Work Ethic, Turnover, and Performance: An Examination of Predictive Validity for Entry-level Employees

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WORK ETHIC, TURNOVER, AND PERFORMANCE:
AN EXAMINATION OF PREDICTIVE VALIDITY FOR ENTRY-LEVEL EMPLOYEES

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A Dissertation Submitted to the Graduate School at the University of Missouri-St. Louis in Partial Fulfillment of the Requirements for the Degree
Doctor of Philosophy in Psychology with an emphasis in Industrial and Organizational

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Abstract

Work ethic is continually cited as a top factor in hiring new employees (Flynn, 1994; Shimko, 1990; VanNess, Melinsky, Buff, & Seifert, 2010). Research on the relationship between work ethic and job performance has typically shown positive results in a variety of contexts (Meriac & Gorman, 2017; Miller et al., 2002). The purpose of this study was to examine dimensions of work ethic and its relationship with turnover and contextual performance in an often-neglected segment of the workforce: entry-level employees. Data were collected from a large fast food franchise, including work ethic, turnover data, and supervisor-rated job performance. In Study 1, the relationships between the work ethic dimensions and turnover were examined. In Study 2, the relationships between work ethic dimensions and performance outcomes were examined through the mediating mechanism of job involvement. Turnover results indicated that dimensions of work ethic, including self-reliance, leisure and morality/ethics are potential predictors of avoidable and involuntary turnover. Wasted time, morality/ethics and leisure were significant predictors of manager-rated performance outcomes and counterproductive behaviors. Implications and future research directions are discussed.

Keywords: work ethic, job involvement, job performance, turnover, entry-level
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Work ethic, turnover, and performance:

An examination of predictive validity for entry-level employees

Identifying constructs that can both buffer the negative impacts of the work environment on performance and decrease turnover enable organizations through efficient use of resources in hiring and selecting applicants while additionally increasing their bottom line. One such construct is work ethic. That is, “the set of beliefs and attitudes reflecting the fundamental value of work” (Meriac, Woehr, & Banister, 2010, p.1). Hiring managers believe work ethic is important. More than 50% of hiring managers reported that there was “a greater concern about an applicant’s attitude rather than their aptitude” (Flynn, 1994, p. 16). Another survey found that while younger workers often lack experience, the most cited reason for hiring entry level employees is their work ethic, above both reliability and availability of the candidate (Shimko, 1990). Furthermore, over 60% of surveyed managers identified work ethic as the most important factor in hiring employees, beyond other social and analytical traits, when all basic skills were already possessed by the applicant (Flynn, 1994).

On a broader level, organizations are expressing general concerns about work ethic among potential employees. Common complaints include a general decline in work ethic is declining in modern countries (Ali & Azim, 1995; Eisenberger, 1989). Concerns with decreased work ethics correspond directly to decreased job performance, higher levels of turnover, and increases in workplace deviance, ranging from breaking organizational policy to breaking laws (Klebnikov, 1993; Shimko, 1992; Sheehy, 1990; Yandle, 1992). It is a widely held belief that when hiring employees, their work ethic plays a role in the decision process.
According to the Bureau of Labor statistics (2012), there are currently over four million entry level food and beverage workers. That number is estimated to grow by over a million in the next eight years. In addition, of those in the food and beverage industry, 55% worked in limited service eating places, which includes fast food restaurants. Due to the large number of jobs that are produced by the fast food industry, it is imperative to understand problems and concerns that are faced in employing new entry level workers.

One of the most cited grievances in the fast food industry has been the turnover rate of their employees. The cost of recruiting, interviewing, hiring, and training has become burdensome, not just to the bottom line profit of companies, but to the morale of managers and teams within each individual restaurant. Whether an organization was corporate-owned or franchise-owned did not change the turnover rate of unskilled fast-food workers, which ranged from 50% to 100% between 2000 and 2008 (Nobscot Corporation, 2006). Additional research has shown that when new hires start, there are higher levels of anticipation and responsibility, but the tendency for these behaviors decrease within the first two months (DelCampo, 2006). Employees may leave their positions for a variety of reasons including: arguments with a supervisor or co-worker, a change in perceptions of the organizational culture, or disinterest in their current job. It is imperative that organizations take into account the bottom line cost of recruitment and training of an employee. The estimated value of attracting, selecting, and training a new fast food employee can cost up to $10,000 per person (McKay, Avery, Tonidandel, Morris, Hernandez, & Hebl, 2007). When all of the human capital costs, in combination with the loss of productivity, specifically in the fast food industry, can add up to $10 billion per year (Holtom, Mitchell, Lee, & Eberly, 2008; Ongori & Agolla, 2008). Taken in context,
for an individual franchise restaurant, the average annual replacement caused by employee
churn can cost between $50,000 to $100,000 (i.e., with 20 employees and a 50% turnover
rate). Identifying those with stronger work ethic may lead to a reduction in turnover for
entry level employees.

A unique attribute of the fast food industry is that the workers are often young and
most work part time. This labor population, which accounts for 50% of the work force,
need little to no educational or pre-existing skills (Bureau of Labor Statistics, 2012). Entry
level fast food work is classified as unskilled. The only training is specific, and happens on
the job (i.e., food preparation, sanitation, and cash handling). In addition, workers under 24
(who are likely to look for work in an entry level job) are more likely to be unemployed
than those who are older and have had time to acquire work experience (Pallais, 2011). In
June, 2012, for example, 26.5% of workers 16-19 and 14.4% of workers 20 to 24 years old
were unemployed, compared with 8.4% of the general population (Bureau of Labor
Statistics, 2012). Due to lack of work experience it may be more difficult to judge how an
inexperienced, younger worker may perform. Finding a construct (i.e., work ethic) that
may aid in identifying high performers, when there is a lack of work experience to draw
from, would be advantageous for organizations.

In recent years, there has been less focus on entry level jobs. While good
management is necessary to understand how to recruit employees, train employees, and
maintain a well-run store, the assumption that if you hire good managers the rest will “fall
into place” may be placing more responsibility on a manager than can accurately be
evaluated. While managers play an integral part, we cannot overemphasize the importance
of work ethic in entry level employees. The proposed study does not address the above
concerns with managers, rather focusing on an all too often overlooked sample population: the entry level worker. By focusing on hiring the best entry level employees we might make a more immediate direct impact on a business. That is, examining entry level employee selection can identify constructs, like work ethic, that may aid in selecting employees who are potentially less likely to turnover and who may be stronger performers.

