Trust: Effects on Outcomes**

In addition to distinguishing the two forms of trust, my study also intended to examine how these types of trust relate to important organizational outcomes. One such outcome is job performance, a broad concept that typically includes multiple dimensions. In 2002, Rotundo and Sackett conducted an extensive review of the relative importance of task performance, citizenship behavior, and counterproductive behavior on job-performance ratings. The authors suggested that task, citizenship, and counterproductive performances are all underlying dimensions of the overall construct of job performance. They defined job performance as those actions and behaviors under an individual’s control that contribute to the goals of the organization. Given the breadth of this definition, it is not surprising that it subsumes all three types of behaviors as job performance.

Some discussion is warranted at this point about the specific facets of performance included in this study. In explicating the dependent variables of interest here, definitions will be borrowed from the Rotundo and Sackett (2002) review. First, task performance includes any behavior that contributes to production of a good or
provision of a service. Clearly, it is not sufficient to study only task-related behaviors given all of the other actions an employee may take that could help or hinder the organization that are not obviously task-related. On the more positive end, employees may engage in behaviors such as demonstrating effort, altruism, spreading goodwill, or endorsing, supporting, and defending organizational objectives (Borman & Motowidlo, 1993; Campbell, 1990; George & Brief, 1992; Organ, 1997). Each of these more specific behaviors belongs to a group of behaviors referred to as citizenship performance. By definition, citizenship performance is behavior that contributes to the social and psychological environment of the organization and thus helps the organization achieve its goals (Rotundo & Sackett, 2002). By the very nature of the fact that these behaviors contribute to organizational success, they should be included in the domain of job performance.

Somewhat paradoxically, behaviors that detract from organizational goals also belong in the domain of job performance. Examples of these behaviors include substance abuse, having poor self-discipline, destroying company property, harming coworkers, and not following rules (Borman & Motowidlo, 1993; Campbell, 1990; Robinson & Bennett, 1995). For the purposes of this study, counterproductive performance is defined as any voluntary behavior that harms the organization. Together, these three forms of behavior form the basis of job performance.

Of course, organizations value more than just high levels of job performance. It is also important to keep and retain those employees who are fulfilling their role requirements. With that in mind, organizational commitment, defined as an employee’s psychological attachment to his or her organization, was chosen as a dependent variable in this study (Meyer & Allen, 1997; Mowday, Steers, & Porter, 1979). Employees who
are strongly committed to their organization value that membership to a strong degree, making it less likely that they will explore alternative employment opportunities. Moreover, high levels of organizational commitment are associated with better job performance, as meta-analytic reviews have linked commitment to beneficial task and citizenship behaviors (Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

An individual’s attachment to his or her organization can also be inferred from the converse of commitment: employee withdrawal. Withdrawal is defined as a set of intentions and behaviors that signal a psychological and physical separation from an organization, usually to avoid some source of dissatisfaction (Hulin, 1991). Examples of withdrawal range from minor acts like daydreaming, chatting about nonwork topics, or tardiness, to more major acts, such as absenteeism and intentions to search for alternative employment. While withdrawal appears in some taxonomies of counterproductive behavior (Sackett & DeVore, 2001), it is a much more passive response to dissatisfaction relative to acts like theft and verbal or physical abuse.

**Job Performance**

Work examining the relationship between intragroup trust and job performance was being conducted as early as 1970 (Friedlander, 1970). This study was based on the notion that the formation of trust, the reduction of fear, and the subsequent growth of confidence are all interrelated factors which facilitate individual and group development. Given that accepting self and others facilitates growth, an individual must learn to trust others in order to grow. From this notion sprung the idea that, to some extent, intragroup trust is a necessary prerequisite for further group accomplishment. To test this idea, Friedlander conducted a longitudinal study of group trust and group accomplishment in
12 workgroups of varied sizes. Based on correlational analysis, the author concluded that intragroup trust was, in fact, a strong predictor of later group performance.

A similar rationale prompted a study by Klimoski and Karol (1976). According to the authors, defensiveness among group members hampered problem-solving effectiveness. Trust acted to mitigate defensiveness, and, through this mechanism, enhanced problem-solving effectiveness. To test this notion, Klimoski and Karol conducted a laboratory study on a sample of 116 females divided into 29 groups wherein trust was manipulated through feedback given to group members concerning how they were evaluated by other members of their group. The belief was that participants seeing favorable evaluations would have more trust in their group members than members seeing negative evaluations. The manipulation worked. Those in the high trust and control conditions outperformed groups in the low trust condition.

Several other studies have examined the relationship between intragroup trust and some measure of group effectiveness (Dooley & Fryxell, 1999; Jehn & Mannix, 2001; Zand, 1972). Dooley and Fryxell found a moderate correlation between strategic decision-making team trust and that teams decision quality in a sample of hospital CEO’s. Jehn and Mannix found similar results in a sample of full-time employed, part-time MBA students working in three-person teams. Again, a moderate correlation was found between intragroup trust and group performance. Zand manipulated trust before a task in groups of business executives. As in the Dooley and Fryxell study, shared trust within the group was a significant determinant of managerial problem solving effectiveness.

An extensive amount of literature has also examined the extent to which trust in management affects job performance. In one study, Dirks (2000) examined the effect
different NCAA basketball teams' trust in their coaches affected their subsequent winning percentages. Not surprisingly, trust was a strong predictor of team performance even after controlling for team talent, experience, and coach record. In fact, subsequent analyses revealed that group trust acted as a mediator between past and future team performance.

These results ran counter to previous work by Dirks wherein trust in leader was not significantly related to performance. Deeper inspection of the results revealed that a lack of statistical power was the likely culprit behind this null result given that the sample was made up of only 41 people (Dirks, 1999). Several other works also yielded a null result concerning the relationship between trust in management and job performance (Konovsky & Cropanzano, 1991; Korsgaard, Roberson, & Rymph, 1998). As in the Dirks study, low statistical power (i.e., a sample size of 41) likely explained the findings of Korsgaard, Roberson, and Rymph.

Thus, while some studies demonstrated a nonsignificant relationship between some form of trust in leader(s) and performance, the bulk of the research shows trust to be, in fact, moderately to strongly related to performance (Dirks, 2000; Earley, 1986; Jung & Avolio, 2000; Korsgaard, Schweiger, & Sapienza, 1995; Pettit, Goris, & Vaught, 1997; Zaheer, McEvily, & Perrone, 1998.) Still other studies have yielded only weak relationships between trust and performance (Conger, Kanungo, & Menon, 2000; Kirkpatrick & Locke, 1996). Given these widely varying results, further exploration of this relationship seemed necessary in this study.

Studies examining the effects of trust on citizenship behavior are more scarce. Furthermore, the manner in which trust is placed in the various models is varied. Some studies view trust as a mediator, others as a correlate. Additionally, the little research that
has been done has lead to contradictory results. In fact, negative, positive, and null relationships have emerged between trust and citizenship.

The bulk of this research treats trust as a mediator (Konovsky & Pugh, 1994; MacKenzie, Podsakoff, & Rich, 2001; Pillai, Schriesheim, & Williams, 1999; Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Rich 1997.) In an attempt to shed light on the relationship between fairness and trust, Konovsky and Pugh conducted a survey-based study in a sample of 475 hospital employees. The authors suggest that one source of trust in an employee-employer relationship is procedural fairness. Using fair procedures is said to demonstrate the supervisor’s respect for the rights and dignity of the employee. This respect and consideration is suggested to foster an environment conducive of trust development and, ultimately, citizenship. Trust was also posited as a mediator between fairness perceptions and citizenship in a study by Pillai et al. As in the previous study, trust was indeed found to partially mediate the relationship between fairness and citizenship.

