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MEAGAN ELEANOR BROCK
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INVESTIGATING THE ANTECEDENTS OF TIME BANDITRY:
CLIMATE, PERSONALITY AND COMMITMENT

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF PSYCHOLOGY

BY

Dr. Michael Buckley, Chair

Dr. Mark Bolino

Dr. Jorge Mendoza

Dr. Michael Mumford

Dr. Shane Connelly

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Abstract

Time banditry has recently been introduced as a distinct construct in the counterproductive work behavior literature. An employee is engaged in time banditry when he or she pursues non-task related activities during work time, whether they are positive or negative (i.e., helping a co-worker or surfing the web). Two studies were conducted to explore situational and dispositional antecedents of time banditry, frequency of time banditry on a daily basis, cognitive rationalizations for misuse of time, and factors that contribute to the classification of time bandit type. Hierarchical linear modeling and discriminant function analysis were used to answer many questions with regards to time banditry. Situational variables such as job climate, and job stressors were found to explain variance in time banditry scores. Further, dispositional variables were shown to both mediate and moderate the job stressor-time banditry relationship. Finally, classification results revealed that both situational and dispositional variables can be used to predict time bandit type. Suggestions for future research and implications for managing time banditry are discussed.

Introduction

Do you have an employee who is always late coming to work or back from lunch? One who makes or receives personal phone calls daily or one who sneaks out a couple of minutes early on a regular basis? What about an associate that is on their cell phone texting throughout the day or who constantly socializes with and distracts other employees? How about an employee who frequently volunteers to assist a colleague or help out in other areas of the organization in order to avoid working on their job tasks? If you answered yes to any of these questions you might have a time thief on your hands. Anecdotally, if you ask your friends or coworkers if they are productive at work 100% of the time, relatively few would agree. In fact, the overwhelming majority, reportedly, do not work to their capacity. Such a response leads one to ponder----if individuals do not work all of the time, then what do they do? Are employees being productive in other ways? Are they engaging in occupational helping behaviors or are they engaging in counterproductive work behaviors? Either is possible. Despite the high economical cost of time theft (Malachowski, 2005), empirical research exploring such behaviors have only recently begun to appear in the academic literature (Brock et al., 2009; Henle et al., 2009; Martin et al., 2009). Due to the lack of extant literature on time misuse, research extending our current knowledge on time waste behaviors can help to provide suggestions to managers and organizations of ways to lessen the negative behaviors and increase positive behaviors (Chen and Tang, 2006).

Employee work habits as they relate to the use and misuse of employee time spent on the job is an area that has recently begun to pique the interest of many employers and researchers. Specifically, “time banditry,” a concept first suggested by Ketchen, Craighead and Buckley (2008), and recently defined by Martin and colleagues (2010) “as the propensity of employees to engage in unsanctioned non-work related activities during work time, including off task activities in the workplace and coming to work late.” As per the definition of time banditry, bandit behaviors can include any behavior that is considered not part of the focal job. For instance an individual helping out a colleague rather than doing their own tasks would be considered a time bandit. Further, time banditry can be counterproductive in terms of individual productivity, but productive when considering the social context of the organization. The prevalence of time waste in organization has become common place. For example, when explaining this research to colleagues, friends, family or individuals in passing, the most common response is “I am a perfect candidate” or “you should come study my organization.” While recent research has begun investigating the prevalence and types of people that engage in time waste (Brock et al., 2009; Henle et al., 2010; Martin et al., 2010), the organizational and job-related antecedents, as well as the rationalizations for such actions remain to be investigated.

Researching time banditry is imperative as time banditry is a very grey area and is hypothesized to have both negative and positive effects. Time banditry can damage the morale and cohesiveness of an organization as it undermines perceptions of justice and equity. For example, when a supervisor must reallocate assignments or

reschedule other employees in order to compensate for another's time misuse it sends the signal that those that are counterproductive are rewarded by removing tasks from the "bad" employee. Thus, employees' perceptions of justice and equity are lessened. Moreover, these negative behaviors that are being "rewarded" are likely going to lead to additional employees' engaging in off task activities, all of which can result in further reduction in morale, and motivation (Jamal, 1984).

In addition to the individual implications, time banditry can also have a substantial financial impact due to loss of employee productivity (Murphy, 1993). The consequences of time banditry is exacerbated in team settings, as one is not only slowing the pace of his or her productivity, but every team member as well (Robinson and O'Leary-Kelly, 1998). The extent to which people waste time in the work place has a real effect on an organizations bottom line, as wasting time equates to less profit, this picture is magnified further when taking salary paid and decreased productivity. In fact, a conservative estimate of time waste among American workers is approximately 2.09 hours in an eight-hour shift, costing companies \$759 billion annually in lost productivity (Malachowski, 2005). Thus, in these times of economic uncertainty, organizations need to be more cognizant of those activities that detract from bottom line profitability. Moreover, efforts need to be focused on understanding and ameliorating counterproductive behavior, rather than defensively cutting funding to strategic programs, and reducing manpower.

Despite the negative outcomes of time banditry, engaging in time banditry can also lead to positive outcomes for the individual and organization. As will be discussed later in this paper, it is posited that engagement in CWBs or in this case

time banditry is preceded by job stress, which can lead to frustration and other negative emotions (Spector & Fox, 2002). In situations in which an employee feels stress they are likely to deal with that stress by engaging time banditry. In this case while it is evident that the employee is not being productive, taking time away from one's task has been found to have a recuperative effect and can work to increase productivity, not reduce it (Dewe & Guest, 1990). Another form of time banditry that is posited to lead to positive organizational outcomes is socializing. Taking time away from task to social with co-workers can improve cohesion within the workplace.

As time theft or banditry has received relatively little attention when considering the extant literature on CWBs, this research endeavor will attempt to expand the knowledge on this unique sub dimension by exploring antecedents of time banditry, and rationalizations for engaging in it. In addition, an effort will be made to provide organizations and managers suggestions for reducing time theft activities.

Theoretical Background

Counterproductive Work Behaviors

Many employers have very different ideas about the behaviors they consider productive and counterproductive. Consider, for example, an employee who takes long lunches, or strolls into work late almost every day, it is easy to see that this employee's behavior is counterproductive to optimal productivity. However, this distinction is not always as clear cut and easy to recognize. Imagine an employee

who helps others with their work instead of completing their personal work tasks. Many would say this employee is lending a helping hand and is very beneficial to the organization. But suppose this employee is not producing up to the organizations standards; should his/her conduct still be considered productive?

Understanding the concept and behaviors underlying counter productivity is important to understanding time banditry, as time banditry is by definition harmful to the organizations bottom line, in terms of production. However, time banditry is not necessarily harmful when the social or contextual nature of performance is considered. Counterproductive work behaviors (CWBs) refer to volitional acts that harm or are intended to harm organizations or people in organizations (Spector & Fox, 2005). Several scholars have attempted to define the dimensionality of counterproductive work behaviors (e.g. Gruys & Sackett, 2003; Spector & Fox, 2005; Spector et al., 2006). While the majority of scholars agree that the construct is multi-dimensional, the dimensions developed and the behaviors that characterize the dimensions vary by research effort.

Gruys and Sackett (2003) outlined 11 types of CWBs: 1) theft and related behavior; 2) destruction of property; 3) misuse of information; 4) misuse of time and resources; 5) unsafe behavior; 6) poor attendance; 7) poor quality work; 8) alcohol use; 9) drug use; 10) inappropriate verbal actions; and 11) inappropriate physical actions. Spector and colleagues (2006) defined a more macro set of dimensions including abuse toward others, production deviance, sabotage, theft, and withdrawal. Despite the variance in defining CWBs, researchers agree that the behaviors are intentional, and the purpose is, oftentimes, negative. Further, they believe that the

individuals engaging in these behaviors tend to be unproductive due to low job satisfaction and low engagement.

The misuse of time and resources dimension of CWB was first presented by Gruys and Sackett (2003). This dimension has only recently begun to receive attention in the empirical CWB literature; perhaps because it is not seen as high risk or as overt as some other forms of CWB, such as theft of goods and harassment. However, the misuse of time and resources has been and is increasingly being recognized as a significant counterproductive work behavior (Henle et al, 2010). The misuse of time can have a significant effect upon the bottom line of an organization as the additive effect of lost productivity is staggering. For example, imagine Mark, a full time administrative assistant in a busy law firm, who makes \$20 an hour. Now imagine Mark falls in line with the average employee and wastes approximately 2 hours a day, 5 days a week. Assuming an 8 hour work day and an approximate salary of \$41,600 a year, Mark's waste is equal to approximately \$10,400 a year. Magnify that by how many employees you have and their given salaries, also taking into consideration payroll taxes and employee fringe benefits, and the cost become too much to ignore.

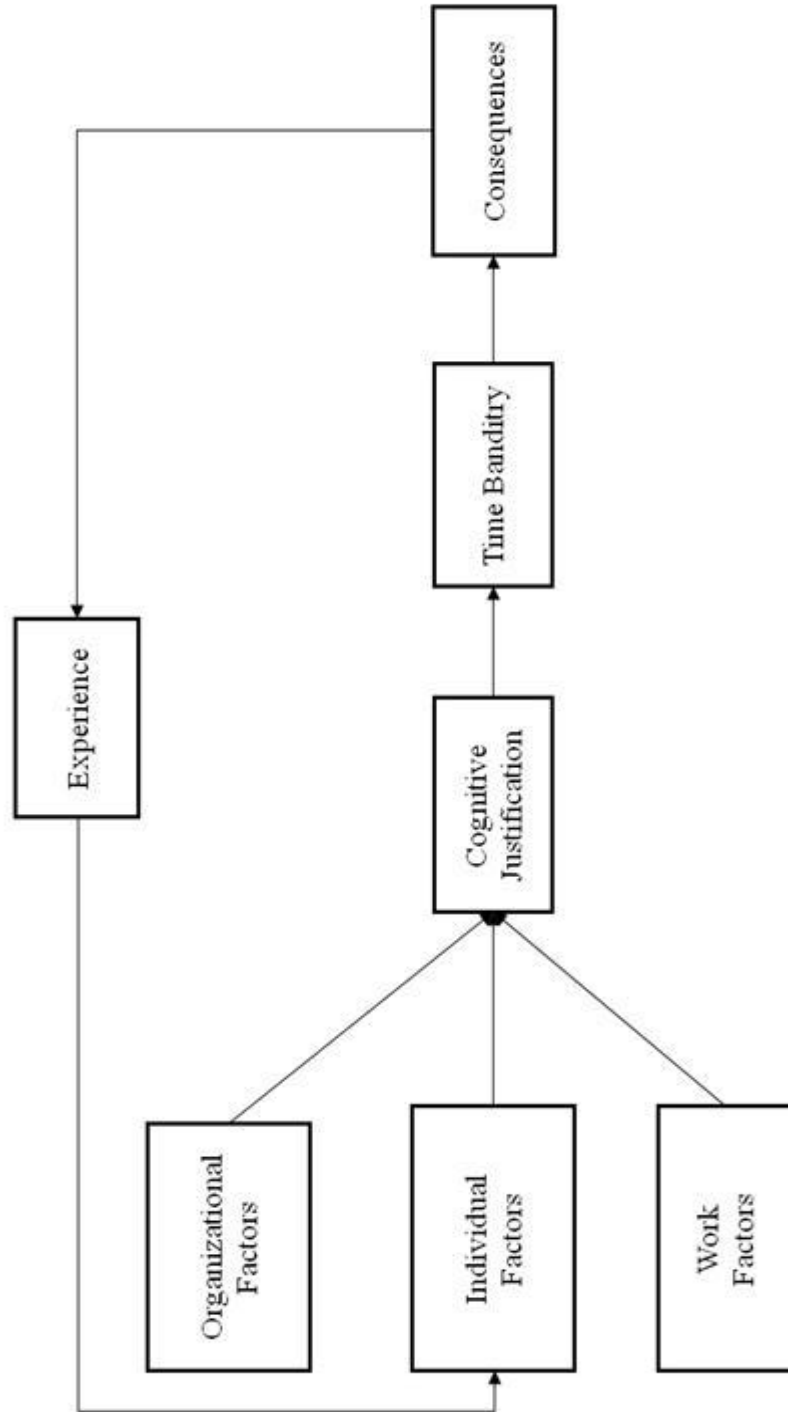
As the outcomes of time banditry are not black and white, it is imperative to gain a better understanding of what time misuse is, and how it fits into the counterproductive framework, especially given that time misuse can be linked to a decrease in productivity and shrinking organizational profits.

Theoretical Model of Time Banditry

Martin and colleagues (2010) developed a conceptual model centered on time banditry. The model identifies the key antecedents to time banditry, including individual, organizational and work factors, experience, cognitive processing, and opportunity as well as outcomes (i.e., consequences and experience). The original time banditry model developed by Martin and colleagues (2010) has been revised for the purpose of this research to remove opportunity from the model, as opportunity is implied by the combination of antecedents present in the organization. The new model of time banditry can be seen in Figure 1.

The antecedent components of the model included organizational, job, and individual level factors. An example of an organizational antecedent to time banditry is culture. Organizational culture can play a large role in establishing a norm within which time banditry is or is not acceptable, and to the extent to which it might occur (Lim, 2002). In a relatively lax environment, wherein many employees engage in a range of behaviors that qualify as time banditry, other employees are likely to follow the lead because the norm specifies that counterproductive behavior is acceptable in that environment. For example, in one sample, it was found that 96% of employees receive personal e-mails at work (Blanchard & Henle, 2008). In a culture where such behavior is common, it is seen as 'less wrong' (Wimbush & Shepard, 1994) and that norm should influence its more prevalent occurrence.

An example of a job level antecedent to time banditry is provision of resources (or lack of). According to Cordes and Dougherty (1993), individuals without access to appropriate resources can become overloaded and fail to complete



their tasks. If equipment is old and is in constant need of repair, there are more causes of time banditry. For example, if a copier or printer is constantly jamming, employees may use this as an excuse not to perform their work. If employees run out of materials that they need to complete their tasks, time banditry will also be much more likely. Ensuring that employees are provided with the materials that they need in order to complete work tasks makes them less likely to engage in time banditry. Additionally, conservation of resources theory (Hobfoll, 1989), suggests that stress can result from a loss of resources, the threat of loss, or the lack of appropriate gain of resources following an investment of one's resources. This stress can lead an employee to engage in time banditry to reduce felt stress.

Finally, an individual level antecedent to time banditry is job satisfaction. An employee's level of satisfaction with his or her job can likewise influence the decision to engage in time banditry behaviors. Specifically, research has shown that individuals with low job satisfaction are more likely to engage in counterproductive work behaviors (Lau, Au, & Ho, 2003). Specifically, dissatisfied employees are much more likely to be late to or absent from work than satisfied employees (Adler & Golan, 1981). One explanation for such behavior is that when an employee is dissatisfied, they may feel less loyal and accountable to their employer (Bardwick, 2008), thus increasing the likelihood that they will purloin time.

Given the organizational, job, and individual level antecedents combine to create an opportunity to engage in time banditry one will rationalizes to him or self that time banditry is justified. It is hypothesized that one can and will come up with many different reasons for engaging in time off task. It is believe this cognitive

process is engaged in order to reduce one’s feeling of wrong doing. After one engages in their justified time banditry there will be a consequences (or lack thereof) which will communicate whether time banditry is tolerated (or ignored) within the organization. This experience of the consequence will then serve to provide information to the employee in future situations in which they are contemplating time banditry.

The Typology of Time Banditry

In addition to developing a model of time banditry, Martin et al (2010) also suggested that there is a typology of time bandits, based on an employees’ level of engagement and productivity (see figure 2).