**Work Ethic**

Work ethic grew out of the post-reformation religious movement, where a new religious movement, the Protestant church followed values and practices of social welfare and focused on the individual (Byrne, 1990). Since the Reformation, modern societies have identified with Max Weber’s value system (i.e., Protestant Work Ethic (PWE)). In his two-part essay entitled *The Protestant Ethic and the Spirit of Capitalism* (Weber, 1905), PWE was characterized by three components: “hard work, self-denial, and the avoidance of idleness” (Highhouse, Zickar, Yankelevich, 2010, p. 349). Ultimately PWE was associated with the ideal of working hard at your job would lead to success and ultimately to one’s calling. From a religious perspective, this came to be seen as a sign of receiving salvation from God. Thus, performing your job became seen as a precedent for job success, and being successful in your job became “a sign of salvation” under PWE (Cherrington, 1980; Weber, 1905). Work ethic has often been viewed as a unidimensional construct, however it is made up of multiple components.

While PWE was originally defined by a religious definition, the first research oriented view of PWE came from studies completed by McClelland, Atkinson, Clark, and Lowell (1953) and McClelland (1961). These researchers focused on operationalizing one piece of work ethic (self-reliance), in particular, self-reliance training done by parents to
engage independence in their children. Additionally, early research also defined PWE as a “need for achievement,” rather than its own uniquely developed construct; however, subsequent research, found similar yet distinct operations between PWE and achievement. The first attempts at dissecting PWE into dimensions, was Weber’s (1905) PWE construct, which consisted of five separate yet related constructs. These included, “hard work as a value in itself; hard work as the key to success; ascetic existence (dangers of self-indulgence); independence or self-reliance; and avoidance of leisure” (Ryan, 2002, p. 124). More current research has examined the structures of various measures of work ethic and identified several differing dimensions (Furnham, 1990; Heaven, 1989; McHoskey, 1994; Miller et al., 2002; Tang, 1993). There have been multiple questionnaires developed to measure work ethic (Blood, 1969; Buchholz, 1978; Goldstein & Eichlorn, 1961; Mirles & Garrett, 1971; Ray, 1982); while, much of the theoretical research on work ethic has defined the construct as multi-dimensional, the questionnaire’s created did not capture these dimensions, rather measured work ethic as a unidimensional construct (Lim, Woehr, You, & Gorman, 2007).

Taken from Weber’s original work, Miller et al. (2002) suggest that “work ethic is not a single unitary construct but a constellation of attitudes and beliefs pertaining to work behavior” (Meriac et al., 2010, p. 317). Furthermore, development of a multi-dimensional work ethic scale has aided further research in the attitudinal domain (Miller et al., 2002; Meriac, Woehr, Gorman, & Thomas, 2013). The current and validated work ethic scale being used in this study is the short form of the Multi-dimensional Work Ethic Profile (MWEP; Miller et al., 2002; Meriac et al., 2013).
In accordance with the MWEP, Miller et al. (2002) suggested characteristics of the work ethic construct are that it (a) is multidimensional; (b) pertains to work and work-related activity in general, not specific to any particular job (yet may generalize to domains other than work-school, hobbies, etc.); (c) is learned; (d) refers to attitudes and beliefs (not necessarily behavior); (e) is a motivational construct reflected in behavior; and (e) is secular, not necessarily tied to any one set of religious beliefs (p.5).

Furthermore, the scale consists of seven dimensions that comprise work ethic: centrality of work, self-reliance, hard work, leisure, morality/ethics, delay of gratification, and wasted time. Centrality of work refers to the “belief in work for work’s sake and the importance of work” (Miller et al., 2002, p.5). Self-reliance refers to “striving for independence in one’s daily work” (Miller et al., 2002, p.5). Hard work is the belief in the virtues of hard work (Miller et al., 2002).” The leisure dimension focuses on “pro-leisure attitudes and beliefs in the importance of non-work activities” (Miller et al., 2002, p.5). The morality/ethics dimension refers to “believing in a just and moral existence” (Miller et al., 2002, p.5). Delay of gratification is focused on “the orientation towards the future and the postponement of rewards” (Miller et al., 2002, p.5). Finally, wasted time is concerned with “attitudes and beliefs reflecting active and productive use of time” (Miller et al., 2002, p.5). Each of the seven dimensions represents a unique part of the overall work ethic construct. Previous correlations have been found to range from .08 and .50 between the seven dimensions suggesting each has unique variance to add to the overall work ethic concept (Miller et al., 2002; See Table 1 for sample item).

Work ethic, in addition to being a set of beliefs and attitudes reflecting fundamental values of work, is defined as similar to a personality construct (Meriac et al., 2010;
Merrens & Garrett, 1975; Mirels & Garrett, 1971). Moreover, work ethic has been shown to be a semi-stable trait that begins developing at an early age. A longitudinal study assessing the development of work ethic in adolescents found that work ethic can be passed down from parent, through learned behaviors, to their children as part of broader cultural attitudes (ter Bogt, Raaijmakers, & van Wel, 2003). Furthermore, in early development, young individuals have identified with the concept of hard work and research, through structural analysis, has confirmed these findings (ter Bogt et al., 2003). These studies do not suggest that work ethic can only be learned at a young age, rather that aspects of work ethic can be seen at early ages.

The proposed study worked to advance current theory in the work ethic domain by examining a sample population that had been underutilized in the field of psychology: entry level employees. Entry level jobs are described as being conventional and realistic, and there is often a clear line of authority to follow (O*Net, 2013). Previous research has shown the quality and quantity of outcomes evaluated with work ethic are best shown in jobs that place a “premium on conventional adherence to prescribed role-appropriate behavior and require little innovativeness and creativity” (Mirels & Garrett, 1971).

Work ethic is a viable antecedent to explaining turnover. In addition to turnover, other outcomes affected by work ethic may include performance variables, such as, task performance, organizational citizenship behaviors (OCB), and workplace deviance. While research has shown some direct relationships between work ethic dimensions and overall performance, not all dimensions had direct relationships with performance (Miller et al., 2002). There may be additional explanatory mechanisms, such as job involvement that can
help interpret why certain dimensions of work ethic are predictors of different types of performance.

The proposed study examined the ability of work ethic to predict turnover in its early stages (i.e., within the first 45 days of employment); as well as, to predict performance in entry level employees. Research has uncovered employee morale effects both turnover and poor performance (Yuceler, 2009). For example, within the first 2 months at work, there is a marketed decline in employee morale, and this shift suggests employees are quick to become complacent in their job (DelCampo, 2006); however, despite a drop in morale, if an individual stays with the organization through this period of time they are less likely to leave or quit their job in the long run (Dike, 2011). By identifying constructs, such as work ethic dimensions in employees, we may be able to identify those who are more likely to extend employment despite other deterents (Study 1) and perform more successfully in entry level positions (Study 2).

By linking practical concerns (i.e., higher performance and lower turnover) in a workplace that is plagued with deficiencies to theoretical constructs (i.e., work ethic and job involvement) that are cited by hiring managers as being some of the most relevant characteristics they look for in new hires, this study aimed to advance science in both theoretical and practical ways.