Research conducted by Podsakoff and colleagues showed trust in leader to act as an intervening mechanism between leader behavior and citizenship (MacKenzie et al., 2001; Podsakoff et al., 1990). The crux of their argument was that transformational or charismatic behaviors exhibited by supervisors caused followers to respect and trust their supervisors. This trust and respect, in turn, motivated employees to do more than they were expected to do (i.e., engage in citizenship behaviors). In this way, the authors suggested that effective leaders transformed the basic attitudes, beliefs, and values of their followers such that these followers were then willing to perform beyond the minimum acceptable levels specified by the organization.
Their earlier research was conducted in a field setting using a sample of petrochemical workers (Podsakoff et al., 1990). The sample was predominately male and split almost equally between managerial and nonmanagerial job titles. Using confirmatory factory analysis, the authors found that trust played an important mediating role in their model. In fact, the aggregate effects of leader behaviors on citizenship were indirect and mediated almost completely by follower’s trust in their leaders. The latter of the two previously mentioned studies followed a similar logic but was conducted using a sample of 477 insurance salespeople (MacKenzie et al., 2001). This study tested a more complicated model than the former, but trust in manager was again posited to mediate the relationship between transformational leader behaviors and extra-role performance. Again, factor analysis results suggested that trust did in fact act as a mediator. Cumulatively, these results offer strong support for the notion that trust is related to citizenship.

Other studies have not focused on the relationship between trust and citizenship specifically, but have offered correlations between the two. Chattopadhyay (1999) found a moderate positive relationship between the trust employees have in coworkers and their willingness to engage in citizenship behaviors. Similarly, Thomas (1999) reported a strong, positive relationship between trust in team and organizational citizenship. Contrarily, Puffer (1987), in a sample of 141 retail salespersons, found a nonsignificant correlation between the faith an employee had in his or her coworkers and their prosocial behavior. Overall, the research indicates that trust and citizenship are positively related.

If the research suggests that trust should be positively related to citizenship behavior, it seems logical that trust should be negatively related to counterproductive behaviors. Testing of this notion began to appear in the literature as early as 1959.
(Mellinger, 1959). In this study, Mellinger posited that the way two people feel about one another should significantly impact how they communicate with each other. Specifically, he suggested that a person who is not trusted will be regarded as threatening and, therefore, will make the other person anxious. As a result, the primary goal of communication with this distrusted individual would be to reduce one’s own anxiety rather than accurately transmitting ideas. In other words, he who is not trusted will not be communicated with as openly as he who is trusted. The findings of this study lent support to the theory that if B distrusts but must still communicate with A, then B will communicate in such a way as to conceal from A information about B’s own attitudes toward an issue, X. Certainly, offering incomplete information to a coworker represents a form of counterproductive behavior.

Several other studies reported relationships between trust and other forms of counterproductive behavior. For example, Bies and Tyler (1993) conducted a field study wherein they examined the relationship between litigation consideration and trust was examined. In this example, trust referred to the belief that the motives of managers are sincere and reflect the best interests of the employees. According to their logic, if employees feel their managers motives are sincere, even if these managers must make unfavorable decisions, these employees will not feel the need to litigate on the basis of this decision. In another study, Simons and Peterson (2000) reported a positive relationship between intragroup trust and a unique counterproductive behavior, loudness. This variable was measured by the following single item “We raise our voices at one another.” A positive relationship between intragroup trust and loudness suggests that group members who trust one another may also be more willing to strain that relationship through counterproductive behaviors because they believe there is enough trust in their
relationship to overcome this strain. Of all of the research reviewed, this is the only study to suggest a positive relationship between trust and counterproductive behavior.

**Commitment and Withdrawal**

One of the most commonly examined consequences of trust is organizational commitment. It seems intuitive that employees who hold confident, positive expectations about their colleagues and are willing to be vulnerable to them will develop a deeper psychological attachment to the organization. Support for this linkage has been confirmed in number of field studies across several industries. For example, Aryee, Budhwar, and Chen (2002) conducted a field study of employees in a public sector coal mining firm, with employees ranging from miners to engineers to marketing and sales professionals. Their results revealed strong correlations between trust in organization, trust in supervisor, and organizational commitment. Similar findings have been yielded by a number of other studies (Armstrong-Stassen, 2002; Brockner, Siegel, Daly, Tyler, & Martin, 1997; Konovsky & Cropanzano, 1991; Pillai et al., 1999).

With respect to employee withdrawal, intention to quit has been the focus of several studies wherein trust was also measured (Christiansen, Villanova, & Mikulay, 1997; Cunningham & MacGregor, 2000; Farh, Tsui, Xin, & Cheng, 1998; Konovsky & Cropanzano, 1991). In each of these instances, trust in superiors was negatively related to intention to quit, but to varying degrees. For example, Fahr et al. found a weak negative relationship between trust in supervisor and intention to quit in a sample of Taiwanese insurance salespeople. In their study, Christiansen et al. looked at the same relationship in a sample of nonacademic university employees. Their results yielded a moderate relationship between the two. Konovsky and Cropanzano, on the other hand, showed a strong negative relationship between trust in management and intention to turnover in a
field study of 195 employees. Thus, while the strength of the relationship varies between studies, all support the contention that trust should be negatively related to intentions to quit. Trust has also been linked to objective measures of actual absenteeism and turnover (Ball, Trevino, & Sims, 1993; Cunningham & MacGregor, 2000; Robinson & Rousseau, 1994).

Hypothesis 2. Routine trust will be positively related to (a) task performance, (b) citizenship, (c) counterproductive behavior, (d) organizational commitment, and (e) withdrawal, independent of urgent trust.

Hypothesis 3. Urgent trust will be positively related to (a) task performance, (b) citizenship, (c) counterproductive behavior, (d) organizational commitment, and (e) withdrawal, independent of routine trust.

**Moderating Effect of Risk Events**

In a recent review of the trust literature, Rousseau et al. (1998) compared the manner in which various disciplines conceptualize trust. Within this discussion, the authors pointed out that there was some agreement across disciplines, particularly with regard to the conditions necessary for trust to arise. One such condition was the presence of risk, which is a key ingredient in psychological, sociological, and economic conceptualizations of trust (Bhattacharya, DeVinney, & Pillutla, 1998; Bradach & Eccles, 1989; Coleman, 1990; Rotter, 1967; Williamson, 1993). In fact, Lewis and Weigert (1985) argued that if action could be taken without risk or uncertainty, trust would be unnecessary. Similarly, Kee and Knox (1970) argued that trust need only be present in situations where one party has something meaningful at stake and is aware of the potential of betrayal and harm from the other. Further supporting this contention, Coleman defined trust situations as those in which the risk taken by one depends on the performance of another. In each of the preceding discussions, risk was posited as a necessary condition for trust.
Further strengthening the tie between risk and trust is the reciprocal nature of the relationship between the two. Put simply, a trustee is only able to demonstrate their trustworthiness if a trustor takes some initial risk. If the trustor is not disappointed by the result of this assumption of risk (i.e., the person being trusted behaves as expected), then the level of trust grows stronger (Rempel, Holmes, & Zanna, 1985). This increased level of trust, in turn, allows further assumption of risk. Risk and trust enhance one another in a positively reinforcing spiral.

Given that some level of risk is necessarily present in any trusting situation, it logically follows that the presence of different levels of risk may make trust more or less important. In fact, risk may moderate the relationship between trusting behavior and important outcomes. A previously discussed example may help illustrate this idea. Police officers must trust one another in a variety of ways. Much like any situation where coworkers must trust one another; the more a police officer can trust his fellow officers, the more job satisfaction he is likely to have. This relationship between trust and job satisfaction may vary in strength depending on the level of risk present in the specific trusting situations.

For example, when an officer trusts his partner to show up for work on time and that partner does indeed show up on time, the trusting officer’s job satisfaction is enhanced but probably only to a small degree, as little risk is associated with his partner being late for work. In fact, the only real risk assumed is that both officers may get in trouble or not be able to respond to a call on time. However, a more serious situation in which the officer’s life is literally in the hands of his partner may arise at any moment. In this case, the officer trusts the other with his life. There is obviously more at risk in this scenario than the former. As such, if the partner behaves in a manner that protects the life
of the officer, the officer's satisfaction is likely to be enhanced to a greater degree than in the example where his partner simply shows up to work on time. The trusting officer, as a result, can feel a sense of calm and security that makes work life more pleasant, as opposed to being constantly worried about the next dangerous event. In this way, the level of risk present moderates the relationship between trust and an important organizational outcomes.