		<i>Productivity</i>	
		High	Low
<i>Engagement</i>	High	Weasel: Engaged- Productive	Sandbagger: Engaged- Unproductive
	Low	Mercenary: Unengaged- Productive	Parasite: Unengaged- Unproductive

The first type of time bandit is the weasel. Weasels are time bandits that are both productive and engaged, but still steal time. They have learned how to manipulate their environment to be able to “weasel” out of work, and are fully

capable of performing more and/or better work. For example, this type of time bandit may say that their tasks will take longer to complete than they actually estimate, in an effort to get more time for themselves on the job. Although weasels steal organizational time, this is the most positive type of time bandit because they are still reasonably engaged, committed, and productive, but the additive effect of their behavior remains a problem. In some organizations, the goal might be to convert other types of time bandits to this type, which could significantly reduce time banditry in the workplace. For workers with this profile, managers should attempt to simply decrease the amount of time banditry behaviors that are acceptable, possibly through a culture change or by implementing performance standards with reinforcements for achieving production goals and consequences for falling short of such goals.

The second type of time bandit is productive but not engaged. These workers are termed mercenaries. These are workers who “go through the motions” but would much rather be somewhere else and would arguably perform another job better if more engaged. This type of bandit only does what they have to in order to keep their job, and are hypothesized to be more common in jobs where there are specific and concrete job performance standards, such as piece rate work. This time banditry profile might also be appropriate for individuals who do not seek to remain with the company or advance their position, thus giving them little motivation to commit to the organization. If employees are already certain that they will turnover relatively soon, there is little that the manager can do to curb time banditry short of creating and enforcing policies against stealing organizational time. As organizational

commitment is likely to remain constant throughout one's life, managers could administer a measure of commitment during the selection process in an effort to reduce the number of mercenary type time bandits that are hired. Time banditry could be reduced, along with all of the other negative employee characteristics that committed employees are less likely to display.

The next type of bandit is the sandbagger, who is engaged but unproductive. They are very excited about what they are doing, but they don't really do a lot of work that is job related. This type of time bandit might exhibit a pattern of occupational helping behaviors. Specifically, you will likely find this individual helping others with their problems rather than accomplishing their own tasks. Because the sandbagger is already engaged in their work, they are likely going to be the easiest type of bandit to manage or fix. Managers should focus their efforts and enthusiasm toward positive organizational goals, using performance goals and incentives to reduce time banditry behaviors.

The final and most harmful type of bandit is the parasite, as they are neither productive nor engaged but draw the same organizational resources as a worker who produces much more. The behaviors that are categorized under the parasite type are those which are typically identified as time misuse in previous research and include such behaviors as social loafing (Latane, Williams, & Harkins, 1979), free riding (Albanese & Van Fleet, 1985), shirking (Judge & Chandler, 1996), and job neglect (Albanese & Van Fleet, 1985). The theme across all these behaviors is the general lack of care for the organizational and job tasks.

What Makes Time Banditry Different?

As time banditry is defined as a variant of counterproductive work behavior and is related to deviant behavior it is crucial to distinguish time banditry from other similar constructs. One of the CWB dimensions outlined by Spector et al. (2006) is production deviance, which bears a resemblance to time banditry. Production deviance is defined as “behavior that violates formally prescribed organizational norms with respect to minimal quality and quantity of work to be accomplished as part of one’s job (Pulich and Tourigny, 2004).” Of the constructs to be discussed, time banditry fits most closely within the dimension of production deviance. However, the main difference between the two constructs is intent and span of behaviors. While production deviance indicates a malicious, cognizant, intent to cause harm, time banditry, is not necessarily intentional, nor is it done to cause harm to the organization. Rather, time banditry can be engaged in for many reasons, ranging from boredom or lack of work, to perceptions of inequity or injustice. Moreover, certain time bandit behaviors, while harmful to one’s individual productivity, could be rather beneficial to the organization (e.g. engagement in occupational helping behaviors).

Another construct related to but different than time banditry is cyber loafing. Cyber loafing is a new form of workplace deviance which has emerged throughout the years as the use of technology has become a larger part of people’s lives. Workplace internet deviance or “cyber loafing” has become another way for employees to deviate from their work (Zoghbi, 2006). This includes surfing the web and doing non-work related task on the internet such as chatting on social

networking sites and online shopping. While, cyber loafing is a form of time banditry, it is not the only form, as time banditry as a construct is more inclusive of different forms of time misuse.

Finally, a more distally related form of time misuse in the workplace is presenteeism. Presenteeism is defined as lost productivity that occurs when employees come to work but perform below par due to any kind of illness (Hemp, 2004; Zengerle, 2004). While presenteeism could be considered a form of time waste, the waste of time is due to a slow pace of work caused by illness rather than engagement of off-task activities, indicated by the definition of time banditry. Furthermore, presenteeism is the result of uncontrollable bodily functions that cause an employee to move and work more slowly. Those engaging in time banditry might work more slowly but that behavior is in their control and is the result of other antecedents.

Existing Research on Time Banditry

An employee can engage in theft of time from an employer in many different ways. Until recently, there has been no comprehensive list of behaviors classified as time theft. In a recent effort to develop a measure of time banditry conducted by Brock and colleagues, three dimensions or categories of behaviors that bandits can and do engage in were identified (2009). Those categories have been defined as classical time banditry, technology related time banditry, and socially oriented time banditry. The outcome of this measure development has answered many questions regarding what behaviors or actions count as an act of time banditry and whether those actions are limited to taking long lunches, or if they extended into the scope of

off task helping behaviors. Extending the research conducted by Brock et al (2009), Martin et al. (2009), developed a nomological network of relationships of time banditry and tested said relationships in an effort to validate the Time Banditry Questionnaire (TBQ).

As stated, the first time banditry study involved the development of a measure of time banditry (Brock et al., 2009). This study utilized a sample of 226 graduate and undergraduate students who were currently employed 20 hours a week or more. Participants were administered a measure developed based existing measures of counterproductive work behavior and cyber loafing, as well as through data collected from interviews with a variety of working professionals. Results of the survey were submitted to a factor analysis. This resulted in a final TBQ measure of 31 items, with three subscales measuring classical time banditry ($\alpha = .88$), technology related time banditry ($\alpha = .92$), and socially oriented time banditry ($\alpha = .71$) (Brock, et al., 2009).

The first factor that emerged was the “Classical Time Banditry.” The classical expression of time banditry behaviors involves taking long lunches, excessive breaks, or feigning illness to avoid work. They are stealing time, but do not use technology or others to do so. When employees engage in these behaviors, they can be likened to slugs: they take their time in doing things and will avoid doing any more work than is absolutely necessary. The second factor that emerged was the theft of time using technology, thus providing the factor title of “Technological Time Banditry.” Time bandits expressing their behavior in this manner use their work computer for non-work tasks, such as sending personal e-mails and surfing the

internet. Phone abuse was also reported, such as sending and receiving calls at work using the company's phone. There were no items on the measure specifically addressing the use of a personal cell phone while at work, but the inclusion of this specific type of time theft will be used in future revisions of the measure and is indicative of the dynamic nature of this type of time banditry. This type of time bandit could be likened to a lightning bug: they can do some pretty cool things with technology, but it doesn't really get them, or the organization, anything. The final way that time banditry behaviors can be expressed is socially, thus yielding the term "Social Time Banditry." Time bandits who are stealing time socially involve others in the process, such as those who talk at length about personal issues at work. They do not necessarily need to involve other coworkers, but could steal time by talking to customers and clients longer than needed and about non-work related topics. These bandits can be likened to the frogs of the workplace: they are in everyone's business and always seem to be busy, hopping from person to person without really accomplishing anything.

A second study was conducted by Martin and colleagues (2009). This study explored the nomological network of relationships with regard to time banditry. The ultimate purpose of this study was to explore the concept of time banditry as separate and distinct from counterproductive work behavior, in general. In addition, it investigated several constructs that could be used to predict ones likelihood of being low or high on the TBQ. Participants of this study were undergraduate and graduate students, who were engaged in a minimum of 20 hours of work per week and had a minimum of one year of work experience.

Results from the Martin et al. (2009), study further confirmed the multidimensional nature of time banditry. Specifically, a confirmatory factor analysis yielded a three-factor solution - Classic time banditry behaviors ($\alpha=.92$), followed by the Technology behaviors ($\alpha=.70$). Socially-based time banditry behaviors exhibited the lowest levels of internal consistency ($\alpha=.59$). It can be seen that the reliabilities from this second administration are not as high as the initial study, thus further development and exploration into the TBQ is necessary, and will be included in this research endeavor.

In addition to confirming the dimensionality of the TBQ, Martin et al. (2009) found an interesting pattern of results with regards to a variety of constructs. In terms of individual personality level variables, the TBQ was significantly related to negative affect ($r=.31, p<.01$), negatively related to positive affect ($r=-.16, p<.01$), negatively related to conscientiousness ($r=-.24, p<.01$), negatively related to openness ($r=-.14, p<.01$), negatively related to agreeableness ($r=-.24, P<.01$), and positively related to neuroticism/emotional stability ($r=.25, p<.01$).

Martin and colleagues also explored individual behavior variables and found that deviant behavior was significantly and positively related to time banditry ($r=.43, p<.01$) and interestingly, they found that workplace engagement was significantly and positively related to time banditry ($r=.60, p<.01$). Finally, it was found that organizational justice was inversely related to time banditry behaviors ($r=-.13, p<.01$). Aside from investigating correlations between the TBQ and measures hypothesized to be related to time banditry, a third effort by Martin et al. (2009) utilized discriminant analysis to explore what constructs could be used to classify

one as high or low on the TBQ. Results of the discriminant analysis revealed that one could be classified as high or low on the TBQ 71.8% using the PANAS, and the Big 5. Overall, the results of the Martin et al. (2009) study provided an initial basis for understanding the concept of time banditry. However, more investigation into additional relational constructs is necessary. Moreover, garnering an understanding of the organizational climate and emotional antecedents, as well as the justifications one uses to rationalize engagement in time banditry is necessary in order to progress the research in this area.

Antecedents of Time Banditry

The current research endeavor will attempt to investigate many different antecedents of time banditry. Specifically, it will explore the climatic factors, work factors, and individual difference factors as they relate to engagement in time banditry. In addition, it will break down time banditry into its typology (as described below) to assess what factors predict what type of time bandit one is. It will also explore the frequency and type of time banditry behaviors that are commonly engaged in. Finally, it will serve as the initial exploration to the cognitive justifications individuals make when engaging in time banditry.

Climate Factors. It is no secret that one's perceptions of a person, a situation, or behavior can impact how one behaves in the future. Climate is "a reflection of how organizational members feel about organizational factors such as job performance expectations, fairness of rewards and punishment, flow of communication, an example set by the organization's leaders (Collins & Jacobs, 2002, p. 468)." Climate theorists alike would concur the perceptions of an

organizations members have a large influence on employees behaviors, both productive and counterproductive (e.g., Dieterly & Schneider, 1974; Fleishman, 1953; Frederiksen, Jensen & Beaton, 1972; Griffin, 2001). In fact climate is directly related to manager-employee interactions, performance, and effectiveness (Issac, 1993). Moreover, in a study conducted by Kangis and colleagues climate was shown to be strongly related to productivity ($r=.71$) (Kangis, Gordon, & Williams, 2000). Several researchers have discussed the impact of climate on ethical and/or counterproductive behaviors (Peterson, 2002; Wimbush & Shepard, 1994). Furthermore, Peterson (2002) found that deviant behavior can be partially predicted by perceptions of climate. As time banditry is a sub dimension of CWB, climate is expected to be related to time bandit; however, the nature of these relationships is unknown. Thus, the aforementioned research has lead to the development of the following research questions that will be tested in study 1:

Research Question 1: Do employee perceptions (positive or negative) of the climate factors related to their job itself predict engagement in time banditry?

Research Question 2: Do employee perceptions (positive or negative) of the climate factors related to their team/supervisor predict engagement in time banditry?

Research Question 3: Do employee perceptions (positive or negative) of the climate factors related to the organizational as a whole predict engagement in time banditry?

Another area to take into consideration when trying to understand climate, is that it exists on multiple employment levels. Specifically, perceptions of the organizational climate likely differ by employment level (supervisory versus non-supervisory). It is also likely to differ by division or workgroup. To illustrate further, it is conceivable that the relationship between the climate and behavior that exists among one level of workers (e.g., secretaries) may not exist at another level (e.g., their managers). Therefore, a climate researcher must consider how the study's variables vary across different levels of employment. Thus, differences in climate will be assessed at the supervisory and non-supervisory levels. In addition climate will be examined globally by aggregating all participants to the employee level.

If climate, in fact, can be affected by level, then we would expect different patterns of antecedents and outcomes across levels. It is also possible that within organizational levels, relationships will be found between the different dimensions of climate and time banditry behavior. The aforementioned discussion has led to the development of the following research question that will be tested in study 1:

Research Question 4: Do the climate factors that predict time banditry vary dependent on whether one is supervisory or non-supervisory?

An understanding of the relationship between the different dimensions of climate and behavior should enable managers and researchers understand how to diagnose and manage both climate and time banditry. This is especially important with the relationship between climate and behavior because time misuse can be extremely costly to organizations.

Job/Task Factors.

Work context. Work context has long been considered important in understanding work behavior (e.g., Frederiksen, 1972). The results of these studies have consistently shown that the context can have a significant impact on the occurrence of CWB (Chen & Spector, 1992; Greenberg, 2002; Harris & Ogbonna, 2002; Rentsch & Steel, 1998). The job related group of factors that are proposed as antecedents of time banditry are the job/task-specific factors that may vary widely across jobs. The factors that will be explored in this research are autonomy, skill variety, task feedback, task identity, task significance, job ambiguity and job conflict.

Autonomy is the extent of one's freedom, discretion, and independence in scheduling and in the way in which one performs the job. Autonomy has been shown to correlate with stress-related responses, such as anxiety, intention of quitting the job, job satisfaction, and physical symptoms (e.g., Spector, Dwyer, & Jex, 1988). Skill variety involves the degree to which a job requires a variety of challenging skills and abilities. Specifically, doing different things or using different valued skills, abilities, and talents (Hackman & Oldham, 1975). Job feedback is the degree to which the worker gets information about the effectiveness of his or her efforts, either directly from the work itself or from others (Hackman & Oldham, 1975). Task identity is the degree to which a job requires completion of a whole and identifiable piece of work; specifically, doing a complete job from beginning to end. Finally, task significance is defined as the extent to which the job has an impact on the lives of other persons within or outside of the organization (Hackman & Oldham, 1975).

Job Ambiguity and Conflict. The concepts of role ambiguity and role conflict as drawn from role theory (Kahn et al. 1964) help to explain why one might be driven to engage in time banditry. Role ambiguity is the degree of uncertainty the employee feels or perceives in regard to his or her role expectations and effective performance in a role. Role conflict taps the incompatibility of role expectations and demands, specifically; it occurs when compliance with ones role expectation conflicts with or hinders accomplishment with another role expectation. Such ambiguity and conflict is likely to lead to task frustration; which has been found to be correlated with low job satisfaction, work anxiety, physical health symptoms, employee withdrawal behavior (e.g., intention to quit, but not absence), aggression, hostility, and sabotage (Chen & Spector, 1992; Spector et al., 2006). Environmental stressors such as ambiguity and conflict can be due to uncertainty about one's tasks, which can evoke affective reactions such as frustration, anxiety, and aggression. Also relevant is the theory of role stress, which relates both role ambiguity and role conflict to the experience of distress and burnout (Cordes & Dougherty, 1993). Furthermore, felt emotions such as distress can motivate individuals to reduce emotions, and one way in which that can be done is engagement in off task activities that are either positive (e.g., helping behaviors) or negative (e.g., distracting co-workers).

As such, the following hypotheses were tested in study 2b:

Hypothesis 1: Perceived daily role ambiguity is positively related to time spent off-task.

Hypothesis 2: Perceived daily role conflict is positively related to time spent off-task.

The progression of the events described above is consistent with research conducted by Fox et al. (2001) and Yang, and Diefendorff (2009), which found that emotions mediate the job stressor-CWB relationship, which is consistent with effective events theory (AET, Weiss & Cropanzano, 1996). The mediating effect of emotions will be discussed in the next section.