**Study 1: Work Ethic as a Predictor of Employee Turnover**

Employee turnover impacts all organizations. Voluntary employee turnover has been identified as a concern due to its potential for a negative effect on an organization’s bottom line (Chen, Ployhart, Cooper-Thomas, Anderson, & Bliese, 2011; Shaw, Gupta, & Delery, 2005). Areas affected by turnover and that have organization wide impacts include
future revenue growth of an organization and overall profitability (Baron, Hannan, & Burton, 2001; Glebbeek & Bax, 2004). Additionally, turnover rates also have a direct impact on job specific performance at the individual level, including a decrease in customer satisfaction and on the job productivity (Huselid, 1995; Koys, 2001).

Employee turnover is consistently viewed as a negative impact for an organization’s bottom-line (Hennes, Leone, & Miller, 2008). Furthermore, previous research has found this type of turnover, voluntary turnover, impacts organizations both in productivity and monetary cost (Clark, 2008; Hennes et al., 2008; O’Reiley, 2008). Sexton, McMurtrey, Michalopoulos, and Smith (2004) argue that turnover in the U.S., is costly to organization both from an employee productivity standpoint as well as the direct replacement cost of the employee who has terminated. That is, high employee turnover is likely to decrease overall productivity and negatively impact a company’s bottom line. For example, the U.S. Department of Labor has estimated, the cost of attracting, hiring, and training for a new position is likely to cost the organization up to 30% of the individual’s salary (Bureau of Labor, 2012). Therefore, when a productive individual leaves an organization voluntarily, the organization is forced to take on the cost of replacing and training a new employee, the time lost while recruiting and selecting a new employee, and any disruption in customer relationships the turnover may have caused. A loss of production is likely to happen because new employees are less experienced and in turn less productive.

To combat turnover issues, one approach has been to make changes in an individual’s work environment. As suggested by Schneider’s (1987) attraction-selection-attrition (ASA) theory, social and cultural forces are driving factors in organizations that
create a homogenous environment for personalities, competencies, values, and interests (Schneider, Goldstein, & Smith, 1995). Based on ASA theory, individuals are attracted to organizations that align to their own thoughts and interests. When organizations select individuals, they look for an alignment of organizational goals, consistent with the individual’s goals. If this alignment is correct, then employee’s will likely stay with the organization because of the “fit” of supported interests. Issues arise, if the employee and organization are not aligned when comparing the work the individual does against their own goals and interests, and the employee may choose to leave the organization due this misalignment.

Increasing job satisfaction for employees is well documented in research. For example, one important predictor of turnover is job satisfaction (Griffeth, Hom, & Gaertner, 2000); however, differing research has found environmental factors, rather than individual factors (i.e., characteristics of the job), as predictors of job satisfaction (Staw, Bell, & Clausen, 1986). Retaining high-performing employees is important for a variety of factors, performance, profit, etc.; however, another line of focus should include whether some individuals are more aligned to quitting behaviors, compared to others, regardless of the working environment. On the opposite side of the coin, research needs to consider whether some individuals are predisposed to be more likely to stay despite harsh working conditions or lower job satisfaction (Zimmerman, 2008). Historically, research has found that individual differences (i.e., personality traits such as impulsivity) should affect turnover (Mobley, Griffeth, Hand, & Meglino, 1979). Similarly, Steers and Mowday (1981) suggested individual differentiators (i.e., individual attributes/values) are antecedents to turnover; one such individual difference construct may be work ethic.
Depending on the reason, employee turnover may demonstrate positive effects on an organization and in some instances increase profits and positively influence organizational goals. As suggested by Dalton and Todor (1982), the common assumption is individuals who leave an organization are likely to be poor performers and with this turnover, allows the organization to reassess and hire more effective replacements. Therefore, turnover is evaluated as functional to an organization when poor performers leave, and dysfunctional to an organization when good performers leave. However, these classifications of turnover are predicated on being able to define the performance of an individual before they leave, and it may be difficult to assess performance of individuals who leave within a short time frame (i.e., within the first 45 days) of being hired.

To determine the length of tenure for an entry level fast food employee one focus group and two stakeholder interviews were conducted with current subject matter experts in the field. The researcher conducted both the focus group and stakeholder interviews. The focus group consisted of four senior level operators in the fast food industry and the stakeholder interviews included two hospitality assessment consultants. All senior level operators had been in the industry and their current jobs for five or more years and had direct contact with the position being surveyed. In addition, the hospitality assessment consultants had previously worked directly in the fast food industry and had been in the current consultant position for at least three years. The consensus between the focus group and stakeholder interviews, on average, found an entry level fast food employee would take three weeks to become proficient in their job. During those three weeks a minimum of five shifts that lasted at least four hours each would be required for training and learning.
procedures. To become proficient in an entry level fast food job, the consensus was 21 days to become proficient.

In addition to determining the length of time for proficiency, current industry standards suggest that a great amount of staff turnover can happen within the first 45 days of employment. According to the Wynhurst Group in a SHRM presentation, “22% of staff turnover occurs in the first 45 days of employment” (2007). Furthermore, the quoted cost to replace an employee who quits can “range between $3,000 and $18,000” (Llarena, 2013). Specifically, for the entry level fast food restaurant in this study, to train a new entry level employee costs, on average, $2,200 (Cost analysis completed by organization used in proposed study, 2013). The current entry level employee who leaves the organization before 45 days costs the organization in multiple ways: (1) Higher overhead costs for hiring and training a new employee and (2) decrease in organizational citizenship behaviors that maintain a loyal customer base. That is, those individuals who stay longer at the company are more productive (due to job knowledge and increase team work) and in turn increase the sales bottom line (Focus Groups with current SEMs in the organization).

Based on the findings from the focus group and stakeholder interviews, new employees take approximately 21 days to become proficient in their job responsibilities (assuming they meet the training requirements laid out by the focus group). Additionally, industry standards suggest turnover typically occurs within the first 45 days of a new employee start date. Combining all the information, the proposed study evaluated employee turnover after 45 days.

The cost of turnover is high and while, practically, personality tests have the potential to screen out or prevent turnover, there has been few studies done to evaluate
such behavior. It is expected that certain work ethic dimensions will be related to quitting behaviors, based on theory. For example, in the fast food industry, evaluating length of tenure will vary as it is common for high turnover in the industry as a whole. Fast food work often serves as a source of employment for individuals between careers or while individuals are seeking a preferred employment opportunity. Due to the transient nature of individuals in the fast food industry, retention is important. For example, if an employee stays with an organization for a minimum of forty-five days, the organization is likely to receive benefits from the tenured employee (i.e., the skills they use for daily work). Therefore, dimensions of work ethic should be antecedents of an employee’s decision to turnover within their first forty-five days of employment. That is, individuals with high scores on dimensions of self-reliance and leisure may be more likely to turnover than those employees who are low in those dimensions of work ethic. Furthermore, those individuals high in delay of gratification, centrality of work, and morality/ethics dimensions may remain longer at an organization than those who are low in these dimensions. Further dimension information and hypotheses are discussed below. See Figure 1 for a model of proposed hypotheses.