Given the presence of this moderator effect, it seems logical that different types of trust (i.e., routine trust and urgent trust) may be more or less important when more risk is present in a situation. Routine trust was defined earlier as the intention to accept vulnerability based on positive expectations of the intentions or behavior of another in situations that have established rules, procedures, or precedents governing actions. Urgent trust was defined earlier as the intention to accept vulnerability based on positive expectations of the intentions or behavior of another in situations that are novel or less common and pose more serious threats to collective interests. Situations that are less common and pose more serious threats, by their very nature, involve a greater level of risk. As such, urgent trust is likely more important than routine trust in situations where risk is high.

By their nature, situations that have established rules and procedures are not saturated with risk and uncertainty. On the other hand, novel situations that pose more serious threats involve a heightened level of risk. Given this distinction, when risk is high, routine trust is not likely to be important or even activated at all. Similarly, when the risk level is relatively low, urgent trust is not important. In other words, in the context of a risky situation, the effects of urgent trust on outcomes become stronger, while the effects of routine trust on outcomes become weaker.
Hypothesis 4. The relationship between urgent trust (independent of routine trust) and (a) task performance, (b) citizenship, (c) counterproductive behavior, (d) organizational commitment, and (e) withdrawal will be moderated by risk, such that the relationship will be stronger when risk is higher.

Hypothesis 5. The relationship between routine trust (independent of urgent trust) and (a) task performance, (b) citizenship, (c) counterproductive behavior, (d) organizational commitment, and (e) withdrawal will be moderated by risk, such that the relationship will be weaker when risk is higher.

**Trust Antecedents: Trustworthiness**

Discussion to this point has focused primarily on distinguishing between the two forms of trust and how these forms of trust differentially drive important organizational outcomes. Logically, these distinct forms of trust may also have distinct antecedents. Sheppard and Sherman (1998) stated, “Trust is partially the product of one’s capacity to assess the trustworthiness of one’s potential partner” (p. 426). Put simply, the trustworthiness of an individual drives the extent to which others will trust them. This is somewhat of an understatement, however. Complications arise because trustworthiness, much like trust, is a multidimensional construct. Several authors have argued this idea, but there is some disagreement about what the exact dimensions of trustworthiness are (Butler, 1991; Lieberman, 1981).

In an attempt to simplify this aforementioned literature, Mayer et al. (1995) reviewed the different conceptualizations of trustworthiness and were able to collapse most previous conceptualizations into three primary dimensions, ability, benevolence, and integrity. According to these authors, these three dimensions provide a parsimonious yet complete foundation for the study of trust in another party.

To begin, ability is a domain specific group of skills or competencies that an individual possesses. That individual is likely to be trusted to complete tasks that fall within their domain of abilities. A host of previous research has identified ability, using
that exact term, as a dimension of trustworthiness (Cook & Wall, 1980, Deutsch, 1960; Sitkin & Roth, 1993). Other authors have identified terms synonymous with ability as dimensions of trustworthiness. For example, Butler (1991) and Lieberman (1981) identified the dimension of competence. This construct is similar to the same as the ability dimension of Mayer et al. Giffin (1967) as another example, identified the expertness of an individual as a factor contributing to how much they are trusted. Whatever term is used, the idea is the same; trust is extended to an individual based somewhat on their skills within some specific domain.

Benevolence has also been identified as a key dimension of trustworthiness. For the purposes of this paper, the definition by Mayer et al. will be utilized and is as follows: “Benevolence is the perception of a positive orientation of the trustee toward the trustor” (p. 719). In other words, a benevolent trustee has good intentions regarding the trustor and is not merely motivated by what profit they can gain by being trusted. As was the case with ability, several authors have identified dimensions highly similar to benevolence, but have assigned different names to this construct. For example, Butler and Cantrell (1984) proffered loyalty as a determinant of dyadic trust. Frost, Stimpson, and Maughan, 1978 identified altruism as an antecedent condition to trust. In both of these examples, the idea of good intentions and motives toward the trustor underlies the construct of interest. As such, each of these conceptualizations reflects, to some extent, the construct of benevolence.

The final trustworthiness dimension of interest is integrity. In order for a trustor to perceive a trustee as having integrity, that trustee must adhere to a set of principles that the trustor sees as acceptable. The degree to which a trustee is perceived to possess integrity is affected by things such as the consistency of that individual’s past actions, as
well as that individual's actions being consistent with his or her words. Several previous authors have used integrity as a dimension of trustworthiness (Butler, 1991; Butler & Cantrell, 1984; Lieberman, 1981) Other authors have identified characteristics highly similar to the construct of integrity as determinants of trust (Hart, Capps, Cangemi, & Caillouet, 1986; Sitkin & Roth, 1993). For example, Gabarro, 1978, discussed character as an important dimension of trustworthiness. As a whole, the dimensions of ability, benevolence, and integrity have appeared repeatedly in discussions of antecedents of trust, albeit using slightly different jargon or definitions. Mayer et al. (1995) argue that together, these dimensions efficiently explain the within-trustor variation in trust for others. As such, these three factors will operate as the antecedents to trust in the model.

However, their model further distinguishes these dimensions of trustworthiness. The relevancy of these distinct dimensions may differ depending on the situation. Sheppard and Sherman (1998) spoke of four types of trust. In their view, trust is not a singular construct but takes one of four distinct forms based on the nature and depth of the interdependence in a given relationship. Trust takes on different forms in different relationships, and so does the nature of the relevant trustworthiness traits. In fact, in their discussion, these authors present a table wherein the different forms of dependence, the risks associated with each form, and the qualities of trustworthiness that are important given each from are presented.

With regard to the form of dependence most closely linked with urgent trust, the risk that another will not perform proficiently is cited as key. One dimension of trustworthiness suggested to mitigate this risk is ability. Thus, Sheppard and Sherman (1998) suggest that the ability dimension of trustworthiness is more important in situations where the risk of individuals not behaving competently is central.
On the other hand, with regard to the form of dependence most closely associated with routine trust, there are two central risks: the risk of cheating and the risk of neglect. The integrity dimension of trustworthiness is most closely tied to the risk of cheating. An individual’s actions being consistent with his or her words partially defines the integrity dimension and is diametrically opposed to the definition of cheating. That is to say cheating suggests that some violation of previous promises has taken place, and individuals high in integrity are likely to follow their word. The risk of neglect is most closely tied to the benevolence dimension of trustworthiness. An individual who is benevolent towards someone trusting them is motivated to help that trustor regardless of personal gain. Neglect is often the result of a lack of vested interest in an outcome. Because a benevolent person takes on the interests of the trustor as their own, they maintain motivation to see things through and not neglect their responsibilities, even when they do not profit directly from this motivation.

An example involving emergency personnel may help clarify how the relevancy of each of the previously discussed dimensions of trustworthiness may differ depending on the situation. First, imagine a situation where two firefighters must enter a burning building to save civilian lives. In this situation, not only are the lives of the civilians in the hands of the firefighters, but the firefighters must trust each other with their lives. This is an example of a urgent situation where the greatest risk to each firefighter is that the other will not behave in a proficient, correct manner. In order for the firefighters to trust one another enough to enter the building, they must each believe that the other possesses the ability to do their job correctly. Concerns about the other firefighters
integrity or benevolence are not likely present in this type of situation, while concerns about the other’s competence are central.

However, in a less severe, more routine situation, the importance of these dimensions of trustworthiness is likely to be reversed. Take, for example, a situation in which two firefighters are severally liable for filing an incident report following an emergency call. Given that only one incident report must be filed, but two firefighters are responsible, it is likely that only one person (Firefighter A) will actually fill out the report. The firefighter not filling out the report (Firefighter B) must trust that the other will, in fact, fill out the report and turn it in. In order to decide whether or not to trust Firefighter A to fill out the report and not neglect his responsibilities, Firefighter B will likely focus on Firefighter A’s benevolence as opposed to his integrity or ability.

Further, Firefighter A likely believes that, next time, Firefighter B will assume the responsibility of filling out the incident report to keep things equitable. This belief is likely to be based more on an evaluation of firefighter B’s integrity than on his ability or benevolence. In each of these examples given above, the relevant trustworthiness dimension varies depending on the situation. This differential relevance is likely to be present in any situation; not just those described above.

Hypothesis 6. Ability will be a stronger predictor of urgent trust than routine trust.
Hypothesis 7. Benevolence will be a stronger predictor of routine trust than urgent trust.
Hypothesis 8. Integrity will be a stronger predictor of routine trust than urgent trust.