Individual Factors

Emotions. Spector and colleagues proposed an emotion-centered model of CWB in which experienced negative emotions serve as antecedents to CWB, (Fox, Spector, & Miles, 2001; Spector & Fox, 2002, 2005). At the heart of this model is the idea that individuals are motivated to engage in CWB in an attempt to reduce negative feelings. Previous research conducted to test the emotion-centered model has found support at the cross-sectional level of analysis (e.g., Fox et al., 2001), as well as the within person level. Specifically, intraindividual variance in CWB was accounted for by negative emotions (Judge et al., 2006; Yang & Diefendorff, 2009). Judge et al. (2006) provided an important initial look at the within-person relations of CWB with affective variables (i.e., state hostility, job satisfaction) and situational antecedents (i.e., supervisor interpersonal justice). Furthermore, Yang and Diefendorff (2009) extended Judge and colleagues research by separating daily CWB into CWB directed at the organization (CWB-O) and CWB directed at individuals (CWB-I) and identifying different antecedents of these two forms of CWB. In addition, Yang and Diefendorff (2009) included a broader

conceptualization of felt negative emotions than were included in Judge et al. (2006). The results of the Yang and Diefendorff study, revealed a relationship link between daily ambiguity, negative mood, and CWB at the intraindividual level.

As time banditry is a sub-dimension and has shown a similar pattern to counterproductive behavior antecedents (Martin et al., 2009) it is expected that negative emotions will mediate the ambiguity-time off task relationship. Additionally, as daily conflict is a similar stressor it is expected that negative emotions will again mediate the conflict-time off task relationship. Furthermore, due to the myriad of behaviors one tends to engage in when spending time off task (e.g., socializing with co-workers, gossiping, etc) it possible the some positive emotions might predict time spent off task, and possibly mediate the ambiguity and conflict relationship as well. However, because this relationship has not empirically explored this relationship cannot be hypothesized with any certainty, and will remain a question of interest.

The idea that emotions can influence or cause one to react is consistent with affective events theory (AET, Weiss & Cropanzano, 1996), which states that people react emotionally to work events and that these affective experiences directly influence individual behaviors and attitudes. Research supports the basic tenets of this theory, showing significant intraindividual relationships between daily work events and state emotions (e.g., Miner, Glomb, & Hulin, 2005), and between transient emotions and behavior (Ilies, Scott, & Judge, 2006). The majority of organizational behavior research on CWB suggests that counterproductive behaviors are induced by negative affective states, however, since the concept of time banditry

includes behaviors that can be viewed as social in nature as well as those behaviors that are considered positive (OCBs), it is possible that felt positive affect can induce engagement in time banditry as well.

As such the following hypotheses and research questions were explored study 2b:

Hypothesis 3: The relation of perceived ambiguity with time spent off task is mediated by negative emotions.

Hypothesis 4: The relation of perceived conflict with time spent off task is mediated by negative emotions.

Research Question 5: Does positive emotion predict time spent off task?

Research Question 6: Does positive emotion mediate the (a) perceived ambiguity and (b) perceived conflict and time off task relationship?

Commitment. Organizational commitment is defined as a psychological mind-set which works to increase the likelihood that an employee will maintain membership in an organization (Allen & Meyer, 1990; Meyer & Allen, 1991). In their three-component model of commitment they delineate three forms of commitment - affective commitment (desire to remain), continuance commitment (perceived cost of leaving), and normative commitment (perceived obligation to remain). In a paper by Meyer and Herscovitch (2001) commitment behavior was discussed in relation to focal (bound to the task of the job) and discretionary (not bound by the actions of the job). Moreover, they contend that commitment, regardless of its form (affective, continuance, or normative), should lead to the enactment of the focal behavior.

As CWBs and specifically time off task can be described as a discretionary behavior it is expected that perceptions of commitment to one's place of employment also may influence engagement in time banditry and the types of time banditry engaged in. If individuals are committed to their jobs and/or their organization, they will be less likely to engage in time banditry, and stay with the organization longer (Johnston, Farasuraman, Futrell, & Black, 1990; Spector & Fox, 2002). Specifically, as commitment to the organization begins to decrease individuals tend to engage in more counterproductive work behaviors. A study by McElroy, Morrow, and Fenton (1995) found that uncommitted workers are more likely to take sick days when they are not sick. Spector and Fox (2002) speculate that this is due to a rift in what the employee expects from the organization and what the organization is giving to the employee (e.g., salary and benefits). Thus, it is expected that when negative emotions are evoked in individuals with higher levels of all types of commitment, said individuals will not spend as much time off task as those with lower levels of commitment. No relationship is hypothesized for the moderating effect of commitment on the positive emotion-time off task relationship; however, the question of whether the relationship will be moderated, if it exists, is of interest and will be explored. As such, the following hypotheses and questions were explored in study 2b:

Hypothesis 5: (a) Affective commitment, (b) Continuance Commitment, (c) Normative Commitment will moderate the relationship between negative emotions and time spent off task.

Research Question 7: Will (a) Affective commitment, (b) Continuance Commitment, (c) Normative Commitment will moderate the relationship between positive emotions and time spent off task.

Personality. Personality variables have been shown to be predictors and moderators of several work place behaviors. In the case of CWBs the relationship between personality and counterproductive behaviors is no exception, and much research has been done to explore these relationships (Colbert, Mount, Harter, Witt, Barrick, 2004; Diefendorff & Mehta, 2007; Fox et al., 2001). Specifically, three of the big five factors have been shown to be related to engagement in counterproductive behaviors –agreeableness, conscientiousness, and emotional stability (Cost & McCrae, 1988; Ones & Viswesvaran, 1998; Salgado, 2002). Of interest in this research is the moderating of effect of both conscientiousness and emotional stability on the negative emotion-time off task relationship. High conscientiousness works to inhibit an individuals’ tendency to engage in CWB (Tepper et al., 2001). Conscientiousness also has direct ties to employee productivity (Kamdar & Van Dyne, 2007) and job performance (Barrick & Mount, 1991) across job criteria and different occupations (Salgado, 1997). In addition, in a study by Salgado (2002), conscientiousness was shown to be negatively related to counterproductive behavior. Thus, the more conscientious employees are, the less likely they are to steal time.

Another personality factor of interest is emotional stability. One who is considered emotionally stable tends to experience consistent feelings of insecurity, depression, despair, and fearfulness (whether high or low). Colbert and her

colleagues (2004) found that, individuals with higher levels of emotional stability are significantly less likely to withhold work effort in less than ideal workplace situations (e.g., those with high ambiguity or conflict). No relationship is hypothesized for the moderating effect of conscientiousness and emotional stability on the positive emotion-time off task relationship; however the question of whether the relationship will be moderated if it exists is of interest and will be explored. While all the big five dimensions will be measured hypotheses will not be posed for all five of them.

As such, the following hypotheses and questions were tested study 2b:

Hypothesis 6: (a) Conscientiousness and (b) emotional stability will moderate the relationship between negative emotions and time spent off task.

Research Question 8: Will (a) conscientiousness and (b) emotional stability moderate the relationship between positive emotions and time spent off task.

Predictors and the Time Banditry Typology

As can be seen in figure 2(introduced previously) there are four different types of time bandits, based upon the overall productivity and engagement of the employee. Figure 2 illustrates the four different types of time bandits- weasels (High engagement-High productivity), mercenaries (Low engagement-High productivity), sandbaggers (High engagement-Low productivity) and parasites (Low engagement-Low Productivity). It is hypothesized that each type of time bandit steals time for a slightly different reason, as the individual and job level factors vary. In order to better understand the typology of time banditry a discriminant analysis will be

conducted to assess what variables work to significantly predict what type of time bandit an employee is. By identifying the type of time bandit, managers may be better equipped to limit the theft of time, thus increasing organizational productivity.

It is expected that several of the antecedents of time banditry as discussed above can be used to predict the type of time bandit the employee is given the necessary opportunity. However, the specific variables are unknown thus, the following research question is posed and explored in study 2b:

Research Question 9: What job and individual level factors can be used to predict time bandit type?

Justifying Time Banditry

Given that a climate is such that it promotes time misuse behaviors, and the right opportunity to engage in time banditry is available one will engage in time banditry if they can rationalize such an act. Justification or rationalization of off task activities occur either prior to or following engagement in any type of time banditry behavior. The rationalization process involves an individual taking into account the previously discussed antecedents, and ‘deciding’ whether they have a ‘right’ to stop working. According to Spector and Fox (2010) an individual that engages in CWBs will justify or rationalize their behavior in an effort to make sense of their own behavior. This process is likely different for every individual. One employee may consider only one factor in isolation, such as feelings of inequity or injustice, while another may consider many factors, such as the lack of supervision, lack of training for the task, and/or low job satisfaction.

Cognitive justification of time banditry can be understood better by exploring its relationship to cognitive dissonance theory (Festinger, 1957). The theory of cognitive dissonance proposes that people have a motivational drive to reduce dissonance by changing their attitudes, beliefs, and behaviors, or by justifying or rationalizing them. A powerful cause of dissonance is an idea in conflict with a fundamental element of the self-concept, such as "I am a good person" or "I made the right decision". The anxiety that comes with the possibility of having made a bad decision can lead to rationalizations. These rationalizations increase the tendency to create additional reasons or justifications to support one's choices, such as "I spend time on the internet at work because I worked really hard for a long time" or "my coworkers take long lunches, I deserve time to myself as well." These beliefs may or may not be true, but it would reduce dissonance and make the person feel better about their choice to engage in off task activities.

Many other theories can also be used to understand cognitive justification of time banditry. For example, equity theory holds that individuals interacting in some way have an innate desire for the results to be equal. If either, or both, parties perceive an inequity, they will experience cognitive dissonance, which then motivates them to take action to correct the inequity (Adams, 1963). According to one survey of over 10,000 American workers, perceived inequities are the second most common reason for engaging in non-work tasks during the work day (Malachowski, 2005), a fact that emphasizes the need for perceived equity in the workplace. This cognitive process may help to explain why many people do not

consider themselves to be time bandits: they are not investing cognitive energy when making these decisions, and they become unmemorable, and thus, are not recalled.

Another theory related to the justification of time banditry is Hobfoll's conservation of resources theory (COR; 1988, 1989). Conservation of resources theory suggests that people strive to obtain, build, and protect that which they value (e.g., resources), and psychological stress occurs when these resources are lost, threatened with loss, or if individuals fail to replenish resources after significant investment. The COR theory can be applied in understanding why one might rationalize off-task behaviors. Specifically, if the employee physically lacks resources, or perceives inability access resources, stressors as related to the job may build. If said stress is not relieved by replenishing resources, one might seek other outlets to relieve job stress (i.e., engaging in off task activities). In this case, engaging in off task activities would be considered a better alternative than continuing to experience stress as stress according to COR studies leads to an increased likelihood of burnout and turnover (Grandey & Cropanzano, 1999).

The theory of moral disengagement is also poised to shed light on how and why employees engage in time banditry without thinking of the deleterious effects. Moral disengagement revolves around the cognitive restructuring of unethical or inhumane conduct, in this case the misuse of company time, into a benign or worthy one by justifying the behavior, through exonerative social comparison; diffusion or displacement of responsibility; disregarding or minimizing the injurious effects of one's actions; and attribution of blame to the organization (Bandura, 2002). The theory of moral disengagement has been used primarily to study questionable

business practices such as using sweat shop labor (Paharia & Deshpand1, 2009), and military or jail personnel involved in questionable acts with prisoners (Bandura, 2002). However, it can be used in this case to understand how an employee can disengage in the act of stealing time from an organization because the effects of such acts are not immediately visible or because the act itself is viewed as some sort of just payment for working hard for a certain amount of time.

Individuals are motivated to engage in time banditry based on the behavior of those around them, and the reaction of others to certain behaviors. If others are behaving, or reacting, in a certain way, such as arriving late to work or taking long lunches or acting as though that behavior is acceptable, that individual will feel more justified in performing those same actions, this is an act of moral disengagement through exonerative social comparisons. Emotional contagion can have a pervasive effect in the workplace and the resulting organizational culture strongly affects this type of cognitive justification. One study found that a type of counterproductive work behavior, bullying, can be impacted by the emotional contagion of the organization (Harvey, Treadway, & Heames, 2007). If the organizational culture accepts bullying, emotional contagion will ensure its transfer to new employees, thus continuing the norm to future work generations, this could be an example of how the time bandit might place blame on the organization for their actions, thus morally disengaging from their actions.

In some instances, the cognitive justification process is overt and thoughtfully considered. However, in most cases, it is not obvious to the individual. This may in part be because many workers do not view certain behaviors as time banditry. If the

resulting behavior is not viewed as a counterproductive work behavior, trying to identify the cognitions preceding the behavior will be difficult for the individual. Regardless of the processes involved, and regardless of whether the individual is consciously engaged in the decision to commit or refrain from time banditry, the cognitive justification stage must occur.

Research Overview

The present research endeavor will be broken down in to two main studies. Study one will examine the extent to which an individual's perceptions of his or her job, team and supervisor, and organization as a whole impact time banditry. Study 2a will assess whether time banditry is a stable behavior by investigating the impact of role ambiguity, role conflict, and emotions as predictors of time spent off task, across days. Personality and organizational commitment will be explored as moderating factors in the aforementioned relationships. In addition, the myriad cognitive rationalizations individuals make when engaging in time banditry will be explored. Study 2b will investigate the typology of time banditry and the factors that predict group membership. This study will also test time banditry in two samples, one of working adults, and one of working students.

Examining time banditry from multiple angles will allow researchers to answer very important questions. Specifically, what are some of the antecedents of time banditry? Can one manage a time bandit? Can an individual that steals time from their organization be both productive and engaged in their job? Such a situation, if it occurs, it would contradict past research conducted on the subject of counterproductive behavior, which indicates that only unengaged and unproductive

works engage in such behaviors (e.g. Fox & Spector, 1999). Moreover, such research will allow for a more concrete understanding how time banditry fits within the counterproductive work behavior umbrella.

Study 1

Overview

The focus of the current study is the assessment of the relationship between time banditry behavior and organizational climate across different organizations using an electronic survey-based methodology. The following research questions will be explored in this study:

Research Question 1: Do employee perceptions (positive or negative) of the climate factors related to their job itself predict engagement in time banditry?

Research Question 2: Do employee perceptions (positive or negative) of the climate factors related to their team/supervisor predict engagement in time banditry?

Research Question 3: Do employee perceptions (positive or negative) of the climate factors related to the organizational as a whole predict engagement in time banditry?

Research Question 4: Do the climate factors that predict time banditry vary dependent on whether one is supervisory or non-supervisory?

Method

Sample

One hundred and eleven full time employees from three different organizations, as well as a general population sample located across the continental United States participated in this study. After reviewing the data 14 participants were excluded from final data analysis as they had incomplete data, thus the final N was 97. The employees held various positions within their respective organizations, both supervisory and non-supervisory, and represented both salaried and hourly wage compensation types. Fifty-eight percent of the sample was female, 66% of the sample held non-supervisory positions, and 74% were salaried employees. The modal age group of participants was 19-29 years old, and the mean tenure within each organization for participants was 5.7 years.

Procedure

Gatekeepers (i.e., HR managers, staff committees, etc) were contacted via e-mail regarding the opportunity to participate in the study. The e-mail contained information about the study and the importance of the research. If the organization agreed to participate, an e-mail was forwarded to the gate keeper containing study procedures, which the gate keeper forwarded to the organizations employees.

Measures

Demographic factors. Certain demographic factors are predicted to be related to time banditry behaviors, and thus, a demographic questionnaire was administered. Prior research has suggested that age is inversely related to counterproductive work behavior (Malachowski, 2005), and this proposition is thus

extended to apply to time banditry behavior. It is predicted that lower levels of time banditry will be exhibited as employees have worked a longer time during their lives, but this is naturally confounded with age. Ethnicity and college major are not expected to be related to time banditry behaviors. The number of hours worked per week, is not predicted to affect time banditry behaviors in this sample.