Employees in entry level jobs may typically leave for reasons such as: lacking consistent self-control, choosing not to show up to work when scheduled, not working well as a team player, and having personality conflicts with other employees or customers. Many of these behaviors, such as being a bad team player, may be a manifestation of the work ethic sub-dimension self-reliance. For example, self-reliance refers to “striving for independence in one’s daily work” (Miller et al., 2002, p. 5). According to Van Ness et al. (2010) self-reliance becomes important for those who need to make a mark in their careers,
often those who are new to job roles, and have more to prove; compared to those individuals who have created more robust credentials and don’t need to rely on themselves, as their status speaks to their ability. That is, self-reliance may aid in boosting an employee’s outward demeanor, relay a higher sense of worth for the individual being observed, and promote individuality of the employee. In addition, workers who are self-reliant are more likely to exhibit high levels of self-expression, more capable of working independently, prefer high levels of responsibility, and being able to make decisions (VanNess et al., 2010). As an entry level fast employee, responsibilities may be more focused on being a team player and following direction. There would be little room for self-expression and having the opportunity to make influential decisions. Therefore, a person who considers themselves highly self-reliant would be more likely to leave an organization or be fired under the pretense of having a bad attitude or not being a team player.

_Hypothesis 1:_ Self-reliance will be positively related to turnover.

The leisure dimension focuses on “pro-leisure attitudes and beliefs in the importance of non-work activities” (Miller et al., 2002, p. 5). Previous theoretical research on leisure evolved around work being a human requirement to produce goods and services in turn for a paycheck; whereas, personal fulfillment comes from leisure activities. Leisure activities allow an individual to have a choice regarding the use their time and allow pursuit of activities of interest, including pursuits in innovation and creative. When viewed in this context, the fewer hours spent working means the more leisure time a person has; this dichotomizes work and leisure putting them at opposite ends of the spectrum (Buchholz, 1978). Therefore, an individual who is highly motivated to seek leisure
activities would be less inclined to want to work compared to an individual who has a low interest in leisure activities. That is, someone who identifies with a leisure orientation would be negatively related to someone who identifies with a strong work ethic (Miller et al., 2002). Employees who are more interested in leisure activities are more likely to avoid work or skip work than to find enjoyment in work and more likely to leave. Therefore, a person who considers themselves high in leisure would be more likely to leave an organization or be fired for not showing up to work or showing up late to work.

_Hypothesis 2:_ Leisure will be positively related to turnover.

Delay of gratification is defined as the “ability to forgo short-term rewards in order to reap some benefit in the future” (Miller et al., 2002, p. 5). That is, maintaining a chosen course of action, such as high levels of self-control, while abandoning the prospective of instant gratification (Reynolds & Schiffbauer, 2005). Therefore, employees who are less likely to make impulsive choices are less likely to leave a current job without a plan (Maertz & Campion, 2004). Previous research in adolescents found that delay of gratification and the ability to self-regulate emotions, in regards to impulsive choices, were correlated with a lack of self-control in other areas of individual’s life. For example, these individuals showed lower achievement levels and often had substance abuse issues (Wulfert, Block, Santa Ana, Rodriguez, & Colsman, 2002). In addition, people who make spontaneous decisions have more problems with planning and impulse-control. Finally, those who are tend to impulsively quit are a key subgroup when explaining models of turnover (Clark & Watson, 1999; Eysenck, 1997). Therefore, those on the opposite end of the spectrum, with the ability to delay gratification are more likely to see the benefits of maintaining longer-term employment. For example, individuals in an entry level job who
maintain tenure over longer periods of time are likely to be considered for promotions within the organization, whereas those low in delay of gratification may be more inclined to quit their job for a job they feel would give them more instant gratification.

*Hypothesis 3:* Delay of gratification will be negatively related to turnover.

Centrality of work refers to the “belief in work for work’s sake and the importance of work” (Miller et al., 2002, p. 5). Centrality of work cuts to the heart of the PWE, “forgoing a need for compensation, rather focusing on one’s own self-identification” (Hirschfeld & Field, 2000). Furthermore, social identity theory is rampant in the literature, explaining the relation around how people identify with specific social situations; however, there is less research on individual identification processes, and in particular how one’s centrality of work influences behavior (Ashforth & Mael, 1989). Those high in centrality of work identify with their job responsibilities, and furthermore see work as an integral part of their life (Diefendorff, Brown, Kamin, & Lord, 2002). That is, individuals with higher in centrality of work will rate work as more important than other activities in their life, compared to individuals who identify with low levels of centrality of work. There is also a general consensus, in the research, that centrality of work is a more stable work attitude. That is, centrality of work, within a person, is less likely to be affected by shifting conditions within the work environment (Hirschfeld & Feild, 2000). Individual with high levels of centrality of work are interested in creating and building relationships that can be mutually beneficial; therefore, those with high levels of centrality of work lend more credence to work principals, such as having a psychological contract. The very definition of centrality at work, suggests work is one of the most important roles in and individual’s life. That is, if work is valued above all else, individuals would be more willing to invest
in work through networking and mutual relationship building and therefore less likely to leave (Grant & Wade-Benzoni, 2009). The opposite end of the spectrum suggests, people with low centrality of work, will attach less value to work and less likely to produce additional effort to their work (Grant & Wade-Benzoni, 2009). As a consequence, those low in centrality of work maybe be more willing to leave an organization. While no research has looked at actual turnover, a recent study found centrality of work had a strong negative relationship with turnover intentions (−.27; Meriac, Woehr, Gorman, & Thomas, 2012), suggesting those higher in centrality of work are less likely to leave their job.

Hypothesis 4: Centrality of work will be negatively related to turnover.

Morality and ethics are another dimension of work ethic. For the purpose of this study morality and ethics are being used interchangeably and are defined, in a broad sense, around how people should act or are expected to act. Furthermore, morality and ethics, taken in the context of work ethic, are represented by a believing in an honest and just existence in one’s work (Miller et al., 2002; Van Ness et al., 2010). In regards to centrality of work, people with a high morality/ethics may be focused on relationship building with their organization and therefore, may feel they have a psychological contract with their employer. If a person has intentions towards turnover, the may be more inclined to ask themselves if they owe or have obligations toward their organization, and include this as part of their turnover decision process (Zimmerman, 2008). The reciprocal nature of a psychological contract between an employee and the organization may be seen as the organization giving the employee an opportunity and the employee may feel the need to return that agreement by remaining with the company. In addition, those who score higher in the morality/ethics dimension may be more inclined to believe that sticking with an
organization is good regardless of a poor environment and that multiple jobs is a related to a sign of poor character (Maertz & Griffeth, 2004). Since remaining true to one’s beliefs is important for those with high levels of morality/ethics they may be less likely to leave an organization.