Propensity to Trust

Sheppard and Sherman (1998) state “Trust is partially the product of one’s capacity to assess the trustworthiness of one’s potential partner” (p. 426). What else
drives the trust evaluation? One suggestion is that characteristics of the trustor influence the decision to trust. Specifically, each person has some propensity to trust. This trait is viewed as a general willingness to trust others and is believed to be a stable within-party factor (Mayer et al., 1995). The propensity of an individual to trust others has a stronger effect on trusting behavior in earlier encounters with potential trustees. Basically, when there is little data about the trustworthiness of a potential trustee, the trustor tends to default to their own propensity when making decision whether or not to trust. With the passage of time and acquisition of information about the trustworthiness of the trustee, the propensity of the trustor to trust becomes less meaningful. This is likely the case because even if an individual is a “trusting person,” they will not tend to trust others who they know for certain and through experience are untrustworthy.

Given that the importance of propensity to trust is situationally and temporally specific, it logically flows that propensity will be differentially important with regards to urgent and routine trust. One distinction between urgent and routine trust is time and frequency. Specifically, routine trust involves typical, repetitive, everyday observed behaviors. Given that these behaviors are frequent and repetitive, a potential trustee has ample information about how trustworthy the observed individual is. In a situation such as this, direct observation is likely to drive trust evaluations to a much greater degree than an individual’s propensity to trust is.

On the other hand, urgent trust involves novel, less common, and more serious observed behaviors. While these observed behaviors are more serious in nature, they are also, by definition, not frequent. As such, individuals making urgent trust evaluations have less experience with these behaviors to draw on and are therefore more likely to defer to their overall propensity to trust. Summarily, an individual making a trust
evaluation is more likely to be influenced by their own level of trusting propensity in urgent as opposed to routine trust evaluation instances.

Hypothesis 9. Propensity to trust will be a stronger predictor of urgent trust than routine trust.
CHAPTER 3
METHOD

Sample

Data were obtained on 126 employees of a North-Central Florida city fire department. The sample consisted of 29 lieutenants, 33 drivers/apparatus operators, and 64 firefighters. Each of these participants belongs to one of 7 different stations within the city with an average of 18 firefighters per station working in one of three different shifts. Each firefighter works a full 24-hour shift and then is off for 48 hours.

Everyone included in this sample began his or her career with the fire department as a firefighter. The work of a firefighter includes combating, extinguishing, and preventing fires as well as maintaining fire department equipment and quarters. Additionally, firefighters are required to render first aid when necessary, respond to hazardous materials incidents, attend company drills and training, maintain required certifications (e.g., CPR), and prepare written and computerized reports after fire and emergency medical incidents. The work itself requires physical strength and agility and may have to be performed in and around heavy traffic, in proximity with hazardous and noxious chemicals, and under a wide range of climatic conditions.

Becoming a fire driver-operator necessitates a promotion from firefighter. The work of a driver-operator involves the specialized task of driving and operating heavy duty and/or specialized motorized vehicles for fire fighting, rescue, or other fire department operations. Included in this job are tasks such as driving the fire apparatus
and crew to and from emergency incidents, operating pumps, raising ladders and booms, laying hose line, and making necessary pumper hook-ups to hydrants. Additionally, driver operators may be required to perform fire fighting, rescue, and other emergency duties as needed. Essentially, when conditions necessitate, driver-operators may be required to perform the functions of a firefighter. Given that the driver operators are performing their jobs in the same situations as a firefighter, their work also requires physical strength and agility and may have to be performed in and around heavy traffic, in proximity with hazardous and noxious chemicals, and under a wide range of climactic conditions.

To become a fire lieutenant, one must be promoted from driver-operator. The work of a fire lieutenant involves inspection and supervisory work promoting fire safety as well as performing skilled fire fighting and providing emergency medical treatment. Essentially, the lieutenant is involved in all the duties listed in the brief job descriptions above, but his or her role is a supervisory one. Additionally, a fire lieutenant participates in training activities and leads company drills. At the actual scene of an emergency, it is the lieutenant who acts as the primary decision-maker. Given that the fire lieutenants are performing their jobs in the same situations as firefighters and driver-operators, their work also requires physical strength and agility and may have to be performed in and around heavy traffic, in proximity with hazardous and noxious chemicals, and under a wide range of climactic conditions.

**Time 1 Procedure**

Time 1 data were collected via self-report survey administered to each shift separately at each station. All firefighters and driver-operators were surveyed. At Time 1,
ability, benevolence, integrity, and propensity to trust measures were administered.

Discussion of each measure follows.

**Trustworthiness (Ability, Benevolence, and Integrity)**

Given the argued differential importance of the three dimensions of trustworthiness, the Mayer and Davis (1999) measure of trustworthiness was used. This measure includes distinct items for each dimension and asks participants to rate the extent to which they agree with the items using a 5-point likert-type scale with anchors of 1 = agree and 5 = disagree. The items for ability are as follows:

- My coworkers are very capable of performing their jobs.
- My coworkers are known to be successful at the things they try to do.
- My coworkers have much knowledge about the work that needs done.
- I feel very confident about my coworkers’ skills.
- My coworkers have specialized capabilities that can increase our performance.
- My coworkers are well qualified.

The items for benevolence are as follows:

- My coworkers are very concerned about my welfare.
- My needs and desires are very important to my coworkers.
- My coworkers would not knowingly do anything to hurt me.
- My coworkers really look out for what is important to me.
- My coworkers will go out of their way to help me.

Finally, the items for integrity are as follows:

- My coworkers have a strong sense of justice.
- I never have to wonder whether my coworkers will stick to their word.
- My coworkers try hard to be fair in dealing with others.
- My coworkers actions and behaviors are not very consistent.
- I like my coworkers’ values.
- Sound principles seem to guide my coworkers’ behaviors.

**Propensity to Trust**

In order to measure propensity to trust, I used the trust subscale of agreeableness from the NEO-PI (R) (Costa & McCrea, 1992). The items are as follows:

- I tend to be cynical and skeptical of others’ intentions.
• I believe that most people are basically well-intentioned.
• I believe that most people will take advantage of you if you let them.
• I think most of the people I deal with are honest and trustworthy.
• I’m suspicious when someone does something nice for me.
• My first reaction is to trust people.
• I tend to assume the best about people. 8. I have a good deal of faith in human nature.

**Time 2 Procedure**

Approximately 6 weeks after the collection of the Time 1 data, Time 2 data were collected via self-report survey administered to each shift separately at each station. Again, all firefighters and driver-operators were surveyed. At Time 2, our firefighter specific measures of urgent and routine trust, and a measure of perceived risk encountered on the job, were administered. Discussion of each measure follows:

**Urgent and Routine Trust**

An ad hoc measure specific to firefighters was designed for the purposes of this study. The first step in designing the measure consisted of meeting with the fire chief to conduct a job analysis of the firefighter’s job duties. This analysis resulted in the identification of five major job dimensions for firefighters: responding to fire calls, responding to auto accidents, training drills, continuing education, and maintaining physical fitness. The fire chief also identified specific tasks within each of those broad dimensions, informally rating those tasks on three criteria: importance, danger, and unpredictability. The chief’s ratings illustrated that all of the major dimensions were important, with each being labeled an important part of a firefighter’s job. The dimensions of danger and unpredictability seemed to be a better source of separation for urgent and routine trust. Responding to fire drills and auto accidents were deemed to be both more dangerous and more unpredictable, relative to training drills, continuing education, and maintaining physical fitness.
To provide additional evidence in support of the chief’s ratings of importance, danger, and unpredictability, the Time 1 survey also asked the respondents to rate the five job dimensions on those three criteria on a 5-point scale. The ratings for responding to fire calls supported the urgent nature of those tasks, with ratings of 4.67 for importance, 4.54 for danger, and 4.56 for unpredictability. The ratings for responding to auto accidents also supported categorizing that as an urgent dimension, with ratings of 4.18 for importance, 3.14 for danger, and 3.60 for unpredictability. In contrast, the ratings for training drills, continuing education, and maintaining physical fitness revealed patterns that suggested a routine classification. The ratings were as follows: (a) 4.30 for importance, 2.82 for danger, and 2.85 for unpredictability for training drills; (b) 4.20 for importance, 1.62 for danger, and 2.22 for unpredictability for education; and (c) 4.07 for importance, 2.08 for danger, and 2.12 for unpredictability for physical fitness. These latter three dimensions were about as important as responding to fire calls and auto accidents, but were significantly less dangerous and unpredictable.