Climate Survey. This 50 item climate questionnaire measures 3 dimensions of climate. These dimensions include Job Level (The Job Itself, Empowerment, Health & Safety, Work Conditions, Growth & Advancement, Job Performance, Training and Education, Compensation & Benefits), Team/Supervisory Level (Supervisory Leadership, Program area Performance, Communication, Teamwork & Cooperation, Cultural Diversity, Customer Service, Performance Commitment, Product & Service Quality) and Organization Level Factors (Organization Practices, Cultural Diversity, Values and Ethics, Communication, Customer Service, Performance Commitment, Product & Service Quality, Teamwork & Cooperation). This survey was developed by TALICO Inc, for use in climate studies, and revised for use in this research. The revisions, involved dropping a significant number of items, resulting in a more concise measure representing each dimension of interest.

Time Banditry Questionnaire (TBQ). This 31 item questionnaire measures the extent to which an employee purloins time from the workplace ($\alpha = .90$). The measure contains three subscales measuring classical time banditry ($\alpha = .88$), technology related time banditry ($\alpha = .92$), and socially oriented time banditry ($\alpha = .71$) (Brock, et al., 2009).

Analyses

Hierarchical linear modeling was utilized to explore relationships within a nested data structure. In this case, individual participants were nested within their respective companies yielding a two-level hierarchical structure. HLM6 software was used to conduct the hierarchical linear analyses, and SPSS software was used to prepare the data for use in HLM6 as well as to conduct additional analyses.

Scores on the Climate Survey were aggregated on individual dimensions, reverse coding items were appropriate and following the recommendations of the instrument developer, TALICO, Inc. This yielded three measures of climate for each participant: Job factors, Team/Supervisor factors, and Organization factors. It was decided a priori that Job and Team/Supervisor factor measures of climate would be treated as individual level variables within the nested structure, whereas the Organizational factors measure would be treated as company, or group, level variable at the second level of the data structure. In order to accomplish this individual level responses on the organizational level climate questions were aggregated to create an organizational climate variable for the second level.

Participant scores on the TBQ were aggregated across dimensions yielding a single TBQ score for each participant. There was no concern in this study with differentiating between types of time banditry behavior. Instead, the focus was on any occurrence of time banditry, therefore the aggregated total score was appropriate.

Results

The analysis was performed by first defining the hierarchical structure within the data. Company or organization membership was used as the grouping variable for the second level of the structure. Organization Level climate was defined as a variable at level two, and all other variables were established at level one. An intercept-only model, the equivalent of a random effect ANOVA, was run comparing mean TBQ scores across groups in order to determine the relevance of a hierarchical analysis. The mean TBQ score across all groups (γ_{00}) was 74.68. Significant differences were found in the variance in intercepts between groups, $\chi^2(1, N = 3) = 20.46, p < .000$, suggesting that mean values of TBQ differed across companies. The intraclass correlation of the model was .26, indicating that approximately 26% of the variance in individual scores on the TBQ could be accounted for by group membership. An examination of individual residual variance in TBQ score, $\sigma^2 = 240.39$, and variance explained by group membership, $\tau_{00} = 85.60$, yielded a design effect of 7.05. With significance in intercept variance and a design effect of 7.05, it was determined that a hierarchical analysis should yield probative information.

Next, predictors were added to the model at level one. Age, gender, tenure, compensation type, and position type were thought to potentially influence time banditry behavior and considered possible covariates. In order to test the effect of these covariates on time banditry, they were added to the model one at a time. However, none of these significantly predicted time banditry behavior, as either

Table 1. *Model Comparisons*

Model	Fixed Effects	VC (includes σ^2)	N Parameters	Deviance	Comparison Model: Δ deviance (df)
A	Intercept	Intercept	1	809.35	---
B	Model A + JOBSUM	Model A	2	803.69	A: 5.66(1)

fixed or random effects, and were subsequently dropped from the analysis. The remaining variables of interest, organizational climate dimensions, were then added to the model. Job level organizational climate (JOBSUM) was found to be a significant fixed factor in the model, $t(95) = 2.51, p < .014$, but not significant as a random factor. The mean TBQ score while controlling for Job Level climate (γ_{00}) was 74.24, with a .32 (γ_{10}) increase for every unit increase in Job Level climate. Intercept variance remained significant, $\chi^2(1, N = 3) = 18.01, p = .001$, indicating the model may benefit from additional predictors. Team/Supervisor Level climate was not found to be a significant predictor of time banditry behavior when entered as either a fixed or random factor. A group level predictor, Organization Level climate, was then added to the model, but not found to be significant. It was therefore determined that the best fitting model, given the data available, was the disaggregated, random effect ANCOVA: $TBQ = \gamma_{00} + \gamma_{10} * JOBSUM + \mu_0 + r$ (refer to Table 1 for model comparison). The final model yields a 4.6% proportion reduction in variance (PRE) over the base model (the intercept-only model).

Discussion

The goal of this study was to examine organizational climate factors as potential antecedents of time banditry behavior. Based on results obtained from the intercept-only model, providing information to answer research questions one, two and three, organizational differences (such as climate) will lead to varying degrees of time banditry behavior within individuals and between organizations. Without further research on individual variables, it appears that time banditry is a situational

variable rather than a dispositional variable. However, future research should explore the influence of dispositional variables on time banditry

Partial evidence was found showing that job level climate predicted time banditry behavior (Research question 1). It is also important to note that the directionality of this relationship is opposite of that what one might expect. Specifically, job level climate was positively associated with TBQ scores such that more positive perceptions of one's job yielded increases in the amount of time banditry behavior reported. Survey questions about job level climate include items such as "My job makes good use of my skills," "I understand what the performance standards are for my job, "I receive all of the resources and support that I need to do my job properly." These suggest that time banditry behavior may increase due to two factors enabled by organizational climate. First, effective organizational practices may lead to greater efficiency and performance on the job. As a result, job tasks may be completed in a more timely fashion, providing employees with "down time" and resulting in increased time banditry behavior. Second, it is possible that a disconnect exists between the expectations management has of their employees, and what the employees are actually capable of producing. When employees are aware of what it takes to do a job to management's expectations, it is likely that they will only produce up to the capacity necessary to meet those expectations, thus, learning to manage the expectation of their managers. Further research will be needed to determine the specific reasons why job climate is positively associated with the occurrence of time banditry.

Evidence that team and organizational dimensions of climate predict time banditry behavior above and beyond individual level predictors was not found (Research Question 2 & 3). In addition, no support was found indicating that time banditry differs by employee level (supervisory vs. non supervisory), as shown by the non-significant result when adding level as predictor in level one of the model (Research Question 4).

Finally, because the intercept variance of the final model remained significant, it will be necessary to continue investigating potential antecedents of time banditry behavior at both levels. Specifically, both dispositional and situational variables should be included in a model when testing time banditry as dispositional variable might work to moderate or mediate the relationship between situational variables and time banditry. Although organizational climate appears to play a role in predicting time banditry at the individual level, it does not account for all of the variance in TBQ scores. Also, scores between groups were significant, but climate factors only appeared to predict at the job level.

Limitations and Future Research

As with any study, it is important to recognize the limitations inherent in both the design and subsequent analysis when taking into account the validity and generalizability of results. In this study, a hierarchical linear modeling technique was used to explain variance in TBQ scores both between individual and between organizations. The size of the sample obtained and analyzed, however, was not necessarily appropriate for this type of analysis. Generally speaking, in order to investigate group-level phenomenon, at least 30 groups should be investigated. In

this study, four were examined, falling far short of the accepted “rule of thumb”. Additionally, it is generally accepted that each group contain at least 30 participants in order to obtain a stable within-group mean. With 97 participants across four groups, the average within-group sample size was less than 25. Although these smaller-than-recommended samples sizes can yield fairly acceptable parameter estimates, the significance (or lack thereof) of predictors within the model becomes suspect.

Scores on the time banditry measure (TBQ) were evaluated for normality and found to be slightly skewed and right-tailed, and showed higher than normal levels of kurtosis. Although fairly robust to normality violations, it is possible that the distribution of data on the TBQ measure is yielding unreliable results. Attempts were made to correct for abnormality by removing outliers from the scores. Additionally, several linear transformations of the TBQ scores were attempted (square, square root, natural log). However, these attempts did not improve the normality of the data distribution and were therefore ignored. Although of minimal concern, the assumption of normality was violated in the analysis.

A final limitation of the study surrounds the nature of the organizational climate measure, as well as the TBQ measure. Both are self-report measures. In the case of the TBQ, it is possible that both impression management tactics and social desirability concerns served as biases for participants completing the measure. In the case of the climate survey, participants were either unable to separate their perceptions of team/supervisor climate from organization level climate, or lacked perception of the organization level beyond team/supervisor considerations as

observed by multicollinearity within these two dimensions. To resolve this issue, an alternate measure of climate should be utilized in future research.

A consensus in the research suggests that modifying or changing organizational climate is effective in reducing counterproductive behaviors, as changing of the climate changes the employees perceptions towards the organization, which works to influence their individual satisfaction, and motivations which impacts performance (Cherrington & Cherrington, 1985; Parilla, Hollinger, & Clark, 1988). In the context of this research, it was found that positive perceptions of one's job actually increased engagement in time banditry. Thus, it appears that modifications don't need to be made to the climate to decrease time banditry, rather changes in expectations, accountability, and management supervision. Future research should explore management modifications and its effect on time banditry.

As study 1 found that additional predictors might help explain the variance in time banditry beyond that climate of the organization, study 2 will focus on individual level antecedents, both situational and dispositional, that predict time banditry. Dispositional variables will also be explored as mediating and moderating variables. In addition, study 2 will examine ways to reduce engagement in time banditry by identifying and classifying the types of time bandits and the variables that predict which type one is classified as. Understanding the variables that classify a time bandit into a type can help one to understand what might need to be altered in order to reduce engagement in time banditry.

Study 2

Study 2 will be broken down into two sections for ease of reporting results. In both studies, the same data set was utilized however, different portions of the data are explored in the respective studies. For the sake of brevity, the sample and methods will be reported once, prior to discussing the analyses and results of each endeavor.

Method

Sample

One hundred and thirty-four individuals employed at least part-time (20 hours per week) were solicited from undergraduate and graduate business courses to participate in a series of surveys for course credit. One hundred and twenty-five participants completed the pre-battery data which will be utilized in both study 2a and 2b. Ninety-three participants participated in a 10 days diary study after completing the pre-battery measures. After reviewing the pre-battery data and diary data 50 participants were excluded from final data analysis for study 2b, as they had incomplete diary data (less than 6 days), thus the final N for study 2a was 84. The employees were 57% female, came from both public (57%) and private sectors (43%), and held various positions within their respective organizations, both supervisory (18%) and non-supervisory (82%).

Procedure

A non-experimental survey method with longitudinal diary measures was utilized in the present study. The diary analysis method is particularly useful as a

means of gathering data over prolonged periods of time, or where data collection may present a problem due to the personal or sensitive nature of the information. The diary method can also be useful where information is hard to remember - providing a means of instantly capturing data. Diary analysis is reliant, however, on subjects remembering to complete the diary, as well as providing an accurate account of what took place.

In the present study a closed format diary was utilized, where all activities were pre-categorized. A closed format allows for more consistent data collection and simpler data analysis than open format diaries which are more time intensive and require coding of responses. A limitation of the closed format diary is the information is often less rich. In addition to using a closed format diary, the diary will be electronically administered. Electronic diaries, such as an internet diary, provide a means whereby the user can log-on to the diary, complete the entry and then submit it to the evaluator when finished.

Data collection for study 2 was undertaken in the spring, summer, and fall of 2010. At the outset of each semester an e-mail was sent to all faculty members teaching a course in the college of business requesting that they encourage participation in the study by providing extra credit in their course for those that participate. If the faculty agreed, an e-mail was sent to all students in the course explaining the study requirements and providing a link to access the online survey. The email also assured prospective participants that the survey was for research purposes only and there were no right or wrong answers. In addition, we also assured them of confidentiality of their survey responses and that their personal identity

information would be removed from the data at the completion of the study. These procedures were intended to help reduce participant's apprehension to respond accurately and honestly, so as to guard responses against contamination (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

At the beginning of the project, all participants were required to first complete an online pre-battery of measures. Pre-student measures included the time Banditry questionnaire (TBQ), personality traits (i.e. Big Five), engagement, productivity, job complexity, organizational commitment, deception, and demographic variables. One week after all pre-study measures had been completed participants were asked to complete daily online surveys for 10 consecutive working days. Daily measures included perceived ambiguity, role conflict, a time banditry checklist, daily time spent of off-task, positive and negative emotions and a cognitive rationalizations checklist. All of the diary survey questions referred to "today" only. An e-mail message was sent out to study participants at 4:00 p.m. on every working day to remind them to complete a daily survey for that day. This was done to increase the likelihood that participants had access to the whole day's work experience, they were not allowed to login to the Web survey before 4:00 p.m. Further, participants were encouraged to continue with the daily reports when they have missed a day's survey. Individuals with fewer than 6 daily responses were excluded from the analyses.

Finally, post diary study participants were thanked for their participation debriefed on the study. After this time participants were provided a completely

separate survey link to enter their name and course in which they were enrolled, so as to receive extra credit.

Measures

Demographic factors. Certain demographic factors are predicted to be related to time banditry behaviors, and thus, a demographic questionnaire was administered. Prior research has suggested that age is inversely related to counterproductive work behavior (Malachowski, 2005), and this proposition is thus extended to apply to time banditry behavior. It is predicted that lower levels of time banditry will be exhibited as employees have worked a longer time during their lives, but this is naturally confounded with age. Ethnicity and college major are not expected to be related to time banditry behaviors. The number of hours worked per week, if the participant is working, is not predicted to affect time banditry behaviors in this sample.

Job complexity. This was measured with items from the Job Diagnostic Survey (Hackman & Oldham, 1980). Three items were used to assess each of the five job dimensions—autonomy, skill variety, task feedback, task identity, and task significance—with respondents indicating on a scale ranging from “very inaccurate” (1) to “very accurate” (7) the extent to which the statements accurately described their jobs. To form an overall complexity index, scores for all 15 items were averaged ($\alpha=.82$). Thus, complex jobs are those that provide job incumbents with independence, opportunity to use a variety of skills, information about their performance, and chance to complete an entire and significant piece of work.

Time Banditry Questionnaire (TBQ). This 31 item questionnaire measures the extent to which an employee purloins time from the workplace ($\alpha = .90$). The measure contains three subscales measuring classical time banditry ($\alpha = .88$), technology related time banditry ($\alpha = .92$), and socially oriented time banditry ($\alpha = .71$) (Brock, et al., 2009). Variants of the TBQ will be administered to the supervisor and the peer participants, in which they will respond in reference to the time banditry of the participant that asked them to take part in the study.

Productivity and engagement measure. This 60 item scale included several sub-scales, and was somewhat specific in its orientation to employees in the service field (Singh, 2000). These items were modified for a more diverse sample and recoded to create productivity ($\alpha = .763$) and engagement ($\alpha = .863$) sub scales.

Organizational Commitment. Organizational commitment will be measured using Allen and Meyer's (1990) three-component measure of commitment. Seven items assessed affective commitment (e.g., "I believe in the value of this change"), seven items assessed continuance commitment (e.g., "I have no choice but to go along with this change"), and eight items assessed normative commitment (e.g., "I would feel guilty about opposing this change"). Responses were made using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). A measure of organizational commitment was included for two reasons. First, it is assumed that if the individual is committed to their job and/or their organization, they will be less likely to engage in time banditry, and stay with the organization longer (Johnston, Parasuraman, Futrell, & Black, 1990; Spector & Fox, 2002). However, if time bandits are engaged and productive it is likely that they have strong

organizational commitment. Second, it is our belief that Individuals that have a stronger sense of organizational commitment will be more likely to accurately and honestly engage in this research.

Paulhus Deception Scale. The Paulhus Deception Scale is a measure that assesses the tendency to provide socially desirable responses (Paulhus, 1991). It was included because of the self-report nature of the study, given that the focal behaviors may be construed as negative in the workplace, particularly if the answers were given to a member of management. There should be no meaningful correlation between this measure and time banditry.