_Hypothesis 5:_ Morality/ethics will be negatively related to turnover.

In accordance with Abelson’s (1987) model, turnover can be classified as being employee voluntary or employee involuntary and organizational acceptable or organizational unacceptable (See Figure 1). While previous turnover research focused on whether employees voluntarily or involuntarily left an organization (Bluedorn, 1978; Price, 1977), this classification excludes the differences between those employees who leave an organizations for avoidable reasons (e.g., better pay, better working conditions, and better management), and those employees who voluntarily leave due to organizational unavoidable reasons (e.g., moving due to another spouse or staying home to take care of family). The Abelson (1987) categorization also delineates differences between those who are organizationally avoidable, employee involuntary (those who are fired or laid off) and those who are organizationally unavoidable, employee involuntary (death or medical leave). Based on Abelson’s model (1987) the reasons people leave are categorized into the four groups: avoidable-voluntary turnover, avoidable-involuntary turnover, unavoidable-voluntary turnover, and unavoidable-involuntary turnover.

Based on Abelson’s research (1987), if an employee leaves a company for reasons outside of their control, the attitudes of these people are marketable different than those who leave an organization due to avoidable reasons (i.e., better work environment elsewhere). That is they are more similar to individuals who stay at the company. The
general consensus is that unavoidable turnover will be less affected by individual differences, and for the purpose of this study those individuals would have been removed (had there been any in the sample who turned over) as it could make results less interpretable (Barrick & Zimmerman, 2005). Previous research has concluded that, when measuring turnover, it is more beneficial to parse out avoidable vs unavoidable for criterion testing (Hom & Griffeth, 1995). To account for these differences the research questions (and supplemental analysis) focused on those who have organizationally avoidable turnover, and are either likely to voluntarily leave the organization (Research Question 1) or who are likely to involuntarily leave the organization or be fired (Research Question 2).

Research Question 1: Are individuals more likely to turnover in the avoidable voluntary turnover group if they have high levels of self-reliance and high levels of leisure (i.e., is avoidable turnover positively related to self-reliance and leisure) or low levels of delay of gratification, centrality of work, and morality/ethics (i.e., is avoidable turnover negatively related to delay of gratification, centrality of work, and morality/ethics)?

Research Question 2: Are individuals more likely to turnover in the avoidable involuntary turnover group if they have high levels of self-reliance and leisure or low levels of delay of gratification, centrality of work, or morality/ethics (i.e., is avoidable turnover negatively related to delay of gratification, centrality of work, and morality/ethics)?
Study 1 Method

Participants

A power analysis was conducted to determine the number of employees needed. For the proposed study, based on a small effect size and power of 0.80, data were collected from 203 entry level employees who have just been hired at 25 pizza fast food restaurants located along the east coast. All restaurants are part of a single franchise. Multivariate outliers for the work ethic scales were examined and dealt with on a case-by-case basis using Mahalanobis distances ($D^2$). Data was collected for 203 individuals; however, two cases were removed based on multivariate outliers and lack of variance. The final sample for Study 1 consisted of 201 individuals, of which 32 had left or been fired from the organization within the first six months.

Participants were entry level employees who were hired in a fast food restaurant. The restaurants were quick service type restaurants along the east coast. New employees were sampled from 40 different stores across four North American states (Maryland, Virginia, North Caroline and South Caroline). No store had more than 10 employees sampled, however there were more store locations in Maryland and North Carolina and the majority of employees surveyed were based from these two states. A comparison of work ethic dimension scores aggregated at the state level showed no significant differences in scoring profiles for new employees across the four states. Descriptive statistics and correlations among the study 1 variables are presented in Table 3 and Table 4.

Procedures

To account for different hiring dates, employees were enrolled on a rolling basis into Study 1. Employees completed their onboarding paperwork on their first day and
were then individually followed for their first 45 days of employment (or until they turned over if before the first 45 days). This allowed for continuous enrollment over the course of Study 1 (i.e., December 2016 through May 2017).

When individuals were hired and completed their on-boarding paperwork (i.e., these are brand new employees) during their first day of work, the study measures were included in their new hire packet. Participants had the option to complete the measures while filling out their company paperwork, online or take a paper version home and complete them later. A stamped return addressed envelope was included to mail the completed measures back to the researcher directly at a university mailbox. All envelopes were addressed to the Work Ethic Study at the University of Missouri. A separate mailbox was set up in the psychology department for the Work Ethic Study to ensure that questionnaires were received by the researcher. Participants were instructed after completion of the measures to include a signed copy of the informed consent, the completed measures (both were stapled together), seal the envelope and return via the US postal service.

The following written instructions were given to the participant:

*Please read all instructions before completing the survey. You are being asked to take part in a study looking at examining attitudes towards work. Your organization is working with the University of Missouri- St. Louis to help understand why some individuals perform better at work, and why some individuals are more likely to leave their job. The following survey WILL NOT affect your current employment and is NOT a requirement for your job. This is an optional survey and the researchers at the University*
of Missouri-St. Louis will be the only people to see your individual responses. Your manager will not see your survey answers.

Please read each question carefully and give your honest rating. Once you have completed the survey please fold and place in the attached stamped return addressed envelope. Please drop in a mailbox or give to your local postmaster for delivery. Your time and effort is greatly appreciated!

Step 1: Read the Informed Consent Document. You have two copies of an informed consent. One is yours to keep; the second will be mailed back to us.

Step 2: If you agree to participate: Please Sign & Print your name on both of the Informed Consent Documents. The informed consent attached to the survey will be mailed with the survey. Please leave these stapled together.

Step 3: Complete the survey questions.

Step 4: Place survey with the stapled informed consent in envelope and seal the envelope.

Step 5: Place in the mail.

Step 6: If you have any questions or concerns please contact Work Ethic Study at (workethicstudy@gmail.com).

All study materials including informed consent forms were shipped to the individual fast food restaurant. Prior to handing out any measures, all managers were given the same briefing and written instructions by the researcher. This briefing and written instructions for the study included the following: (1) an explanation of the current study taking place, (2) instructions on handing out the measures with the on-boarding paperwork, (3) possible questions from the employee, (4) instructions on when an employee quits the organization; how to report that information back to the researcher, and (5) contact information for the
researcher, and (6) IRB paperwork for the Manager to complete. (Please see Appendix for a copy of instructions).