Having established some empirical foundation for the separation of urgent and routine trust, I developed specific scale items for the tasks within those five job dimensions. Participants were asked to rate how comfortable they were trusting their coworkers to complete certain tasks, on a 7-point likert-type scale with anchors of “I always feel comfortable trusting my coworkers to complete this task.” and “I never feel comfortable trusting my coworkers to complete this task.” The physical fitness items included: “Lifting weights to improve and maintain strength,” “Performing stretching exercises to build flexibility,” and “Exercising to build cardiovascular endurance.” The education items included “Learning about fire protection systems” and “Studying maps of the local territory.” The training items included “Adequately preparing for aerial
drills” and “Increasing proficiency in pumping evolutions drills.” The auto accident items included “Collect medical data at accident scenes,” “Feel for injuries on accident victims,” “Administer medical treatment to accident victims,” and “Survey accident scene for safety considerations.” The fire call items included “Size up the situation before entering a burning building,” “Conduct a primary search for people trapped in a burning building,” “Protect and rescue civilians in and around fire location,” “Protect and rescue fellow firefighters in and around fire location,” “Use tools and procedures to extinguish the fire,” “Performing property salvage during and after the fire,” and “Conduct overhaul procedures to look for other fires in building.”

**Perceived Risk**

After an extensive review of the risk literature, it was determined that an ad hoc measure of perceived risk would be most appropriate for this study. Participants were asked to rate their extent of agreement with each of the following items:

- The past couple months have been more dangerous than normal.
- These past two months have been anything but routine.
- The calls we have had lately have been quite risky.
- Things have been uneventful at work lately.
- There hasn’t been a dangerous situation at work in quite a while.
- In general, these last couple months have been more safe than normal.

**Time 3 Procedure**

Approximately 6 weeks after the collection of the Time 2 data, Time 3 data were collected via self-report survey administered to each shift separately at each station. Again, all firefighters and driver-operators were surveyed. At Time 3, only a measure of job satisfaction was administered. However, at Time 3, supervisors also were surveyed and asked to evaluate their subordinates using measures of task performance, organizational citizenship behavior, and counterproductive behavior. Discussion of each measure follows:
Task Performance

To measure task performance, Williams and Anderson’s 1991 measure of in-role behavior was used. This referent of this particular measure is an employee and the rater is intended to be a superior. The items for this measure are as follows:

• Adequately completes assigned duties.
• Fulfills responsibilities specified in job description.
• Performs tasks that are expected of him/her.
• Meets formal requirements of the job.
• Engages in activities that will directly affect his/her performance.
• Neglects aspects of the job he/she is obligated to perform (R).
• Fails to perform essential duties (R).

Organizational Citizenship Behavior

The Lee and Allen (2002) measure was used to measure organizational citizenship behavior. Again, the referent is an employee and the rater is intended to be a supervisor. This measure captures not only those citizenship behaviors aimed at helping the organization, but also those citizenship behaviors aimed at helping specific individuals within the organization. The rater is asked to rate how frequently the target person engaged in these behaviors using anchor points of 1 = never and 7 = always.

The first eight items of the scale refer to citizenship behaviors intended to help individuals within the organization and are as follows:

• Help others who have been absent.
• Willingly give your time to help others who have work-related problems.
• Adjust your work schedule to accommodate other employees’ requests for time off.
• Go out of the way to make newer employees feel welcome in the work group.
• Show genuine concern and courtesy toward coworkers, even under the most trying business or personal situations.
• Give up time to help others who have work or non-work problems, 7. Assist others with their duties.
• Share personal property with others to help them work.
The remaining eight items refer to citizenship behaviors aimed at helping the organization as a whole rather than a specific individual within the organization and are as follows:

- Attend functions that are not required by that help the organizational image.
- Keep up with the developments of the organization.
- Defend the organization when other employees criticize it.
- Show pride when representing the organization in public.
- Offer ideas to improve the functioning of the organization.
- Express loyalty toward the organization.
- Take action to protect the organization from potential problems.
- Demonstrate concern about the image of the organization.

**Counterproductive Behavior**

A measure developed by Bennett and Robinson (2000) was used to measure counterproductive behavior. This measure was also self-report and asked participants to rate how often they had engaged in certain behaviors in the past 12 months. Participants used the following anchors for the scale: 1 = never, 2 = once a year, 3 = twice a year, 4 = several times a year, 5 = monthly, 6 = weekly, and 7 = daily. The items are as follows:

- Made fun of someone at work.
- Said something hurtful to someone at work.
- Cursed at someone at work.
- Played a mean prank on someone at work.
- Acted rudely toward someone at work.
- Publicly embarrassed someone at work.
- Taken property from work without permission.
- Spent too much time fantasizing or daydreaming instead of working.
- Taken an additional or longer break than is acceptable at your workplace.
- Come in late to work without permission.
- Littered your work environment.
- Neglected to follow your boss’s instructions.
- Intentionally worked slower than you could have worked.
- Discussed confidential company information with an unauthorized person.
- Put little effort into your work.
- Dragged out work in order to get overtime.
Organizational Commitment

The revised version of Meyer and Allen's (1997) affective commitment scale was used to measure organizational commitment. This scale assesses an emotional (as opposed to economic-based) attachment to an organization. The scale for rating each item was a 5-point likert-type scale with anchors of 1 = strongly agree and 5 = strongly disagree. The items are as follows:

• I would be very happy to spend the rest of my career with this organization.
• I really feel as if this organization's problems are my own.
• I do not feel like "part of the family" at my organization. (R)
• I do not feel "emotionally attached" to this organization. (R)
• This organization has a great deal of personal meaning for me.
• I do not feel a strong sense of belonging to my organization. (R).

Withdrawal

Withdrawal was assessed using the 12-item instrument developed by Lehman and Simpson (1992). Participants were asked to indicate how often they performed the actions in each statement. The scale for rating each item was a 5-point likert-type scale with anchors of 1 = almost never and 5 = very often. The actions included:

• Thought of being absent.
• Chatted with coworkers about nonwork topics.
• Left work situation for unnecessary reasons.
• Daydreamed.
• Spent work time on personal matters.
• Put less effort into the job than should have.
• Thought of leaving current job.
• Let others do your work.
• Left work early without permission.
• Taken longer lunch or rest breaks than allowed.
CHAPTER 4  
RESULTS  

Descriptive Statistics  
The means, standard deviations, reliabilities, and zero-order correlations among all the study variables are shown in Table 1. Most notable is the .61 correlation between urgent and routine trust, suggesting that the two are highly correlated yet still empirically distinguishable. The correlations among the trust antecedents were all moderate to strong and consistent with past work by Mayer and Davis (1999). The three facets of job performance were also strongly related, supporting the notion that they are multiple dimensions of the same performance construct (Rotundo & Sackett, 2002). Similarly, organizational commitment and employee withdrawal were strongly negatively correlated, as expected. These correlations, together with the coefficient alphas on the diagonal, provide some support for the construct validity of the measures used to test my hypotheses.