Emotions. The job-related affective well-being scale (JAWS) (Van Katwyk, Fox, Spector, & Kelloway, 2000) was used to assess daily positive and negative emotions. The JAWS scale consists of 30 items. High scores represent high levels of each emotion. A positive emotions score was obtained by summing the scores on the 13 positive affect items; a negative emotions score was obtained by summing scores on the 17 negative affect items. Van Katwyk et al. (2000) reported a Cronbach's alpha of .95 for the overall JAWS scale. Participants were instructed to indicate how often they felt each emotion in general, with the response options ranging from 1 = *never* to 6 = *extremely often*. The average internal consistency reliability for this measure is .93 (Yang & Diefendorff, 2009).

Big five mini-markers. The big five mini-markers is a brief version of Goldberg's unipolar Big Five markers (1992). The big five mini-markers is self-report inventory designed to measure the big five dimensions of personality - openness to experience, conscientiousness, extraversion, agreeableness and

neuroticism. Openness includes having wide interests, and being imaginative and insightful. Individuals high in conscientiousness display efficient, organized, and practical thoughts and behaviors. Extraverted individuals are described as being talkative, energetic, and assertive. Individuals who score highly on agreeableness tend to be sympathetic, kind, and affectionate. Finally, neurotic individuals are known to be tense, moody, and anxious (Srivastava, 2006). The big five mini-markers consists of 40 items.

Daily perceived Ambiguity and Conflict. We utilized the fourteen item measure developed by Rizzo, House, and Lirtzman (1970) and modified it to be used on a daily basis. Role conflict is comprised of 8 items with an average reliability of $\alpha = .80$ and role ambiguity is comprised of 6 items with an average reliability $\alpha = .83$. The scale ranged from 1 = *strongly disagree* to 6 = *strongly agree*. Sample items were “I knew what my responsibilities were” and “Explanation was clear of what had to be done.”

Daily Time Banditry indicators. Time banditry (TB) was assessed in two ways. First, a multiple response checklist consisting of a modification of the TB behaviors, in which participants indicate if they had engaged in that particular behavior on that given day. Second, two likert-type items assessing amount of time spent on and off task in a given day.

Daily positive and negative emotions. The job-related affective well-being scale (JAWS) (Van Katwyk, Fox, Spector, & Kelloway, 2000) was used to assess daily positive and negative emotions. Participants were instructed to indicate how

often they felt each emotion “today,” with the response options ranging from 1 = never to 6 = always.

Daily Rationalizations. A checklist was utilized identifying several of the common rationalizations employees have for engaging CWBs and/or off task behaviors. Employees were asked to indicate as many reasons as pertained to them for engaging in off task activities (if they had identified previously that they had indeed had engaged in off task activities).

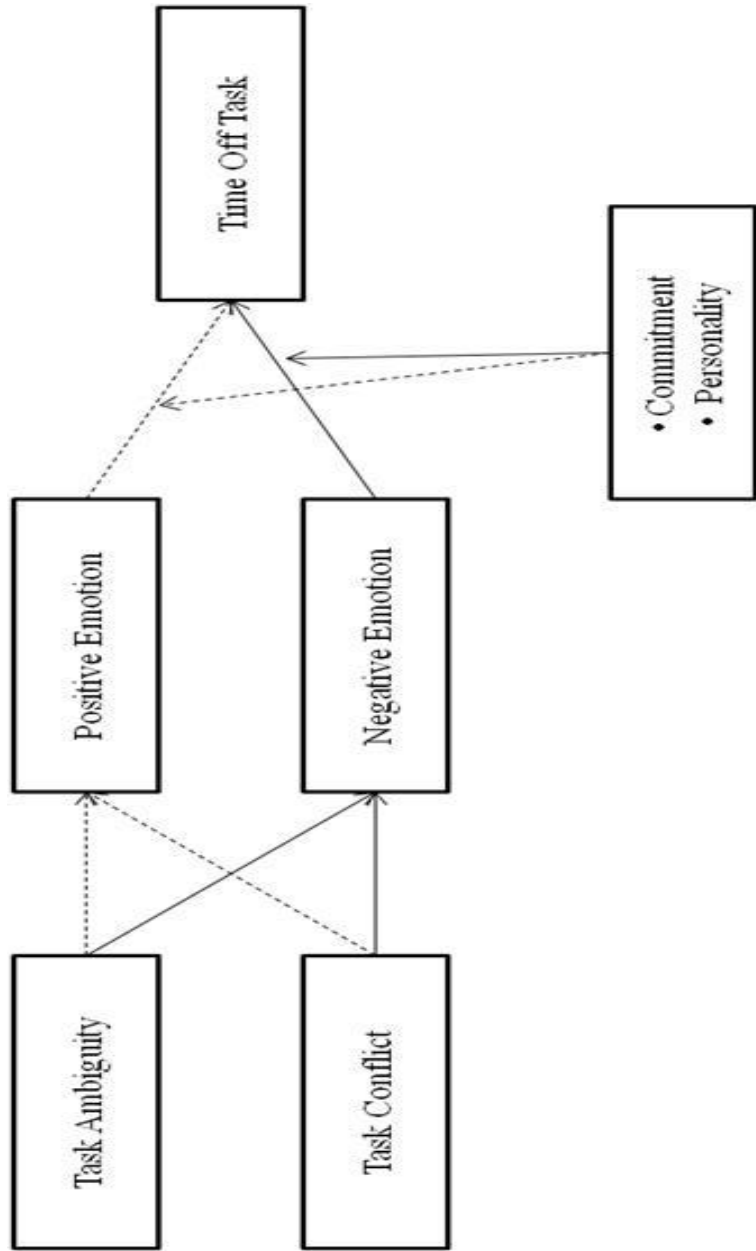
Study 2a

The purpose of the present study was to examine multiple aspects of the time banditry model in a sample of working students, using a daily diary technique. Specifically, this study explored the existence and frequency of time banditry on a daily basis, daily employee emotions, daily role conflict, daily role ambiguity and the cognitive rationalizations for daily misuse of time. An addition, Spector and Fox’s (2002) emotion-centered model was tested with time off task as the outcome rather than general CWB. The full model, as shown in figure 3 was tested pertaining to the following hypotheses and research questions that were presented previously.

Hypothesis 1: Perceived daily role ambiguity is positively related to time spent off-task.

Hypothesis 2: Perceived daily role conflict is positively related to time spent off-task.

Hypothesis 3: The relation of perceived ambiguity with time spent off task is mediated by negative emotions.



Hypothesis 4: The relation of perceived conflict with time spent off task is mediated by negative emotions.

Research Question 5: Does positive emotion predict time spent off task?

Research Question 6: Does positive emotion mediate the (a) perceived ambiguity and (b) perceived conflict and time off task relationship?

Hypothesis 5: (a) Affective commitment, (b) Continuance Commitment, (c) Normative Commitment with moderate the relationship between negative emotions and time spent off task.

Research Question 7: Will (a) Affective commitment, (b) Continuance Commitment, (c) Normative Commitment with moderate the relationship between positive emotions and time spent off task.

Hypothesis 6: (a) Conscientiousness and (b) emotional stability will moderate the relationship between negative emotions and time spent off task.

Research Question 8: Will (a) conscientiousness and (b) emotional stability moderate the relationship between positive emotions and time spent off task.

Analyses Overview

As several questions are being explored from this data, different strategies will be utilized given the nature of the question. First, within and between person differences in daily time spent off task will be explored using Hierarchical linear model. Second, simple frequency analysis will be used to assess the most common types of time banditry behaviors engaged in, and the most common rationalizations employees give if they in fact engage in time off task.

Hierarchical linear modeling (HLM 6.0; Raudenbush & Bryk, 2002) was employed to test the within-person and cross-level between-person effects. The type of random coefficient model treated in this paper is the Hierarchical Linear Model (HLM). (Goldstein, 1987; Bryk and Raudenbush (1992). HLM partitions the variance in dependent variables (i.e., daily counterproductive behavior) into within-person sources and between-person sources. The data from individuals in this study are measured through a daily diary taken on 10 consecutive days and can be understood as having a multilevel structure. For the purposes of this study a two-level model will be considered, participants are considered as level-two units and the repeated measurements as level-one units, so that the longitudinal measurements are nested within the individuals. For longitudinal data, the nesting structure is measurements nested in individuals. Considerable literature exists on the models for the analysis of two-level longitudinal data. (see, for example, Catrien et al., 1998; Diggle et al., 1994; Laird and Ware, 1982; Snijders, 1996; Verbeke and Molenberghs, 1997, 2000; Verbeke et al., 2001). To aid in the interpretation of the intercepts Level 1 predictors were centered on each person's mean (Hofmann & Gavin, 1998).

Within-person mediation effects were examined following Shrout and Bolger's (2002) recommendation. The mediated within-person association between daily stressors (Conflict and Ambiguity) and daily time spent off task is temporally proximal in this study (within a day). According to Shrout and Bolger (2002), Baron and Kenny's (1986) classic procedure has conceptual usefulness for estimating temporally proximal mediation models. In this approach, the independent variable

(IV) should be significantly related to the dependent variable (DV), and when the DV is regressed on both the IV and the mediator (M), the coefficient for the IV–DV link becomes nonsignificant (full mediation) or becomes smaller (partial mediation). The preceding procedure has been utilized for estimating single-level meditational models involving multilevel data (Krull & MacKinnon, 2001).

Results

Means, standard deviations, and correlations among demographic variables, personality traits, and aggregated variables from daily measures are reported in Table 2. Within-person correlations are reported above the diagonal.

Prior to testing our hypotheses, null models were run to examine the within- and between-person variance on all of the daily data. As shown in Table 3, the within-person variance components for the daily measures ranged from .05 to 114.31. The between-person variance components ranged from .25 to 110.14. The chi-square test indicated that all the between-person variance components were significant. Although HLM does not provide a significance test for the within-person variance component, the percentage of total variance in each of the daily variables residing within persons ranged from 49.9% to 68.4%. Thus, the amount of within-person variability was not trivial, suggesting it was appropriate to utilize HLM to partition the variability in our variables into within-person and between-person components.

Table 2. Means, Standard Deviations, and Zero Order correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 TBQ	69.04	15.18	1.00														
2 Extraversion	26.27	6.51	-0.06	1.00													
3 Emotional Stability	27.46	5.14	-.230*	-0.11	1.00												
4 Conscientiousness	31.64	5.19	-.330**	0.19	0.11	1.00											
5 Affective Comm	31.75	11.09	-0.07	0.14	0.11	0.15	1.00										
6 Continuance Comm	33.65	10.92	0.08	0.01	-0.03	0.01	.253*	1.00									
7 Normative Comm	32.89	8.04	-0.16	0.13	-.248*	.236*	.449**	0.17	1.00								
8 Positive Emotions	48.75	13.88	-0.02	0.19	0.17	0.09	.678**	0.08	.273*	1.00							
9 Negative Emotions	42.42	14.87	0.18	-0.06	-.259*	-0.06	-0.21	.244*	0.00	-.373**	1.00						
10 Skill Variety	12.75	4.72	-0.09	0.08	0.17	0.14	.599**	0.19	.281**	.516**	-0.09	1.00					
11 Task Identity	15.42	3.62	-0.17	0.14	0.15	.236*	.425**	0.17	.265*	.379**	-0.17	.526**	1.00				
12 Engagement	114.81	12.51	-0.01	.255*	0.11	0.12	.649**	0.13	.269*	.573**	-.501**	.571**	.442**	1.00			
13 Productivity	152.18	14.98	-.223*	.284**	0.10	.299**	0.19	0.10	0.14	0.20	-0.07	.222*	.561**	.332**	1.00		
14 Ambiguity	12.14	3.16	-0.01	-0.14	-0.02	-0.08	-0.17	-0.18	-0.04	-.275*	.237*	-0.15	-.355**	-.343**	-.335**	1.00	
15 Conflict	24.20	5.60	-0.03	-0.10	0.12	0.03	0.06	-.225*	-0.13	0.08	-.459**	0.13	0.11	.343**	0.18	-.223*	1.00

Table 3. *HLM Estimates of Null Models*

Dependent variable	γ_{00}	σ^2	τ_{00}	% of total variance that is within-person
Task ambiguity	12.75***	10.27	6.78***	60.2%
Task Conflict	25.47***	26.45	24.69***	51.7%
Negative emotions	34.26***	92.08	92.40***	49.9%
Positive Emotions	43.47***	114.31	110.14***	50.9%
Time Off-Task	4.37***	0.575	0.265***	68.4%

Note. $N = 84$, γ_{00} = pooled intercept, σ^2 = within-person variance, τ_{00} = between person variance. The percentage of total variance that is within-person was computed using the formula $\sigma^2 / (\sigma^2 + \tau_{00})$. *** $p < .001$.

Tests of Within-Person Hypotheses

With the precondition of significant between-person variance and meaningful within-person variance met, we proceeded with testing within-person hypotheses. First, we checked whether the mediators were significantly related to the dependent variable. Daily negative emotions was significantly related to Time Off-Task ($\gamma_{10} = -.011$, $SE = .004$, $df = 795$, $t = 2.574$, $p < .01$). Daily positive emotion was found not to be unrelated to Time Off-task and was dropped from further analysis. Since

positive emotion was dropped from the analysis we can answer research questions 5, 6a, 6b, 7a, 7b, 7c, 8a, and 8b, were not related to time spent off task. Due to the volatile nature of longitudinal data, we evaluated the robust standard errors. We then proceeded with testing the mediating effects of daily emotions on the daily stressor (task ambiguity and task conflict) and time off task.

In bivariate tests, Daily Task Conflict was positively related to time off task ($\gamma_{10} = .02, SE = .01, df = 795, t = 2.38, p < .02$), offering support for Hypothesis 1. We subsequently tested Hypothesis 2. However, daily ambiguity was not found to be related to daily time off task and was thus dropped from further analysis. Since ambiguity was dropped from the analysis hypotheses 3 was no longer relevant to the analysis. When Time Off-Task was regressed on perceived daily conflict and negative emotions, the significance of daily conflicts impact was eliminated ($\gamma_{10} = .01, p > .10$), but the effect of negative emotions upon time off task remained significant ($\gamma_{20} = .01, p < .03$). This result indicates the negative emotion fully mediates the conflict/time off task relationship. These results provide support for hypothesis 4. Further, perceived conflict and negative emotions jointly explained 67.7% of the within-person variance in Time spent off task.

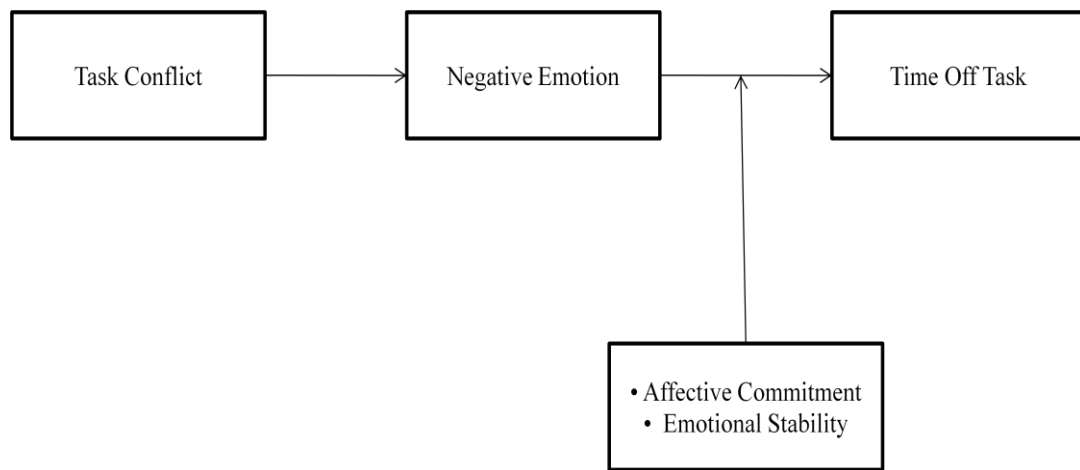
Tests of Cross-Level Hypotheses

As reported earlier, negative emotions were significantly associated with time off task. When time off task was regressed on negative emotions at Level 1, the between-person variances in the slope terms were significantly different from zero ($\chi^2 = 469.25, p < .000$) suggesting the potential presence of Level 2 moderators. As presented in figure one, emotional stability and commitment (affective, continuance,

and normative) were examined as moderator variables. All variables were individually introduced into the model to assess whether they moderated the effect of negative emotions and time spent off task. Emotional Stability ($\gamma_{11} = -.03, p < .02, R^2 = 19.8\%$ in the slopes) and Affective Commitment ($\gamma_{11} = -.01, p < .03, R^2 = 19.7\%$ in the slopes) moderated the effects of negative emotions on time spent off task. Both emotional stability and affective commitment weakened the impact of negative emotions on time off-task. Thus, Hypotheses 5a and 6b were supported.