Participation in this study was not revealed to the organization; however, the research team used the employee’s name to compare to a list of employees who were terminated at the end of the study, as provided by the manager to the research team. The company was not provided names of who completed the initial measures, but because the research team had access to the employee name, the responses were not anonymous. Participants were given the measures when they were given the on-boarding paperwork. They were given the option to complete the measures while doing their paperwork or informed they could take the measures home and complete them off site in a paper or online format. Either way, the employee was responsible for dropping the measures in the mail after completion. Once the measures were completed participants mailed back in a stamped return addressed envelope.

When any employee quit or was fired, managers were asked to submit online termination data over an online questionnaire. Managers filled out the employee name, store number, and date of termination. Forced choice checkboxes and instructions required the manager to pick an option for the reason for termination (See Appendix D). In addition, an explanation box was included if further information needs to be provided (please see Appendix for online form format and manager instructions).

The research team matched the online manager termination forms with measures returned from new employees. An individual’s name was attached to the IRB documentation which was mailed back with the questionnaires. In the case of individuals having the same name, a store number was also included on the questionnaire for
identification purposes. Store numbers were on the paperwork when the measures arrived at stores. An individual’s name and store number was used to match their responses with their turnover information provided through an online tool (see Appendix) the manager completed.

Data were manually entered from the measures by the research team and ten percent of data were double entered to check for accuracy. In return for participation the organization received aggregate data on turnover for their organization. Aggregate data included summary information only and no individual results were given to the organization.

**Measures**

**Demographics.** Demographic information was collected, including age, gender, race, and store location.

**Work Ethic.** The MWEP-SF (Meriac et al., 2013) was used to measure the seven dimensions of work ethic. Responses were measured on a 1-7 Likert-type scale ranging from Strongly Disagree to Strongly Agree. The scale has 28 items, in random order. The seven dimensions are self-reliance, morality/ethics, leisure, hard work, centrality of work, wasted time, and delay of gratification. The MWEP-SF has historically gone through psychometric validation. Internal consistency for the sub dimensions for Study 1 were: self-reliance (.83), morality/ethics (.83), leisure (.86), hard work (.85), centrality of work (.90), wasted time (.81), and delay of gratification (.83). The leisure scale was not reverse coded for the individual analyses; however, before combining the leisure dimension into the overall MWEP dimension, the leisure dimension was reverse coded to align directions with the other six dimensions.
**Social Desirability.** Five questions were asked to check for socially desirable answers. These True/False questions have been adapted from the Crowne-Marlowe Social Desirability scale. Reliability for study 1 was $\alpha = .69$. Social desirability was used as a control variable in the analysis. See Tables 5-7, Model 2 for results.

**Turnover.** Each individual was hired and was followed for their first 45 days of employment. In line with Abelson’s (1987) model, data were coded in terms of whether the turnover was employee voluntary or employee involuntary and organization avoidable or organization unavoidable. The three turnover categories for this study were: (1) employees who stayed with the organization, (2) employees who left for involuntary, avoidable reasons, and (3) employees who left for voluntary, avoidable reasons. To verify termination reason, managers entered into an online, forced-choice form the primary reason for termination (see Appendix for form). Some of the reasons employees who turned over due to avoidable-voluntary group included: better job, better working conditions elsewhere, problems with management, better organization to work for elsewhere; while, reasons for turnover in the avoidable-involuntary category include: abusive language, failure to perform the job, job abandonment, and policy violation.

After data were coded into the above listed categories, it was determined the sample size was too small to run the hypothesized analysis for individuals that turned over within the first 45 days. The original hypotheses were to examine how many individuals made it to their 45th day of employment; however, due to low turnover, only 9 individuals quit or were fired in their first 45 days. Of the total, cleaned sample ($N = 201$), 32 individuals (16%, days ranged 13 – 162 days, average 72 days tenure, mode 17 days tenure) left the organization within the six months turnover data was collected. To account for the small
sample of turnover, logistic regression was run on the entire sample that turned over and hypotheses were tested against the full sample of individuals who turned over. Additional, supplemental analyses (for the research questions) were conducted based on the smaller sub-samples of individuals who were terminated (N = 6) and who left for voluntary, avoidable reasons (N = 26) during the 6 month period data was collected; however, due to the small sample sizes for the avoidable and unavoidable turnover groups, these were considered preliminary analysis to answer the research questions and results are addressed in the discussion.

**Study 1 Results**

Logistic regression analysis was used to test the five hypotheses for Study 1. Due to the nature of the entry level job, all employees will turnover at one point or another. Rather, the aim of Study 1 was to examine if a company hiring these entry level employees will be able to recoup the cost of training and outfitting an entry level employee before they leave. To test the individual contribution of each of the five predictors, the likelihood-ratios, Wald test, and odds ratios are reported in Table 5.

Specifically, turnover was regressed on each of the seven MWEP dimensions. As a group, the seven dimensions accounted for 9% of the variance in turnover (Model 1, Table 5). To account for social desirability in responses, a second model (Model 2, Table 5) was run, controlling for social desirability in the first block. This increased the overall variance accounted for by the seven dimensions of work ethic to 10%. Neither Model 1 or Model 2, with the seven dimensions combined, were significant predictors of turnover; however, three of the seven dimensions (self-reliance, morality/ethics, and leisure)
approached significance in Model 1 and two (self-reliance and morality/ethics) approached significance in Model 2.

Individual logistic regression analysis and relative weights analysis were performed for each dimension due to the multicollinearity among the MWEP dimensions (Models 3 – 9). Multicollinearity was established based on the combined evidence of large bivariate correlations between dimensions of work ethic (see Table 2), variance inflation factor (VIF) statistics greater than 2.5 and Tolerance greater than .40 (Allison, 1999). The dimensions with the strongest relationship were the four MWEP dimensions: morality/ethics, centrality of work, hard work and wasted time. To understand the effects each dimension had on the models, additional relative weights analyses (RWA) were conducted based on Tonidandel and LeBreton’s (2010) methodology for RWA in logistic regression. The purpose of evaluating relative importance for each of the seven work ethic predictors was to identify the contribution each work ethic variable made to the total variance in turnover, when both the individual work ethic dimension is considered by itself and in conjunction with the other six dimensions (Johnson & LeBreton, 2004). Results for the raw relative weights, rescaled relative weights, and confidence intervals are reported for Models 1 and 2 in Tables 5, 6 and 7.