Hypothesis 1  
I first conducted a factor analysis to verify the a priori separation of urgent and routine trust. I subjected the 17 trust items to a principal components analysis with varimax rotation. The scree plot supported a two-factor solution. The first factor, which corresponded to urgent trust, explained 60% of the variance in the 17 items. The items pertaining to responding to fire calls and auto accidents all loaded on this urgent trust factor. The average loading across those 11 items was .81, with no significant cross loadings on the other factor. The second factor, which corresponded to routine trust,
Table 1. Means, standard deviations, coefficient alphas, and zero-order intercorrelations for study variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
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<tr>
<td>1</td>
<td>Ability</td>
<td>4.32</td>
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<td></td>
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<tr>
<td>2</td>
<td>Benevolence</td>
<td>4.09</td>
<td>.67</td>
<td>.62**</td>
<td>.88</td>
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<td></td>
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<td>3</td>
<td>Integrity</td>
<td>3.89</td>
<td>.61</td>
<td>.63**</td>
<td>.81</td>
<td></td>
<td></td>
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<td>4</td>
<td>Propensity to Trust</td>
<td>3.62</td>
<td>.54</td>
<td>.27**</td>
<td>.34**</td>
<td>.48**</td>
<td>.78</td>
<td></td>
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<tr>
<td>5</td>
<td>Urgent Trust</td>
<td>6.02</td>
<td>1.02</td>
<td>.18</td>
<td>.17</td>
<td>.29**</td>
<td>.12</td>
<td>.97</td>
<td></td>
<td></td>
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<tr>
<td>6</td>
<td>Routine Trust</td>
<td>4.88</td>
<td>1.11</td>
<td>.33**</td>
<td>.39**</td>
<td>.44**</td>
<td>.19*</td>
<td>.61**</td>
<td>.93</td>
<td></td>
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<td>7</td>
<td>Task Performance</td>
<td>4.30</td>
<td>.63</td>
<td>.11</td>
<td>.40**</td>
<td>.08</td>
<td>-.06</td>
<td>-.09</td>
<td>.19</td>
<td>.87</td>
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<td>8</td>
<td>Citizenship Behavior</td>
<td>4.11</td>
<td>.57</td>
<td>.14</td>
<td>.24*</td>
<td>.05</td>
<td>.21</td>
<td>-.07</td>
<td>.06</td>
<td>.57**</td>
<td>.94</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>Counterproductive Behavior</td>
<td>1.48</td>
<td>.49</td>
<td>.02</td>
<td>-.27*</td>
<td>.00</td>
<td>-.23*</td>
<td>.08</td>
<td>-.05</td>
<td>-.49**</td>
<td>-.52**</td>
<td>.93</td>
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<td>10</td>
<td>Organizational Commitment</td>
<td>3.57</td>
<td>.84</td>
<td>.16</td>
<td>.24*</td>
<td>.21*</td>
<td>.29**</td>
<td>.17</td>
<td>.41**</td>
<td>.19</td>
<td>.32**</td>
<td>-.11</td>
<td>.86</td>
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<td>Withdrawal</td>
<td>2.20</td>
<td>.60</td>
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<td>-.07</td>
<td>-.11</td>
<td>-.27*</td>
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<td>-.39**</td>
<td>-.08</td>
<td>-.10</td>
<td>.08</td>
<td>-.56**</td>
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</table>

Note. N = 104. *p < .05 * p < .01. Coefficient alphas are presented in boldface along the diagonal.
explained an incremental 14% of the variance in the 17 items. The items pertaining to fitness, education, and training all loaded on this routine trust factor. The average loading across those 7 items was .78, with no significant cross loadings on the other factor. Further, the zero-order correlation between urgent and routine trust was .60. While this correlation is strong enough to suggest that these two concepts are related, the magnitude of this relationship is not great enough to suggest that they should be considered one concept. Taken together, these results provide some support for the distinction between the urgent and routine trust categories.

**Hypothesis 2**

Hypotheses 2a-c stated that routine trust would be significantly related to task performance, citizenship, and counterproductive behavior, independent of urgent trust. The results of the regression analyses are shown in Table 2. Hypothesis 2a was supported, as routine trust was significantly related to task performance in the predicted direction ($\beta = .43$, significant at $p < .01$). However, routine trust did not explain significant variance in citizenship behavior or counterproductive behavior, failing to support Hypotheses 1b-c.

<table>
<thead>
<tr>
<th>Table 2. Regression results</th>
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<tbody>
<tr>
<td>Task performance</td>
</tr>
<tr>
<td>Step: Urgent Trust</td>
</tr>
<tr>
<td>1. Urgent Trust</td>
</tr>
<tr>
<td>2. Routine Trust</td>
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</tbody>
</table>

Note. $N = 104$. ** $p < .05$. *** $p < .01$

Hypotheses 2d-e predicted that routine trust would be significantly related to organizational commitment and withdrawal, independent of urgent trust. The results of the regression analyses are shown in Table 3. Both hypotheses were supported. Higher levels of routine trust were associated with higher levels of organizational commitment.
(β = .45, significant at p < .01, supporting Hypothesis 1d) and lower levels of withdrawal (β = -.42, significant at p < .01, supporting Hypothesis 1e).

Table 3. Regression results

<table>
<thead>
<tr>
<th>Step:</th>
<th>Organizational Commitment</th>
<th>Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>R²</td>
</tr>
<tr>
<td>1. Urgent Trust</td>
<td>-.11</td>
<td>.15</td>
</tr>
<tr>
<td>2. Routine Trust</td>
<td>.45***</td>
<td></td>
</tr>
</tbody>
</table>

Note.  N = 104. ** p < .05. *** p < .01

Hypothesis 3

Hypotheses 3a-c stated that urgent trust would be significantly related to task performance, citizenship, and counterproductive behavior, independent of routine trust. The results of the regression analyses are shown in Table 2. None of these hypotheses were supported. Contrary to predictions, higher levels of urgent trust were associated with lower levels of task performance (β = -.35, significant at p < .05). There were no other significant unique effects.

Hypotheses 3d-e predicted that urgent trust would be significantly related to organizational commitment and withdrawal, independent of routine trust. The results of the regression analyses are shown in Table 3. Urgent trust did not explain significant variance in either of these two outcome variables. Therefore, neither hypothesis was supported.

Hypothesis 4

Hypotheses 4a-c predicted that the relationships between urgent trust (independent of routine trust) and (a) task performance, (b) citizenship, and (c) counterproductive behavior would be moderated by risk, such that the relationships would be stronger when risk was higher. To test these interaction hypotheses, moderated multiple regression was used. To assess direct effects, the three outcome variables were
regressed on urgent trust and routine trust in the first step of the regression. In step two, the direct effects of risk were assessed. Step three entered both the urgent trust x risk interaction as well as the routine trust x risk interaction. The results of these regressions can be found in Table 4. The interaction of urgent trust and risk was not significant for any of the three outcomes, failing to support these predictions.

Hypotheses 4d-e predicted that the relationships between urgent trust (independent of routine trust) and (d) organizational commitment, and (e) withdrawal would be moderated by risk, such that the relationships would be stronger when risk was higher. The results of these moderated regressions can be found in Table 5. The interaction of urgent trust and risk was not significant for either of the outcomes, failing to support these predictions.

**Hypothesis 5**

Hypotheses 5a-c predicted that the relationships between routine trust (independent of urgent trust) and (a) task performance, (b) citizenship, and (c) counterproductive behavior would be moderated by risk, such that the relationship would be weaker when risk was higher. The results of these moderated regressions can be found in Table 4. The interaction of routine trust and risk was not significant for any of the three outcomes, failing to support these predictions.

Hypotheses 5d-e stated that the relationships between routine trust (independent of urgent trust) and (d) organizational commitment, and (e) withdrawal would be moderated by risk, such that the relationship would be weaker when risk was higher. The results of these moderated regressions can be found in Table 5. The interaction of routine trust and risk was not significant for either of these outcomes, failing to support these predictions.
Table 4. Moderated regression results

<table>
<thead>
<tr>
<th>Step:</th>
<th>Task Performance</th>
<th>Citizenship Behavior</th>
<th>Counterproductive Behavior</th>
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<tbody>
<tr>
<td></td>
<td>β</td>
<td>ΔR²</td>
<td>R²</td>
</tr>
<tr>
<td>1. Urgent Trust (UT)</td>
<td>-.35**</td>
<td>.12***</td>
<td>.12***</td>
</tr>
<tr>
<td>Routine Trust (RT)</td>
<td>.43***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Risk</td>
<td>.11</td>
<td>.01</td>
<td>.13**</td>
</tr>
<tr>
<td>3. UT x Risk</td>
<td>-1.05</td>
<td>.01</td>
<td>.14*</td>
</tr>
<tr>
<td>RT x Risk</td>
<td>.44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 104. * p < .10 ** p < .05. *** p ≤ .01
Table 5. Moderated regression results

<table>
<thead>
<tr>
<th>Step:</th>
<th>Organizational Commitment</th>
<th>Withdrawal</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$\Delta R^2$</td>
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<tr>
<td>1. Urgent Trust (UT)</td>
<td>-0.11</td>
<td>0.15</td>
</tr>
<tr>
<td>Routine Trust (RT)</td>
<td>.45***</td>
<td></td>
</tr>
<tr>
<td>2. Risk</td>
<td>-0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>3. UT x Risk</td>
<td>-1.20</td>
<td>0.01</td>
</tr>
<tr>
<td>RT x Risk</td>
<td>0.59</td>
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Note. $N = 104$. * $p < .10$ ** $p < .05$. *** $p < .01$

**Hypothesis 6**

Hypothesis 6 predicted that ability would be a stronger predictor of urgent trust than routine trust. Ability was significantly related to both urgent trust ($r = .18$, significant at $p < .10$) and routine trust ($r = .33$, significant at $p < .01$). The correlations suggest that, contrary to predictions, ability is more strongly associated with routine trust than urgent trust. However, the two correlations were not found to be significantly different ($p = .21$). Therefore, this hypothesis was not supported.