Hypotheses that focused on between-person effects (Hypotheses 5a, 5b, 5c 6a, and 6b) were tested again, controlling for demographic variables (gender, age, position level, and sector). No differences in the pattern of significant effects were observed. In addition, we explored three-way cross-level interactions with emotional stability and affective commitment and their interaction term entered at Level 2 as predictors of the Level 1 slope terms relating daily negative emotions to time off task. No three-way interactions were observed in these analyses. The final mediation model results are presented in figure 4.

Figure 4. Final Model



Frequencies of Behaviors and Rationalizations

Aggregated scores were computed for participants on time banditry behaviors, time spent off task question and all cognitive rationalization items. Descriptive statistics were conducted on all items. It was found that on average participants spend a quarter of their time off task on any given day. Thus, for full time employees (40 hours per week), the normal employee will be off task 2 hours per day or 10 hours out of the 40 hour work week. The most frequent types of behaviors engaged in were internet use, socializing, getting a drink, and conducting personal business. The most frequent rationalizations given were “I didn’t have enough tasks to fill my time,” “I was helping out in another area of the organization (non-job related),” “Everyone around me was working slowly, so I did too,” “I had no deadlines to meet so I took my time.” In addition, the provided list of rationalizations, many participant providing additional rationalizations in an open-ended response. Specifically, the overwhelming majority responded by saying that “no one can be productive 100% of the time.”

Discussion

In this study Spector and Fox’s (2002) emotion-centered model of CWB was adopted. This model contends that work related stressors (i.e. task ambiguity and conflict) are likely to evoke negative emotions, and as a way of dealing with these negative emotion employees can and will engage in counterproductive activities. In this study we specifically explored the outcome of time off task or time banditry, a sub dimension of the counterproductive behavior framework. Despite its prevalence

and the deleterious effects of time banditry, past research has had little success in accurately identifying the predictors of time theft because most research attempting to assess the antecedents has been focused at the between-person level of analysis (e.g., Henle et al., 2010). While, between person research can be fruitful, the antecedents of time banditry (i.e. low job satisfaction, perceived ambiguity and conflict, negative emotions) are inter individual phenomenon, and need to be researched at an inter individual level. To fill this void, the relationships among daily stressors such as conflict and ambiguity, emotions, and time off task within persons and across days were assessed.

Research on time theft and the emotions centered model of CWB was extended by this research in several ways. First, and most broadly we extend the model to a specific sub dimension of CWB – time banditry. Second, the phenomenon of time banditry was shown to be both a within and between person phenomenon occurring and changing across several days. Third, negative emotions and positive emotions were explored as mediators of time spent off task. Finally, additional moderators of the negative emotions-time off task relation were introduced. Specifically, affective commitment was found to moderate the emotions-time off task relationship. Thus, when one has a strong desire to remain with an organization (affective commitment), they will likely engage in less time off task in spite of the presence of strong negative emotions and job stressors. In addition to commitment, an individual's level of emotional stability also moderates the emotions-time off task relationship. Thus, in the presence of strong negative emotions and job stressors, those with high levels of emotional stability are likely better equipped to handle the

demands of such situation, and will not need to resort to engaging in off task activities to cope with the stressors.

Cognitive rationalization results provide insight to the theories that help explain the justifications employees use. For instance, the rationalization that “no one can be productive 100% of the time,” indicates that one is morally disengaging with the act of time banditry by rationalizing that it is okay to take time off task because they have convinced themselves it is impossible to be continually productive. In addition to moral disengagement theory, equity theory helps explain the rationalization that “Everyone around me was working slowly, so I did too.” It appears that individuals take time away from task in order restore balance of equity between colleagues. Finally, the rationalization that “I had no deadlines to meet so I took my time,” provides evidence that time bandits manage the expectation of their supervisors. By taking more time to complete a task than they individually need to complete it, the employee is creating a buffer in their work time, as supervisors will believe that task will continue to take that amount of time.

Implications for Theory

Overall, the results of this study provide new insight into the behavioral process counterproductive work behaviors and specifically the sub dimension of time banditry. Three major contributions pertaining to CWBs and the emotion-centered model have stemmed from the research. First, the emotions centered model was found to hold up at the sub dimensional level of CWBs. Furthermore, the patterns of predictors, mediators and moderators might vary dependent of the dimension being explored. Second, affective commitment plays a role in moderating the emotion-

centered model. Third, emotional stability, and not conscientious was found to moderate the negative emotions-time off task relationship.

In regards to the first contribution to the literature, Spector and Fox's model was supported at the dimension level of CWB, indicating it can be explored at other sub levels and is not just a global CWB phenomenon. Specifically, results were consistent with the mediation hypotheses whereby daily negative emotions fully mediated the effect of perceived conflict on daily time spent off task. Interestingly, this relationship was not found for the antecedent of perceived ambiguity, which has been previously shown in the literature to predict CWB (Yang & Diefendorff, 2009). Perhaps these findings indicate that different sub dimensions of CWB have different patterns on antecedents and mediators worth exploring in the future.

The second major contribution to CWB literature and specifically the emotion-centered model of CWB is the inclusion of commitment as a moderation of the emotions-time off task relationship. Exploring commitment as a moderator rather than a predictor of OCB and CWB contributes not only to the CWB literature but also to the emotion centered model, as very few if any studies have explored commitment in that fashion. Specifically, previous research examining the consequences of commitment has focused almost exclusively on positive work outcomes, and has largely ignored negative work outcomes. Therefore, our findings help to expand the domain of potential consequences in commitment research. In addition, because this research was conducted at the intra-individual level, the result of this research shows that affective commitment stably works to reduce the time spent off task. At this point, we can only speculate on the explanation for the

moderating effect of affective commitment. As we noted earlier, it is possible that employees with strong affective commitment are better able to channel negative emotions into some other acceptable behavior, as compared to those with low affective commitment who engage in off task activities.

The third major contribution of this research also concerns the emotion-centered model of CWB. Specially, the results add insight to the understanding of the role that stable personality traits play in emotion-centered processes preceding time off task. Specifically, that emotional stability moderated the negative emotion–time off task link, such that high levels of emotional stability weakened the link between negative emotions and time off task. The finding that conscientious does not moderate the relationship is in line with research conducted by Ilies et al. (2006) who found that conscientiousness did not moderate the positive emotion–organizational citizenship behavior relationship. Moreover, our findings come in contrast to the finding of Yang and Diefendorff (2009) who found that high conscientiousness may be more effective in decreasing the likelihood that an employee will act on their negative emotions by engaging in CWBs. Our findings in line with Ilies (2006) and in contrast to Yang and Diefendorff (2009) suggest that conscientiousness might vary depending on the dimension on of CWB being explored. Making the emotion centered model a lot more complex than has been found in past cross-sectional research.

Differentiating between the CWB sub dimensions appears to result in different patterns of predictors and moderators, thus the nature of the CWBs in the work place are much more complex than previously explored. To better understand

the job and individual level antecedents as well as moderators of CWB, researchers could examine sub dimensions singularly prior to making global assumptions and developing implications for practice, as they might have undesired outcomes.

Finally, the fourth major contribution of this research is the initial exploration of cognitive rationalizations for engaging in time banditry. It was found that employees place blame for their off task activities on the organization; specifically, that they are not provided with enough tasks to fill their time at work. In line with past assumptions about time bandits' expectation management, a second justification was that the employee does not have a specific deadline to meet, so they take their time on tasks instead of completing the task and seeking a new one. Another justification worth further research was one regarding helping behaviors. It seems that employees help out in other areas of the organization rather than completing their own tasks. Perhaps this suggests that helping behaviors themselves can be considered counterproductive when engaging in them instead of the required tasks of the job. This leads to the age-old question in the performance literature – which is more important, task or contextual behavior? Should one only engage in contextual behavior when task behavior has been fulfilled?

Implications for Practice

As there are multiple components contributing to time spent off task there are several areas in which managers can work to improve behaviors. As always the best approach would to take all aspects as a whole focusing on reducing job stressors, increasing affective commitment, and from an HR perspective hiring individuals

with higher levels of emotional stability. However, grand changes are not always manageable.

The first practical suggestions to decreasing incidences of time spent off task would be focus on aspects of the job that might work to decrease felt negative emotion. In the case of this research, managers should work to reduce felt conflict. Conflict often stems from employees who receive incompatible requests from two or more people, and have to carry out tasks that either go against organizational rules, or are not properly supported by the resources of the organization. Thus, managers should review their expectations of their employees, while considering the policies and rules governing the work to be done in order to lower the levels of conflict an employee feels when completing tasks. This change could both decrease felt negative emotions and also create more affective commitment as the employee will likely desire to stay with an organization with low levels of conflict. Alternatively, it may be beneficial to target negative emotions directly. Thus, a second suggestion for decreasing the amount of time off task would focus solely on the experienced negative emotions and coping mechanisms. Implementing stress management techniques would likely reduce an employees need to cope through counterproductive behaviors. A third suggestion, would be to encourage employees to engage in the more positive forms of time banditry is they need to step away from their individual job tasks. While they would still be engaging in time banditry, the negative outcome of loss of productivity could possibly be made up for by the positive organizational outcomes (i.e., helping another employee be more productive). A final suggestion would be to focus on selecting employees that are

less likely to engage in time off task. Specifically, including emotional stability as a predictor of negative job performance in the chosen selection system can effectively reduce the amount of time spent off task. Inclusion of such measures would likely be fruitful in complex organizations in which employees report to several people or in situations of uncertainty; for instance, during mergers and acquisitions.

Limitations and Future Directions

As with any study, it is important to recognize the limitations inherent in both the design and subsequent analysis when taking into account the implications and generalizability of results. Though the causal sequence implied by our model (stressors–emotions–CWB) is grounded in prior theory (Judge et al., 2006; Spector & Fox, 2002, 2005), the correlational nature of our data does not allow one to rule out alternative causal orderings of these variables. For instance, it could be that engaging in time off task on a given day leads to greater negative emotions and stronger perceptions of task conflict. Future research would benefit from the use of experimental designs aimed at manipulating key variables (e.g., conflict, negative emotions) to determine the causal direction of the effects observed in our study.

The second limitation arises out of the design of this study. Specifically, because self reports were utilized, participants' daily recollections might not have been entirely accurate. Recall and other information processing biases are not eliminated with the use of diary measure. However, the use of diary studies tend to be more accurate than retrospective studies, as it minimize the time elapsed from the behavior and recall (Bolger et al., 2003).

A third limitation in this study is common method bias. The use of self-reports also might have inflated the relationships among the study variables because of common method bias. While common method bias is a potential problem in this study, assessing study variables from the employee's perspective has some advantages over alternative assessment strategies because the variables focused on employee perceptions of their work, felt emotions, and time off task (Fox & Spector, 1999). Although some authors have advocated for collecting CWB data from other sources (e.g., supervisor, coworkers; see, e.g., Sackett, Burris, & Callahan, 1989), these sources are subject to their own set of biases, including lacking the opportunity to observe hidden CWB (Bennett & Robinson, 2000; Fox et al., 2001; Vardi & Weitz, 2004). Thus, CWB assessed by other means may not be more accurate than self-ratings (Berry et al, 2007; Ones et al., 1993). This is especially true of time banditry, as skilled time bandits likely go undetected.

Finally, as with any study collecting information on an individual's likelihood of engaging in deviant or counterproductive behavior, it should be noted that there is the potential for socially desirable responding (Lee, 1993). Socially desirable responding might have inflated the relationships among variables (e.g., individuals reporting less negative emotions and less time spent off task than was the case on a given day). As such, we might have underestimated the actual level of time off task. However, our findings of time off task were approximately two hours, which is in time with past research and is arguably a conservative estimate.

Future research should consider additional situational antecedents of CWB. Specifically, situational events and interactions with co-workers might influence

engagement in time off task. Related to our assessment of these factors, we did not collect data on whether participants actually interacted with their supervisor or customers on a given day. Certain daily events outside of job related factors might be working to increase negative emotions and could explain more of the variance within person on time spent off task. Thus, including a daily environmental events survey would be beneficial. Future research should also examine daily OCB related time off task. Specifically, one can engage in helping behaviors rather than completing one's own work; thus by definition engaging in time banditry. Of interests in future research would be the assessment of the emotion-centered model with positive aspects of time banditry as the outcome.

Overall, this study set out to examine the relationships of daily time off task with distal and proximal antecedents. The study results provide support for the theorized relationships and mediational effects, with daily negative emotions mediating the effects of perceived job stressors (conflict and ambiguity) on a sub dimension of CWB – time spent off task across 10 working days. Furthermore, the cross-level influence of personality traits (conscientiousness, and emotional stability) and commitment on the stressor–emotion–CWB linkages was partially supported. These results of study 2a enrich our understanding of the dynamic circumstances that precipitate the occurrence of employee time theft, specifically that circumstances are dependent on the type of CWB being engaged in, beyond the target of the behavior (the organization or on individual). Now that we have assessed what factors might contribute to whether one might engage in time banditry, the next step is to begin exploring how to manage those who do so.

Study 2b

Study Overview

The purpose of the present study is to examine the typology of time banditry. The ability to classify individuals into types of bandits, and discover that variables to work to classify said types will help managers key into the variables that they need in order to manager and/or ameliorate engagement in time theft. Discriminant function analysis will be used to determine what if any individual and job level factors can be used to classify time bandits into the engagement productivity typology. In addition, scores on the TBQ for the sample will be compared to the scores on the TBQ for a full time working field sample in order to provided evidence of the generalizability of this research to an applied setting. The following research question will be explored in this study

Research Question 9: What job and individual level factors can be used to predict time bandit type?

Analysis

To determine which personal characteristics are more or less associated with the typology of time banditry and the propensity to steal time from the workplace, discriminant function analysis will be used. By examining constructs that have previously been linked to CWB and applying them as predictors of time banditry we can begin to make new associations between personality characteristics and time theft and establish time banditry as a sub dimension of CWB. Discriminant function analysis will be used to validate the hypothesis that there are four different types of

time bandits, and that these bandit types are differentiated by the productivity and engagement of the worker. Should this analysis produce significant results, measures of productivity and engagement could be used to predict the type of time bandit that the person is likely to be. This could circumvent, to an extent, the problematic fact that the measure of time banditry is open to faking and socially desirable answering. This could also assist managers in determining which type of intervention would reduce time banditry for that type of worker.

Results

Prior to conducting the discriminant analysis, a one-way ANOVA was conducted to assess whether the types of time bandits differed on the TBQ. The results of the ANOVA demonstrate that there is a significant difference between groups, $F(3, 121)=2.64$, $p<.05$ on the TBQ. Means, standard deviations, and group N's can be seen in table 4.