Results of the individual logistics regression analyses indicated that morality/ethics was approaching significance and negatively related to turnover ($\beta = -.45$, $p = .07$, Nagelkerke $R^2 = .03$). The RWA for morality/ethics was not significant, however did account for the largest amount of accounted variance in the overall $R^2$ (28%) for Model 1. This suggests that new employees who place a higher value on morality/ethics were less likely to turnover. No other individual relationships were significant or approaching
significant. These results suggest potential support for Hypothesis 5, that morality/ethics would be negatively related to turnover. Based on the overall turnover analysis, no other hypotheses (H1 – H4) were supported.

To better understand the nature of the relationship between work ethic and turnover, supplemental analyses were conducted to answer the research questions. A second logistic regression was run using a smaller sample (N = 195), comparing only those employees who voluntarily left the organization (compared to those who remained at the organization). Results can be found in Table 6.

Specifically, voluntary avoidable turnover was regressed on each of the seven MWEP dimensions. As a group, the seven dimensions accounted for 12% of the variance in turnover (Model 1, Table 6). To account for social desirability in responses, a second model (Model 2, Table 6) was run, controlling for social desirability in the first block. This increased the overall variance accounted for by the seven dimensions of work ethic to 13%. Both Model 1 and Model 2, with the seven dimensions combined, were approaching significance for predicting voluntary, avoidable turnover. Further, two of the seven dimensions, self-reliance (β = .98, p < .05) and leisure (β = -.49, p < .05), were significant in Model 1 and self-reliance (β = 1.03, p < .05) remained significant when social desirability was controlled for in Model 2. The RWAs for self-reliance and leisure were not significant; however, for self-reliance the RWA did account for the largest amount of accounted variance in the overall R² (38%) for Model 1 and Model 2. Taking into consideration the turnover sample only included those individuals who were deemed avoidable turnover, the above results suggest support for Hypothesis 1, that self-reliance is positively related to turnover. A second finding in Model 1, is the significant negative
relationship between leisure and turnover. While significant, the leisure result was in the opposite direction hypothesized, suggesting as individuals leisure score increase the likelihood of avoidable turnover decreases. Implications of higher leisure scores can be found in the discussion.

The final logistic regression was run using the involuntary sample of turnover. A large caveat of this secondary analysis was the extremely small sample of involuntary turnover subjects. With only 6 out of the 175 sample that were fired, the following should be interpreted cautiously. A smaller sample (N = 175), which compared those who stayed against those who were left involuntarily can be found in Table 7. Specifically, involuntary turnover was regressed on each of the seven MWEP dimensions. As a group, the seven dimensions accounted for 24% of the variance in turnover (Model 1, Table 6). To account for social desirability in responses, a second model (Model 2, Table 6) was run, controlling for social desirability in the first block. This decreased the overall variance accounted for by the seven dimensions of work ethic to 3%. Both Model 1 and Model 2, with the seven dimensions combined, were not significant for predicting involuntary turnover; however, morality/ethics (β = -2.19, p < .05) was significant in Model 1 and remained significant when social desirability was controlled for in Model 2 (β = -2.34, p < .05). Taking into consideration the turnover sample only included those individuals who were deemed involuntary turnover, the above results suggest support for Hypothesis 5, that morality/ethics is negatively related to turnover.

Results of the individual analyses for the 7 MWEP dimension regressed onto involuntary turnover indicated that morality/ethics remained significant and negatively related to turnover (β = -.91, p < .05, Nagelkerke R² = .08). The RWA for morality/ethics
was not significant, however, morality/ethics did account for a largest amount of variance in the overall $R^2$ (34%) for Model 2, when social desirability was controlled. This potentially suggests that new employees who place a higher value on morality/ethics were less likely to be fired, accounting for 8% of the involuntary turnover variance. No other individual relationships in the involuntary analysis were significant or approaching significant. These results, despite the small sample size, continue to suggest potential support that morality/ethics would be negatively related to turnover.

**Study 1 Discussion**

Previous meta-analytic research has found that individual differences impact turnover behaviors; however, research has focused on broad level personality traits, such as the Big Five personality factors or work ethic as a unidimensional trait (Zimmerman, 2008). Previous research has not, before now, examined the relationship between dimensions of work ethic and actual turnover.

The fast food industry is marked by an environment that is fast-paced and requires team work for task completion. This environment may be too much for some individuals to handle; leading to employees self-selecting out or being terminated. The loss to organizations, due to employee turnover, can include direct replacement costs, lost productivity, and loss of corporate profits. It is estimated that turnover can cost up to 30% of a new hire’s salary to replace a person (Sexton et al., 2004). By identifying dispositional traits that may reduce short-term turnover in employees, organizations may be able to retain employees longer, reaping greater benefit for the organization.

The current study found that, despite a small sample size for turnover, there are clear implications for predicting specific types of turnover based on dimensions of work
ethic. For example, both self-reliance and morality and ethics showed potentially support for predictors of overall turnover in organizations. Further, when the sample was broken down into avoidable turnover, self-reliance was a significant predictor of organizational leavers. A clear call out is the need for further examination of self-reliance (e.g., with a larger sample size) in turnover research, as those individuals who scored higher were more likely to leave the organization within the first 6 months of tenure. This potentially suggests, individuals in a fast paced, fast food environment who prefer to rely on themselves rather than a team are more prone to leave the organization faster and organizations would benefit from potentially evaluating individuals for self-reliance as a screen out criteria in the selection process for low level, team oriented type job roles.

A second finding was the relationship between leisure and avoidable turnover in entry level positions. While it was initially hypothesized that leisure would be positively related to turnover, the opposite was actually found. Individuals who were more aligned to higher levels of leisure were also less likely to leave an organization for avoidable reasons (i.e., better working conditions or problems with management). The impact of this result could mean that individuals in entry level type jobs, while valuing having leisure time are more capable at distinguishing and separating between their leisure time and their work. That is, due to the nature of entry level work, an individual can easily separate their tasks at work with what they do outside of work. As task responsibility and job complexity increase, work-life balance may be harder to attain as you are capable of taking work home with you and not leaving work at the office. In the context of entry level fast food jobs, this is not the case. Once you leave work, your job responsibilities are completed until your next shift. Therefore, you are more able to separate and potentially enjoy your leisure
time, while not equating one (i.e., your job) with the other (i.e., your leisure). This could potentially explain why, in this sample, we found a negative relationship between avoidable turnover and leisure disposition.

A third finding was the significant relationship between morality/ethics and involuntary turnover. While not initially hypothesized at an involuntary level, this finding supports the assumption that individual with a higher orientation towards morality/ethics are less likely to be fired from an organization. The sample size for the analysis was extremely small; however, the results are in line with historic research on morality and ethics (Maertz & Griffeth, 2004; Zimmerman, 2008) and research on work ethic dimensions and counterproductive behaviors (Meriac & Gorman, 2017). Research between dimensions of conscientiousness and work ethic dimensions also supports the preliminary evidence found in this study. Christopher, Zabel, and Jones (2008) found strong relationships between dutifulness and morality/ethics, whereas both constructs involve showing restraint in and individual’s dealings and environment. This evidence bolsters the use of dimensions of work ethic, specifically morality/ethics as part of the wider nomological net of constructs that can be used a potential selection criteria for identification of turnover (i.e., getting fired).