**Hypothesis 7**

Hypotheses 7 predicted that benevolence would be a stronger predictor of routine trust than urgent trust. Benevolence was significantly related to both urgent trust ($r = .17$, significant at $p < .10$) and routine trust ($r = .39$, significant at $p < .01$). Additionally, these correlations were significantly different at a .10 level ($p = .08$). The correlations suggest that benevolence is more strongly associated with routine trust than urgent trust, as predicted. Therefore, this hypothesis was supported.

**Hypothesis 8**

Hypothesis 8 predicted that integrity would be a stronger predictor of routine trust than urgent trust. Integrity was significantly related to both urgent trust ($r = .29$, significant at $p < .01$) and routine trust ($r = .44$, significant at $p < .01$). The correlations
suggest that integrity is more strongly associated with routine trust than urgent trust. However, the two correlations were not found to be significantly different ($p = .21$). Therefore, this hypothesis was not supported.

**Hypothesis 9**

Hypothesis 9 stated that propensity to trust would be a stronger predictor of urgent trust than routine trust. Propensity to trust was not significantly related to urgent trust ($r = .12$). However, propensity to trust was significantly related to routine trust ($r = .19$, significant at $p < .10$). The correlations suggest that, contrary to predictions, propensity to trust is more strongly associated with routine trust than urgent trust. However, the two correlations were not found to be significantly different ($p = .61$). Therefore, this hypothesis was not supported.
Kramer (1999) said "trust is moving from a bit player to center stage in contemporary organizational theory and research" (p. 594). Reasons for the increased importance of trust include the changing nature of work, increased use of teams, and more geographic dispersion of employees working together. The purpose of this paper was not to discuss the importance of trust per se, but rather to delineate two important types of trust, urgent trust and routine trust.

For the purposes of this study, the definition of trust put forth by Roussseau, Sitkin, Burt, and Camerer in the 1998 special issue on trust in the Academy of Management Review was used. They define trust as a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another.

Unfortunately, definition leaves two important questions unanswered: First, willingness to be vulnerable during what kind of behavior and second, positive expectations that the person will engage in what type of behavior. These two questions are important because many jobs possess an inherent duality: everyday, traditional actions, with punctuated instances of emergencies or crises. It seems likely that trust may take on different forms in these different situations. Given this possibility, the purpose of this study was to reconceptualize trust as it is experienced in jobs that possess this
important duality. More specifically, this study examined two types of trust: urgent trust and routine trust.

**Routine Trust's Relationship with Commitment and Withdrawal**

While the study predicted that organizational commitment and withdrawal would be driven by both urgent and routine trust, independent of one another, this was not the case. Routine trust had a significant impact on both outcomes controlling for urgent trust. The same was not true in the opposite direction. This result suggests that an individual's desire to engage in behaviors such as shirking, absenteeism, or even leaving the organization is driven by reactions to the behavior of one's coworkers in situations that have established rules, procedures, or precedence governing actions.

Perhaps trust concerning everyday behaviors of coworkers was more important because of the sample used in this particular study. Firefighter training is difficult, extensive, and ongoing throughout a firefighter's career. Further, the nature of this training focuses specifically on the urgent, critical nature of the job. As such, training simulations often accentuate expecting the unexpected and reacting to it well. Because of the nature of firefighter training and education, perhaps there is a restriction in range concerning those specific abilities most strongly related to urgent trust.

The descriptive statistics of this study suggest that this explanation may have credence. On a 7-point scale, the average score for urgent trust was 6, suggesting that these firefighters, on average, "almost always" trusted their coworkers concerning behaviors associated with urgent trust. For example, given that each and every firefighter in the sample was EMT certified, it seems likely that a vast majority could be trusted to "collect medical data at accident scenes," as one item asks, even in less than ideal situations.
Given the likely relative stability of urgent trust across fire departments, it seems likely that what would drive firefighters to be more or less committed to their particular fire department, or want to leave their particular fire department, would be the day to day nuances of life in these departments. In fact, the items used to measure commitment and withdrawal are all organization specific, not career specific. Thus, each measure attempted to capture feelings concerning the particular department for which these firefighters work.

Individuals are not likely to physically or emotionally withdraw from their organization when they can trust their coworkers to do their share as related to the typical tasks for the day's work, especially if these same coworkers can be generally trusted in novel situations that pose serious threats to collective interests. On the other hand, if urgent trust can be assumed across all organizations in the field, individuals may be particularly sensitive to not being able to trust their coworkers to complete the more monotonous and routine tasks of the job. This certainly may lead them to withdraw themselves from their work.

Organizational commitment works in a similar fashion, but perhaps the logic is even simpler. If those factors related to the formation of urgent trust are stable within the career a person has been extensively trained for, then the desire to leave a particular organization would certainly be driven by the extent to which an individual is able to trust their coworkers to complete the more common tasks of the job.

**Routine Trust's Relationship with Job Performance**

Routine trust was also positively related to task performance, independent of the effects of urgent trust. The measure of task performance used in this dissertation used formal requirements of the job as the referent. Essential job elements, by definition, have
established rules, procedures, or precedence governing actions. Behaviors related to
evaluations of routine trust involve situations that also have established rules, procedures,
or precedence governing actions.

This result suggests a possible, positively reinforcing, cycle of routine trust and
job performance. To illustrate, assume a particular individual trusts their closest
coworkers to complete the most common, routine tasks of a job. To reciprocate, this
individual performs his or her job well, with respect to their assigned duties. Other
employees see this trustable, solid job performance, and trust this individual. They, in
turn, fulfill their responsibilities of their job description and the cycle perpetuates.

**Negative Effects of Urgent Trust**

Study findings concerning urgent trust differed not only from routine trust, but
also from expectations. Urgent trust was, in fact, found to be negatively related to task
performance, controlling for routine trust. While this result was probably specific to this
study and not likely to be replicated, some explanation is necessary. Perhaps those who
perform the worst in a general sense have to trust others in urgent situations because they
do not possess enough competencies themselves. For example, if a firefighter knows that
they cannot check a person's vital sign correctly under pressure, they would likely have to
trust their coworkers to pick up the slack.

**Citizenship and Counterproductive Behaviors**

Somewhat surprisingly, neither routine nor urgent trust were related to citizenship
or counterproductive behaviors. Again, the sample of this particular study may be
partially responsible for this contrary finding. The firefighters in this sample, much like
the vast majority of firefighters in this country, work 24-hour shifts, often with the same
group of people. They sleep, eat, and shower at work. They spend their entire waking
hours on these days with their coworkers. In fact, the stations are called firehouses. This is because they function much like a household. For example, there are chores to be done, decisions to be made about the living environment, and a social environment that must be maintained.

As such, the firefighters of a specific shift often function like a family. Each task is done as much out of concern and respect for others as it is by necessity. For an individual to engage in counterproductive behavior in a work environment such as this is comparable to an obvious and motivated attack on the "family" that is that particular shift at that particular station. Similarly, not engaging in citizenship behavior such as showing concern and courtesy towards one's coworkers may also be seen as apparent and deliberate disregard for the working unit. In other words, for a firefighter to engage in counterproductive behaviors and not engage in citizenship behaviors is a much bigger deal than for a normal employee at a typical job to do the same. In other words, there are powerful norms in this sample concerning these behaviors that may trump the effects of trust.