Table 4: *Means and standard deviations on TBQ by type*

Types	Mean	N	Std. Deviation
1 - Weasel	63.3784	37	11.79772
2 – Sand Bagger	70.2500	20	13.95434
3 - Mercenary	66.7083	24	13.79817
4 - Parasite	72.2045	44	17.35750
Total	68.2240	125	14.95901

Discriminant analysis depends on clear classification of group membership and relies on the presence of categorical variables to do so. Performance and engagement were measured on a continuous scale and were transformed into interval data using the distribution quartiles. In order to determine how the types of time bandits differed with respect to their responses to several job and individual level factors, a discriminant function analysis was conducted. However, due to the large amount of predictor variables and the small sample size, the number of predictors included in the discriminant analysis needed to be reduced. A series of analyses of variances were conducted to identify the variables in which were significant group differences. The results of these analyses showed that groups differed on the following individual level factors extraversion $F(3,121)= 4.256, p< .007$, conscientiousness $F(3, 121)=5.737, p<001$, openness $F(3, 121)= 3.616, p< .015$, continuance commitment $F(3, 121) = 2.947, p<.03$, affective commitment $F(3, 121)=12.024, p<.000$, positive affect $F(3,121)=15.597,p<.000$, and negative affect $F(3,121)=3.522, p<.017$. With respect to job related factors groups differed on feedback $F(3. 121)= 17.611, p<.000$, autonomy $F(3, 121)=15.254, p<.000$, skill variety $F(3,121)=12.732$, task identity $F(3,121)=17.572, p<.000$, and task significance $F(3,121)=6.432, p<.000$. The above significant variables were used at the dependent variables, used to predict the four time banditry groups (1= High Engagement - High productivity, 2 = High Engagement – Low Productivity, 3 = Low Engagement – High Productivity, 4 = Low Engagement – Low Productivity).

Next, the data were subjected to a DFA in a stepwise fashion using the WILKS method of selecting variables to be entered or deleted, using the default p

criterion for entering and removing variables. Before proceeding to the results of the classification, the hypothesis that the variance/covariance matrices of the four groups are in the same population was tested using Box's M statistic (Box's M = 63.359, F = 1.29, $p > .05$). Thus, the null hypothesis with respect to the homogeneity of variance/covariance matrices in the population is accepted.

Only two of the discriminant functions were statistically significant, DF1, $\Lambda = .375$, $\chi^2(15) = 117.27$, $p < .000$, DF2 $\Lambda = .727$, $\chi^2(8) = 38.12$, $p = .000$, and DF3 $\Lambda = .950$, $\chi^2(3) = 6.15$, $p = .104$. Thus, there are two statistically discriminant functions for this problem. In order to interpret the discriminant functions the functions at group centroids were explored (table 5)

Table 5: *Functions at Group Centroids*

Types	Function		
	1	2	3
1 - Weasel	1.258	.257	-.146
2 - Sand Bagger	.540	-.867	.350
3 - Mercenary	-.692	.826	.266
4 - Parasite	-.926	-.272	-.182

Note. Unstandardized canonical discriminant functions evaluated at group means

In the column labeled Function 1, we see that the centroid for Groups 1 and 2 is positive, while the centroid values for Group 3 and 4 are negative. Groups 1 and 2 are both high on engagement, thus it appears function one is separating groups that are high on engagement from those that are low on engagement. Next, the values for Function 2 were examined for the two groups that were not differentiated by the first discriminant function. Groups 1 and 3 have positive values and Groups 2 and 4 have negative values. Function 2 is separating groups on productivity. Groups 1 and 3 are

Table 6: *Classification Results*

Origina l	Count	Types	Predicted Group Membership				Total
			1	2	3	4	
	31	1 - Weasel	31	1	2	3	37
	7	2 - Sand Bagger	7	8	0	5	20
	4	3 - Mercenary	4	1	11	8	24
	2	4 - Parasite	2	3	5	34	44
%	83.8	1 - Weasel	83.8	2.7	5.4	8.1	100.0
	35.0	2 - Sand Bagger	35.0	40.0	.0	25.0	100.0
	16.7	3 - Mercenary	16.7	4.2	45.8	33.3	100.0
	4.5	4 - Parasite	4.5	6.8	11.4	77.3	100.0

a. 67.2% of original grouped cases correctly classified.

high on productivity while groups 2 and 4 and low on productivity. Using the two significant discriminant functions approximately, 67.2% of grouped cases were correctly classified. Group classification results can be seen in table 6.

Results of the predictor variable analysis revealed that 5 of the 12 independent predictor variables included in the analysis are useful in distinguishing between the different types of time bandits – autonomy, task identity, skill variety, conscientiousness and extraversion. As seen in table 7 we see that three of the variables entered into the functions (autonomy, skill variety, and extraversion) are the important variables in the first discriminant function, while task identity is the only important variable on the second function that is also statistically significant. Finally, conscientiousness is important for the third discriminant function, which is not a significant function.

Table 7: Correlations between IVs and DF scores

	Function		
	1	2	3
Autonomy	.618*	-.246	-.154
Skill Variety	.550*	-.246	-.488
Extraversion	.334*	.017	-.107
Task Identity	.574	.626*	-.343
Conscientiousness	.328	.207	.726*

*. Largest absolute correlation between each variable and any discriminant function

As stated above, three of the statistically significant variables (autonomy, skill variety, and extraversion) are the important variables in the first discriminant function, which distinguishes highly engaged groups (groups 1 and 2) from the other

two groups. We would therefore expect that the means for the groups 1 and 2 on these two variables would tend to be different from the means of the other two groups. The means for autonomy for groups 1 ($M= 17.03, SD=2.76$) and 2 ($M=16.25, SD= 3.26$) are higher than Groups 3 ($M=12.54, SD= 2.86$) and 4 ($M= 13.16, SD= 3.62$). As can be seen in table 8, this pattern of results is consistent for skill variety and extraversion. For the second discriminant function, task identity was the only significant predictor, function which distinguishes highly productive groups (groups 1 and 3) from the other two groups. The means on task identity for groups 1 ($M= 17.86, SD= 2.55$) and 3 ($M= 15.04, SD= 2.49$) are higher than the means for groups 2 ($M= 13.85, SD= 3.01$) and 4 ($M= 12.95, SD= 3.83$).

Table 8: *Predictor Means and Standard deviations by type*

		<i>M</i>	<i>SD</i>
1 - Weasels	Autonomy	17.03	2.76
	Task Identity	17.86	2.55
	Skill Variety	15.30	3.79
	Conscientiousness	33.14	4.75
	Extraversion	29.16	4.95
2 - Sandbaggers	Autonomy	16.25	3.26
	Task Identity	13.85	3.01
	Skill Variety	13.85	3.56
	Conscientiousness	32.60	4.65
	Extraversion	27.25	8.05
3- Mercenaries	Autonomy	12.54	2.86
	Task Identity	15.04	2.49
	Skill Variety	9.63	4.41
	Conscientiousness	32.04	3.57
	Extraversion	24.96	6.96
4- Parasites	Autonomy	13.16	3.62
	Task Identity	12.95	3.83
	Skill Variety	11.07	4.15
	Conscientiousness	28.95	5.68
	Extraversion	24.66	5.53

Comparing Samples of the TBQ

Time theft (or banditry) is an important organizational concern with high stakes outcomes, thus there are be some concerns with using a sample of student, albeit working students. Specifically, students might tend to engage in more time banditry than those employed full time as commitment to that organization is not established, and one's expectation to stay might not necessarily be there. Thus, in this set of analyses scores on the TBQ from the participant sample in study 1(non-student, full-time working adults) was compared to scores on the TBQ from the participant sample in study 2(working students).

Multiple ANCOVAs were conducting to assess the effect of group (Group1 = student sample, Group 2= working sample) on scores on the TBQ total, and the three dimensions of the TBQ. Number of hours worked per week, and position level (supervisory/non-supervisory) were included as controls. The results of the analysis on TBQ scores were $F(1, 177) = 2.211, p > .05$, indicating that there are no differences between the working population and the student working population. In addition to exploring global TBQ scores, scores on TBQ sub dimensions were also compared. The results of the analysis on 'Classic Dimension' scores of the TBQ were $F(1, 177) = 3.806, p > .05$, indicating that there are no differences between the working population and the student working population. The results of the analysis on 'Technological Dimension' scores of the TBQ were $F(1, 177) = 1.296, p > .05$, indicating that there are no differences between the working population and the student working population. The results of the analysis on 'Social Dimension' scores

of the TBQ were $F(1, 177) = 0.66, p > .05$, indicating that there are no differences between the working population and the student working population.

Discussion

The five largest structure coefficients were autonomy, skill variety, extraversion, task identity, and conscientiousness. Autonomy, skill variety, and extraversion were found to be important variables in the first discriminant function, which distinguishes groups 1 and 2 from groups 3 and 4. For the second discriminant function, task identity was the only significant predictor, which distinguishes highly productive groups (groups 1 and 3) from the other two groups.

As was discussed in the typology of time banditry, time bandits are broken down by levels of engagement and productivity. Group 1 (high engagement-high productivity) and Group 2 (low engagement – High productivity) both fall high on productivity thus it appears that autonomy, skill variety, and extraversion combine to distinguish those that are high on productivity. Group 1 (high engagement-high productivity) and Group 3 (high engagement – low productivity) both fall high on the productivity dimensions thus it appears that task identity distinguishes high on engagement.

The results of this study provide further insight into the antecedents of CWB by specifically exploring the unique sub dimension of time banditry. It was found that time banditry can be split into four types of time bandits. In addition, this research suggests that those individuals that engage in CWB are not necessarily unengaged and unproductive, which is in contrast to past research (e.g., Fox &

Spector, 1999). The notion that employees can be both productive and engaged in their job while still engaging in time banditry is novel. In addition, it suggests that OCB and CWB are not on opposite ends of a continuum but rather on separate continuums. In order to explore this hypothesis further, future research should include both measures of OCB, OCB-related time theft, and CWB-related time theft.

Another major contribution of this research to the time banditry literature is its generalizability to applied samples. A major concern with many research endeavors is the use of convenience student samples, as they might not actually mirror what happens in the “real” world. By comparing scores of the TBQ for full time employees to those of working students, our results on the student sample were shown to be generalizable to applied samples, as there was no difference between the student sample and the full time sample. Thus, it is appropriate to conduct research with working students and use the results to provide suggestions to organizations and managers on time banditry.

Practical Application

While there are many ways we could summarize our interpretation, one way is to explore each individual type of time bandit. While all types of time bandits are important this research has shown that different types of time bandits engage in different levels of time off task with weasels (High engagement-High productivity), mercenaries (Low engagement-High productivity), sandbaggers (High engagement-Low productivity) and parasites (Low engagement-Low Productivity) engaging in least to most respectively. As such, it is suggested that a manager spend more time reducing or “rehabilitating” mercenaries and sandbaggers, as they have most to gain

in terms of productivity and engagement. Regardless of this suggestion, each type of time bandit will be discussed.

Managers might be hesitant to correct behaviors of the weasel, as they tend to be highly engaged and highly productive employees, however they are still engaging in time off task. Thus, these employees are likely constrained in some way and could potentially have higher levels of productivity and engagement if small tweaks are made. For instance, all of the significant predictors can have an impact on the Weasel. Thus, providing these employees with more autonomy and variety in their task might steer them away from being a time bandit. Future, research should explore the types of time banditry weasels engage in, as they might be less harmful to the organization.

If an employer or manager has issues with the sandbagger time bandit (i.e., employees that are engaged with their job but not very productive) they might want to explore one's level of task identity. As a reminder task identity is the degree to which a job requires completion of a whole and identifiable piece of work; specifically, doing a complete job from beginning to end. Do the employees have the capability to follow a task from start to finish, if not they might stray from their tasks in order find fulfillment in other areas of the organization. For instance, sandbaggers are hypothesized to exhibit a pattern of occupational helping behaviors. Specifically, you will likely find this individual helping others with their problems rather than accomplishing their own tasks. Because they sandbagger is already engaged in their work, they are likely going to be the easiest type of bandit to manage or fix. While,

we do not suggest discouraging this type of behavior we do encourage management to provide the employee more ownership over task.

For the mercenary also known as the unengaged, productive worker the manager might want to focus on aspects of the job that can work to improve engagement. As this type of bandit only does what they have to in order to keep their job, and are hypothesized to be more common in jobs where there are specific and concrete job performance standards, such as piece rate work. Managers might want to enlist these employees as trainers or leaders of divisions. Perhaps providing the employee with more skill variety can increase the employees' level of importance to the organization, which in turn can work to provide them the motivation to commit to the organization.

Finally, for the parasite, or the unengaged and unproductive worker, the manager can choose to either terminate the employment relationship or 'rehabilitate' the employee. For the parasite, all factors predicting group membership should be explored. Perhaps this person is simply in the wrong position.

Limitations and Future Research

The first major limitation of this study was the lack of holdout sample to validate the DF model. By splitting the sample and conducting the discriminant analysis on a portion of the sample and then applying the model to the hold out sample the model could be validated. It was not appropriate to split the sample in this study as it would have left an insufficient of participants in each group to conduct the analysis. As this research was exploratory, future research should be conducted to validate the model.

A second limitation of this study was the reliability for social sub dimension of time banditry. The Cronbachs alpha for this dimension was .61, which is below the commonly accepted threshold level of .70. The impact of such low reliability is that it may underestimate observed relationships between the TBQ and other variables. This result might be because there are a limited number of items in the social sub dimensions, indicating construct under representation. While, the sub dimensions were not specifically explored in this study future efforts should be made to modify the TBQ scale.

A third limitation is the use of self-report measures, as they might have inflated the relationships among the study variables because of common method bias, as was discussed in the limitations of study 2a. In addition to common method bias there is a potential of range restriction. Specifically, it may also be the case that participants might have been reluctant to expose their misbehavior on the TBQ as such; actual time banditry might have been underestimated. The effect of such range restriction would have been to make the observed relationships smaller than what would have been observed under a full range of responses. While it has been advised that counterproductive behaviors be collected from multiple sources (Sackett, Burris, & Callahan, 1989), these sources are subject to their own set of biases. In addition, skilled time bandits are likely to hide their off task behaviors from their managers and co-workers, thus there is a lack of opportunity to observe time banditry (Martin et al., 2009). Further, time banditry and other counterproductive behaviors assessed by other means may not be more accurate than self-ratings (Berry et al, 2007; Ones et al., 1993). Regardless, future research should be collected from multiple sources.

In addition, outcome measures such as productivity and engagements should be collected from multiple sources, both objective and subjective.

General Discussion

The phenomenon of time banditry is not a new epidemic. However, in recent years organizations have seen and will continue to see massive changes in their organizational structure. Such changes include the introduction of new technology, some of which might change the nature of one's job, making it less time consuming. With such changes will come a change in how employees' complete tasks and it is the managers and organizational officials' duties to ensure they are aware of the needs of their employees, as well as the requirements and processes of the assigned job tasks. In order to aid managers in their quest in understanding and managing the elusive time bandit empirical research was conducted on working adults in a variety of organizations and positions. The purpose of this research was to provide evidence that time banditry is a separate and distinct sub dimension of CWB, and that types of time bandits are separate and distinct. This was accomplished by exploring a myriad of antecedents to engagement in time banditry. It was argued that time banditry was a situational variable that could be impacted by dispositional variables. Further, that time bandits could be classified into the engagement-productivity typology using several commonly used CWB predictors.

Study 1 found that the amount of time banditry engaged in can depend on the organization with which one is employed, specifically, the climate of that organization. Further, that job related perceptions of climate are the best predictors

of engagement in time banditry by organization .The results indicate that it is not necessarily the organization but the job within organization that help explain engagement in time theft. This first study provided initial evidence that time banditry is a situational construct. However, only situational variables were explored in this study. Moreover, despite the finding that job related perceptions of climate help explain why one engages in time banditry it was found that additional predictors needed to be explored.

In an attempt to explain more of the variance between people on time banditry, study 2 explored several situational and dispositional antecedents of time banditry within and between people. The results of Study 2 found that engagement in time banditry varies by day and these changes could be explained by daily felt stress (i.e., job conflict) and subsequent felt negative emotions. Specifically, that negative emotion mediates the stressor-time off task relationship. Furthermore, it was found that dispositional variables (i.e., affective commitment and emotional stability) moderate the relationship between felt negative emotions and engagement in time off task. In addition, exploring the emotion-centered model of CWB as it related to time banditry, Study 2 also provided initial exploration into the rationalizations of time banditry. Specifically, time bandits will manipulate their supervisor perception of how long a task will take to accomplish, allowing them more time to engage in off task activities. It is contented that all time bandits engage in some form of expectation management. In addition to expectation management, factors that are controllable by the organization were found as justifications for time banditry (e.g., lack of work and resources).