**Trustworthiness**

To assess trustworthiness, this study used the model presented by Mayer et al., 1995, which identifies ability, benevolence, and integrity as the key dimensions of trustworthiness. To the key dimensions of trustworthiness. To begin, these authors define ability as a domain specific group of skills or competencies that an individual possesses. While the correlations suggested that ability is more strongly associated with routine trust than urgent trust, these correlations were not found to be significantly different.

Given that all of the items for measuring both types of trust were derived from a job analysis, it seems logical that a person would need specific abilities to engage in each
task. As such, the notion that some sort of ability is required to perform any task on the trust measures may be constant across both forms of trust evaluations. In other words, perhaps ability of the trustee is a necessary but insufficient condition for any type of trusting behavior to occur.

By definition, a benevolent individual has good intentions regarding the trustor. In this study, it seems logical that these good intentions would drive everyday, repetitive tasks as these tasks often benefit the entire station. Consequences of not engaging in these behaviors are existent, but probably not severe. It is in fact, the severity of consequences of not engaging in urgent behaviors that overrides the impact of benevolence.

For example if a firefighter does not lift weights, few short-term effects are likely. Contrarily, this same firefighter failing to survey an accident for safety concerns can immediately lead to severe consequences including injury or death. In other words, behaviors related to urgent trust evaluations usually occur in strong situations where feelings of benevolence may not be able to manifest themselves.

With regard to integrity, an individual is seen as having integrity if they adhere to a set of moral principles that a trustor sees as acceptable. Put simply, integrity involves moral character. While integrity had a stronger relationship with routine trust than with urgent trust, the correlations were not significantly different. This suggests that evaluations of an individual's moral character do not drive subsequent feelings of urgent and routine trust to a different degree.

Interestingly, part of what determines integrity is consistency of action over time as well as consistency between action and words. This would certainly suggest that, if an individual possesses integrity, they would behave accordingly consistently across
situations, be they urgent or routine. As such, their integrity will effect trust evaluations of both types to an approximately equal degree.

**Propensity to Trust**

In another contrary finding, propensity to trust was significantly related to routine trust, but not urgent trust. Closer analysis, however, revealed that propensity was not found to be related to urgent and routine trust to a different degree. This suggests that an individual's general willingness to trust others in fact generalizes across types of trust. Given the non-specific nature of propensity to trust, it is not altogether surprising that the strength of its relationship with trust was not specific to a certain from of trust.

**Practical Implications**

The results of this study suggest that routine trust had significant effects on both commitment and withdrawal. Specifically, higher levels of routine trust were associated with higher levels of commitment and lower levels of withdrawal. Both of these outcomes are important to the fire service. To begin, firefighter training is not only time intensive but also expensive. For this reason, it is important that those firefighters who complete this training do not intend to leave the organization. Further, given the sporadically dangerous nature of the job, it is critical that firefighters are not mentally withdrawn from their work, as this could lead to injuries or even death.

Fortunately, there are actions that the fire department can take to foster the development of routine trust. In order to do so, the department can conduct more frequent assessments of routine task performance and/or conduct more training on routine tasks. This would help to insure that firefighters would perform better in terms of routine tasks. This enhanced performance should lead others to trust the individuals they work with in routine matters. Finally, the fire department can take steps to hire individuals who
possess high levels of integrity and benevolence, the two dimensions of trustworthiness most closely associated with routine trust.

**Study Limitations**

Perhaps the greatest limitation of this study was its small sample size and resulting lack of statistical power. This lack of power did not affect the strength of relationships between study variables, but rather the statistical significance of these relationships. In other words, though some effect sizes were of reasonable strength, the small sample size of the study made them non-significant. This affected not only the relationship of independent and dependent variables, but also the statistical significance of the difference between correlations between the two types of trust with respect to other study variables.

Another weakness of this study was that scores on most of the variables were collected via self-report. In other words, study participants decided their own scores on most measures. To partially mitigate the negative effects of a self-report design, data were collected over three time periods separated by the passage of at least 6 weeks. This delay is a necessary but insufficient condition for assessing causality. That is, the independent variables were measured prior to the intervening trust variables and the dependent variables.

One limitation of this study will be particularly difficult to overcome in future research, family type samples. Because of the living environment in the jobs most enriched with urgent trust situations, a strong group identification results. Because of the close-knit nature of the group, not engaging in citizenship or engaging in counterproductive behaviors is not likely as they signal an attack on the "family." Most jobs were the urgent form of trust is most prevalent will have a job environment similar
to that described above. For example, military personnel are often stationed together and share the bulk of not only their work hours, but also their leisure time with other military personnel. A similar identification amongst workers seems likely with police officers as well. This sweeping camaraderie likely acts to restrict range on negative outcome variables.

These aforementioned jobs where urgent trust related behaviors are most prevalent also create another potential problem, restriction in range in those behaviors related to urgent trust. Police, firefighters, and military personnel all receive extensive training involving how to handle emergency situations. If members of these organizations cannot pass this training, they are generally replaced. As such, in these types of jobs, at least the competency component of trusting others may be assumed.

Suggestions for Future Research

First and foremost, future research should examine the same research questions addressed in this paper using other relevant, larger samples. Perhaps a police or military sample might have more participants and therefore more statistical power to more closely examined the relationships of interest in this study. Also, these samples will likely yield different and interesting results specific to these professions.

Further, urgent and routine trust should be examined in more traditional jobs, to see if this distinction exists in more commonplace work environments. The argument was made earlier in this paper that this duality of tasks (urgent and routine) is present in nearly all jobs to some degree. Some careers where this distinction may be more readily apparent include any job involving the use of heavy equipment, dangerous chemicals, or high wattage power. Some jobs, such as public utility work involve all three.
In other careers, this distinction may not be immediately recognizable, but still present. Certainly, teachers, mechanics, lawyers, realtors, contractors and other professionals frequently encounter situations that are novel and pose serious threats to collective interests, even if not in a life or death sense. It would be interesting to see if urgent and routine trust behave differently in these types of jobs.

Future research should also look at urgent and routine trust in a more extensive nomological network. Many other independent variables than those included in this study likely drive the formations of trust evaluations. For example, an individual's tenure with an organization may effect how much they differentially trust their coworkers. Also, as alluded to earlier, a person's career choice itself may be related to the manner in which they trust. It could be that those who are most willing to trust others, especially with regard to urgent trust, self- select themselves into jobs where emergency situations are more likely.

It also seems likely that an individual's personality (in a big 5 sense) may impact that individual's level of trust in others. Specifically, trustworthiness is a subfactor of the personality dimension of agreeableness. It would be valuable to see if a person's own trustworthiness is related to their trust in others. Also, it seems logical that more conscientious people may trust others less because they are used to doing more than their fair share. Additionally, affect is liable to effect trust reactions. Whether or not a person is in a positive mood will certainly affect their opinions of others.

Finally, given the recent proliferation of justice research, future research should examine how both forms of trust and justice are related. It seems that justice could be either a dependent or independent variable in its relationship with trust. For example, those who are treated justly by their coworkers and/or employer may be more likely to
trust these individuals. On the other hand, not being able to trust one's coworkers may lead to feelings of injustice at the workplace. In other words, a person might feel that it is unfair that they should have to work with untrustworthy people.
REFERENCES


BIOGRAPHICAL SKETCH

I was born in Mobile, Alabama, and moved to Florida at the age of 2. I attended grade school and high school in Pensacola, Florida. In 1996, I graduated from Booker T. Washington High School. I obtained a Bachelor of Science degree in business administration from the University of Florida in August 1999. Immediately after graduation, I began working toward my Ph.D., also at the University of Florida.

Upon graduation, I intend to continue to work for my current employer, Alligator Properties. I currently work as both a property manager and a realtor for this organization. I hope to eventually return to a University setting in a teaching position, but probably only part time.
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Jason A. Colquitt, Chair
Associate Professor of Management

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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This dissertation was submitted to the Graduate Faculty of the Department of Management in the College of Business Administration and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree Doctor of Philosophy.

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Dean, Graduate School