Based on the results of study 1 and study 2a one can conclude that time banditry exists, and both situational and dispositional variables together can explain why one might engage in time banditry. Based on the studies presented in this paper, it is also suggested that the effect of the environment not be understated, as it may have more of an impact on time banditry than personality predispositions. While personality factors clearly influence the expression of counterproductive work behaviors through mediation and moderation, explorations of additional situational antecedents should prove fruitful in providing insight into the situational nature of time banditry.

After garnering a better understanding of the antecedents and justifications of time banditry, study 3 attempted to provide suggestions for managing time banditry by exploring the typology of time bandits and the factors that predict bandit type. The results of this study indicate that levels of job autonomy, skill variety, extraversion, task identity, and conscientiousness can be used to predict time bandit type. Understanding what factors predict time bandit type provides managers information on the individual variables that need to be accounted for and the work variables that can be altered in order to manage or rehabilitate time bandits.

Parasites were hypothesized to be the most detrimental to the organization because of their low productivity and low engagement in their work. This hypothesis was consistent with what was found, and this group was found to have the highest reported score on the time banditry measure. Managers could use a variety of tactics to improve performance, such as training, and different ways to increase engagement, such as empowerment and job enrichment and rotation. At the opposite

end of the spectrum weasels were predicted to demonstrate the lowest levels of time banditry and were expected to be highly engaged and productive on their jobs. Results were consistent with this hypothesis. Mercenaries and sandbaggers fall in the middle of the continuum and are thus less understood and harder to classify. In order to increase accuracy of time bandit classification, future research should include additional predictor variables. Study 3 also provided evidence that all employees will still engage in time banditry, despite their level of engagement with the job. In addition, time bandits can still be productive employees.

Implications for Research

Time banditry research as a whole is in its infancy, while this study provides additional research on the factors that contribute to engagement in time banditry, future research regarding both the positive and negative outcomes of such behavior is suggested. Future research should explore when time banditry can have a positive impact on the organization and the individual. In addition, cost and benefits of positive time banditry should be assessed. For instance, exploring the cost of lost productivity, and compare it to the social gain of the positive actions.

In terms of research on CWBs, the results of these studies should be seen as having set the stage studying the dimensions of CWB separately. It is clear from both Studies 1 and 2 that the patterns of predictors can vary dependent on the sub dimension being explored as compared to CWB as a global phenomenon. The concept of separating CWB into different dimensions is not novel. Prior CWB research has identified different antecedent patterns when exploring CWB aimed at the organization (CWB-O) and CWB aimed at individuals within the organization

(CWB-I) (Berry, Ones, & Sackett, 2007; Hershcovis et al., 2007; Yang & Diefendorff, 2009). However, research has not explored the differing patterns of relationships across all dimensions of CWB. Thus, this research provides initial call for research to explore sub dimensions separately. In doing so, the complexity of the antecedents of CWB can be better understood.

Implications for Practice

The number one suggestion for managers, based on this research, is to always be aware of the situation. Time theft does not exist in a bubble, thus singular attempts to resolve such behaviors are likely going to fail. For instance, setting strict policies for computer use or intolerance of tardiness are not going to solve anything if the climate of the organization is not address as well. In addition, the attempted removal of time banditry is not feasible nor is it always going to be beneficial, as it is posited that there are social and recuperative benefits of taking time away from ones job. It is not likely that organizations are going to stop employees from engaging in time banditry. Thus, interventions should be targeted on reducing negative time banditry behaviors. In addition, it is suggested that attempts be made to encourage positive forms of time banditry as a way to vent job stress, rather than the use of negative forms of time banditry.

An intervention that has seen much success in the business world is the introductions of pet (or personal) projects. Pet project programs have been found to be a positive and productive way in which employees can take time away from their focal tasks. Programs, such as the ones in place at 3M, Google, and Walmart, allow employees to spend up to 20 percent of their time at the office on personal projects in

which they are passionate about. These projects could be anything from creating a new product to updating an old process to any other innovative idea. In addition to pet projects, organization could encourage employees to get involved with organizational outreach, mentoring programs, or any other non-task related activity that can benefit the organization, while at the same time allowing the employee freedom from the bounds of their job tasks.

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Appendix A

Time Banditry Questionnaire (TBQ)

Instructions: Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who takes long breaks without approval? Please circle a number for each statement to indicate the extent to which you agree or disagree with that statement.

Scale:

1	2	3	4	5
Disagree Strongly	Disagree a little	Neither agree nor disagree	Agree a little	Agree Strongly

1. I purposely take longer in the restroom than necessary
2. I use the internet for work related business only
3. I receive personal phone calls at work
4. I put less effort into my work than I know I can
5. I talk to co-workers about their families during work hours
6. I tell my boss/colleague a task will take longer than I know I can finish it in, so I can take my time
7. I always put 100% effort into my work task
8. If my boss is gone for the day, I will leave early
9. I check non-work related e-mail at work
10. When given a task I finish it faster than the expected time frame and use the remaining time for personal use
11. I spend time on the internet for reasons not related to work
12. I never make personal phone calls at work
13. If I didn't feel like going to work I would call in sick, even if I wasn't
14. I take time out of my day to talk with my boss about non-work related topics
15. I receive non-work related e-mail at work
16. I spend more time than necessary on tasks
17. I daydream while at work
18. I take long coffee/smoke breaks without approval
19. I send non-work related e-mail at work
20. I spend time in and out of the office engaging in leisure activities (e.g., golfing, going to lunch, drinks, and/or dinner) with clients
21. I never check non-work related e-mail during work hours
22. If I finished a project 20 minutes before the end of the work day, I would not start working on anything new

23. I start working as soon as I arrive at work
24. While at work, the only e-mail use I engage in is work related
25. I go to the restroom even if I don't have to
26. I take longer lunch breaks than I am supposed to
27. I take breaks at my desk to catch up on a bestseller or to read a magazine
28. I use sick days in order to catch up on personal things
29. When I arrive at work in the morning I get coffee and/or eat breakfast before I start working
30. I pretend to work through lunch to leave early, even though I still take a break to eat
31. I only take the required amount of break time allowed in my organization

Note: Format modified from online administration.

Appendix B

Climate Survey

Instructions: Please indicate your level of agreement with each statement.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Questions pertaining to your job

1. My job is interesting.
2. My job makes good use of my skills and abilities.
3. I usually feel a sense of accomplishment when I complete my job.
4. My ideas and suggestions are utilized and valued here.
5. I am personally encouraged to be creative and innovative here.
6. I am appropriately involved in making decisions that affect my work.
7. The health and safety conditions in my work unit are good.
8. There are good opportunities here for me to learn new job skills.
9. There are good opportunities here to advance to better job.
10. I understand what the performance standards are for my job.
11. I receive regular feedback about how well I am performing my job.
12. I receive all of the resources and support that I need to do my job properly.
13. I am usually given recognition when I do a good job.
14. I feel motivated to fully meet or exceed the performance goals for my job.
15. My program area has received training in ways to improve its team effectiveness.
16. The pay rate for my job has been properly set.
17. Pay increases are administered fairly and consistently.
18. The employee benefit plan here meets my needs satisfactorily.

Questions pertaining to your team/supervisor

1. My supervisor/team leader is willing to listen to my problems or complaints.
2. My supervisor/team leader is an effective coach and trainer.
3. My supervisor /team leader is an effective problem solver.
4. My supervisor/team leader treats all employees fairly.
5. My supervisor/team leader sets a good example for me to follow.
6. I understand the performance standards that have been established for my program area.
7. High quality performance is a priority in my work area.
8. I get all of the information that I need to do my job properly.
9. My supervisor/team leader is an accurate, reliable source of information.
10. Decision making information is properly shared among those who need it.
11. There is a lot of teamwork among the employees in my program area.
12. There is a lot of teamwork between the different program areas here.

13. Cultural relations issues that may arise in my program area are properly handled.
14. Feedback from our customers is used to improve product and service quality.
15. We have an effective process for responding to customer complaints or problems.
16. The employees in my program area consistently try to meet or exceed job quality standards and customer needs.

Questions pertaining to your organization

1. Management conducts the business of this organization effectively.
2. Management is responsive to the needs and concerns of employees.
3. Most of the individual managers are effective in their jobs.
4. The policies and work rules of this organization are clearly outlined.
5. Organization policies and work rules are administered fairly here.
6. The leadership of this organization is sensitive to the work related needs and concerns of culturally diverse employees.
7. The leadership of this organization conducts business in a moral and ethical manner.
8. The employees in my program area conduct themselves in accordance with the organization's code of values and ethics.
9. Communication from the leadership of this organization is open and honest.
10. Employees here are free to speak up and say what they think.
11. Quality standards have been established for all of our services.
12. This organization tries to meet all of its customers' needs and expectations.
13. Feedback from our employees is used to improve service quality.
14. There is a lot of teamwork between organization leadership and the employees.
15. Members of organization leadership work together effectively as a team.
16. Recognition in this organization is appropriately shared among those who deserve it.

Note: Format modified from online administration.

Appendix C

Productivity and Engagement Measures (PEM)

Instructions: Please indicate your level of agreement with each statement.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Engagement Items

- 1 I can decide which tasks I give priority to.
- 2 This organization really inspires me to put forth my best effort.
- 3 I have a lot of freedom in when to do my tasks.
- 4 I am extremely glad that I chose this organization for work for over others I was considering at the time I was hired.
- 5 Performing well on my job is important to me.
- 6 I am willing to put in a great deal of effort beyond what is normally expected in order to help this organization be successful.
- 7 I can control how much work I do.
- 8 I have a lot of freedom in the tasks that I choose to do.
- 9 I have a lot of control over the tasks I perform.
- 10 I would accept almost any type of job assignment in order to keep working for this organization.
- 11 I really care about the fate of this organization
- 12 I often think about quitting my job. (R)
- 13 I only do what I have to to meet performance expectations. (R)
- 14 My boss doesn't recognize my contribution. (R)
- 15 I am often expected to handle problems that arise on my job, even if they are not in my job description. (R)
- 16 I feel that I work too hard for my customers. (R)
- 17 I often feel that I have conflicting demands on my job. (R)
- 18 I will probably look for a new job next year. (R)
- 19 My boss favors some employees over others. (R)
- 20 I feel that I treat some customers very impersonally. (R)
- 21 I feel like I am not rewarded for the work I do. (R)
- 22 I feel burned out trying to meet my manager's expectations. (R)
- 23 My company's expectations for performance are unreasonable. (R)
- 24 I feel indifferent toward my customers. (R)
- 25 I don't have control over my work environment. (R)
- 26 I am surprised by the performance my manager expects. (R)

Productivity Items

- 1 My productivity meets my personal standards.
- 2 I take the necessary time to help customers, even if it means I can't get all of my work done for that day.
- 3 I can generally handle problems on my first try.
- 4 I respond promptly to customer or employee requests, despite my busy workload.
- 5 I work out solutions to problems that arise on the job.
- 6 I follow the company's procedures for interacting with customers
- 7 I feel that I put forth more effort than my coworkers.
- 8 I frequently do more than my boss expects me to.
- 9 I have a good understanding of the company's performance standards.
- 10 I ask my manager how I can improve my performance.
- 11 I listen to each and every customer and/or employee with a problem and think of ways to resolve it.
- 12 I always provide correct information to customers and/or other employees.
- 13 I take extra effort to make my boss aware of my job performance.
- 14 I help others to meet their performance standards. (cut from analysis)
- 15 I understand what I can do to get promoted.
- 16 My productivity meets my company's standards.
- 17 I consistently follow up with customers and/or employees to ensure their continued satisfaction.
- 18 I take the initiative to help a customer, even when it is not my job (different department, off the clock).
- 19 I feel that I am very productive in my work
- 20 I always provide accurate and complete information when completing paperwork.
- 21 I consider my overall performance when I work toward a smaller goal.
- 22 I interact with customers the way my company expects me to interact with customers.
- 23 I am dependable and accurate in my work.
- 24 I take the time to learn how I can improve my performance.
- 25 It takes me a lot longer to do the same tasks as my coworkers. (R)
- 26 I feel I have a lot of free time on my job. (R)
- 27 I do what my manager tells me to, nothing more, nothing less. (R)
- 28 Thinking about the amount of work I have to do interferes with actually completing it. (R)
- 29 I don't have enough time to do my job well. (R)
- 30 I have to satisfy too many different people on my job. (R)

- 31 I am often expected to handle problems that arise on my job, even if I have not had the proper training to deal with them. (R)
- 32 I don't have enough help to do my job. (R)
- 33 I often have to do things without adequate training. (R)
- 34 I do not often meet the company's performance standards. (R)

Note: Format modified from online administration.

Appendix D

Diary Questionnaire

I. Daily Ambiguity and Conflict

Directions: Please indicate the extent that you agree or disagree with each state for today only

1 Disagree Strongly	2 Disagree	3 Neutral	4 Agree	5 Agree Strongly
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1. I feel certain about how much authority I have.
2. Clear, planned goals and objectives for my job.
3. I have to do things that should be done differently.
4. I receive an assignment without the manpower to complete it.
5. I know what my responsibilities are.
6. I have to buck a rule or policy in order to carry out an assignment.
7. I work with two or more groups who operate quite differently.
8. I know exactly what is expected of me.
9. I receive incompatible requests from two or more people.
10. I do things that are apt to be accepted by one person and not accepted by others.
11. I receive an assignment without adequate resources and materials to execute it.
12. Explanation is clear of what has to be done.
13. I work on unnecessary things.

II. What amount of time did you spend off task today?

1 Less than a quarter of the time (1 hour or less)	2 A quarter of the time (2 hours)	3 Half of the time (4 hours)	4 Most of the time (6 hours)	5 Almost all the time (7 plus hours)
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III. When I was not working on a job-related, assigned task I was (check all that apply)

- using the internet for personal purposes (including e-mail
- Socializing with co-workers
- Using my work or personal phone to make personal calls
- Conducting personal business
- Spacing out/day dreaming
- Watching a video or listening to some other media

- Running errands
- Getting a drink
- Taking a "smoke" break
- Other (please specify)

IV. The reason(s) I was not continually productive at work today is (are)(check all that apply)

- I had so many tasks I didn't know where to start
- I didn't have enough tasks to fill my time
- I was helping out in some other area of the organization
- I feel I am underpaid for the work I do
- My co-workers were distracting me
- My work cut into my home time, so I had to do personal tasks at work
- I was uninterested in the assigned task
- I felt unengaged in my job as a whole
- Everyone around me was working slow, so I did to
- I had no deadlines to meet, so I took my time
- Other (please specify)

V. Below are a number of statements that describe different emotions that a job can make a person feel. Please indicate the amount to which any part of your job (e.g., the work, coworkers, supervisor, clients, pay) has made you feel that emotion today only.

Instructions: Please rate the extent to which your job has made you feel the following ways today

1	2	3	4	5	6
Never	Rarely	Sometimes	Quite Often	Extremely Often	Always

1. My job made me feel at ease
2. My job made me feel angry
3. My job made me feel annoyed
4. My job made me feel anxious
5. My job made me feel bored
6. My job made me feel cheerful
7. My job made me feel calm
8. My job made me feel confused
9. My job made me feel content
10. My job made me feel depressed
11. My job made me feel disgusted
12. My job made me feel discouraged

13. My job made me feel elated
14. My job made me feel energetic
15. My job made me feel excited
16. My job made me feel ecstatic
17. My job made me feel enthusiastic
18. My job made me feel frightened
19. My job made me feel frustrated
20. My job made me feel furious
21. My job made me feel gloomy
22. My job made me feel fatigued
23. My job made me feel happy
24. My job made me feel intimidated
25. My job made me feel inspired
26. My job made me feel miserable
27. My job made me feel pleased
28. My job made me feel proud
29. My job made me feel satisfied
30. My job made me feel relaxed