A limitation of study 1 was the multicollinearity of the work ethic variables, morality/ethics, centrality of work, hard work and wasted time. The correlational relationships between these four variables were significant and had both variance inflation factor (VIF) statistics greater than 2.5 and Tolerance greater than .40 (Allison, 1999). Multicollinearity is an issue because it can increase the variance of the coefficient estimates, make it difficult to understand which variables are influencing the overall $R^2$. 
and can potentially make regression estimates sensitive to any minor changes made in the analysis. For study 1, relative weights analyses were run to account for which constructs were contributing the most to the change in $R^2$ and provide additional evidence and support for the findings (Tonidandel & LeBreton, 2010). Across all three logistic regressions analyses, none of the predictors’ raw weights were relevant, which suggested further testing with a larger sample would be important to confirm the work ethic – turnover relationships.

A second limitation for study 1 was the restriction of range in responses. In Study 1, employees had to first be hired into the organization. During the recruitment phase, some applicants were not hired into the organization and this study has no information on that pool of individuals. Next, employees were given the option to complete the measures. As this research was conducted voluntarily, we do not have information on individuals who did not complete Study 1 paperwork. Therefore, results may have been different had all individuals who applied been hired into the organization and had all employee’s been required to complete the measures on hire.

The majority of applicant and employees working in entry-level work would not consider this type of role a career. All employees will eventually leave their job, either leaving their current organization for another type of work, moving up within the organization, or retiring. One contribution of this study was to examine the likelihood of predicting short term turnover (i.e., 45 days) in entry level workers. Research has shown turning over prematurely results in a great loss due to the recruitment, selection, training, and other costs associated with hiring and onboarding a new employee.
While the benefit of Study 1 incorporates dimensions of work ethic and its prediction of turnover, due to limitations with the sample size there were not enough individuals who turned over at the 45 day mark, to investigate this claim. This limitation could be due to a variety of factors, including but not limited to the economic conditions on the east coast, lack of job opportunities available to individuals and/or potential career paths available during the winter/spring of 2016/2017, and management level turnover within the organization. In the spring of 2016 a new Director of Operations took control and began evaluating management capabilities; higher than normal turnover took place during 2016 at a management level, potentially influencing individuals to stay at the organization to see if the “grass became greener” with new management in place.

**Study 2: Work Ethic as a Predictor of Performance Outcomes**

Another major concern for those in the fast food industry is a profit margin that is determined by the measurement and weight of each customer’s order. Employee performance is vital, particularly with such small profit margins. Work ethic, in addition to identifying turnover, may help to identify high performers within entry level positions. Individual attributes and values such as the dimensions of work ethic are viable antecedents to explaining performance. While research has shown some direct relationships between work ethic dimensions and performance outcomes, there may be additional explanatory mechanisms that can help interpret why dimensions of work ethic are predictors of performance. In the case of entry level employees, job involvement may help to explain the relationships between work ethic and performance outcomes (See Figure 2 for model).

**Job Involvement**
The development of the job involvement construct has led to some confusion over how it should be defined and measured (Kanungo, 1979; Paullay, Alliger, & Stone-Romero, 1994). Originally introduced by Lodahl and Kejner (1965), job involvement was conceptualized as “the degree to which a person has identified psychologically with his job, or the importance of his job in his total self-image”, and as the result of how “work performance affects a person’s self-esteem” (pp. 24-25). Due to the dual nature of the original construct definition it was difficult to operationalize (Brown, 1996).

Almost fifteen years after the introduction of job involvement, Kanungo (1979) helped align the conceptualization of job involvement as a unidimensional construct. Kanungo argued that a clear, concise objective definition of job involvement did not exist. Further, the multiple definitions from previous research left understanding of job involvement difficult. To reach clarity Kanungo, redefined job involvement to include only the cognitive identification with the job (1982b). Therefore, the concept that job involvement was the same as job performance (and could be measured as such) was abandoned.

Research generally utilizes the job involvement definition by Kanungo (1982b). Other examples of defining job involvement included conceptualization as the person’s ego involvement at work (Parasuraman, 1982), a general state of cognitive identification with one’s job (Elloy, Everett, & Flynn, 1992), and being cognitively preoccupied with one’s job (Paullay, Alliger, and Stone-Romero, 1994). The general consensus of these definitions lies in the “cognitive identification” an individual has with their job. Therefore, for the purpose of this study job involvement is defined as the psychological identification an individual has with the type of job that he or she is doing
Work activities consume large parts of a person’s life. The effect work has on people can be motivating and engaging or, in opposite, mentally and emotionally hazardous. An individual’s quality of life can be greatly affected by their degree of involvement or alienation in their job (Brown, 1996). Involvement implies a positive engagement experience in the individual’s job, and alienation implies loss of individuality between the individual and the job (e.g., Argyris, 1964; Kanungo, 1982b; McGregor, 1960; Brown, 1996). Previous research considered the idea of “job involvement and job alienation to be polar opposites” (Kanungo 1979; 1982b). Therefore, it is important to clearly define and measure the construct of job involvement, as well as identify those variables that may influence job involvement and in turn, be affected by job involvement.

**Work Ethic and Job Involvement**

Job involvement and work ethic have, historically, overlapped (Brown, 1996; Rabinowitz & Hall, 1977). However, the difference between job involvement and work ethic are very distinct. Work ethic, as defined in this study, has nothing to do with the psychological identification with one’s job; rather, work ethic is much broader and references an individual’s work disposition across any work they do, including development of oneself. In this case, it is possible for an individual to have a strong work ethic and believe in the importance of work, but at the same time not necessarily identify with the particular job they currently hold. The two concepts are related but both are not required as antecedents of performance.
Kanungo (1979; 1982b) suggested that work ethic, in general, refers to an individual’s standard regard for the importance of work in their life. At the individual level, a person attaches the appropriate level of significance work has in their own life. Therefore, work ethic is viewed as an individual’s own response to their life experiences and how that has influenced their identification with work. This cognitive identification will be derived from both social and cultural influences and individuals is exposed to throughout their life. That is, an individual will base their work value on their past experiences (i.e., cultural, familial, and societal trainings). In other words, development of work ethic in an individual’s early years has the opportunity to create a belief that work can be both good and central to one’s life (i.e., work ethic) and becomes part of the individual throughout their working career (Elloy & Terpening, 1992; Kanungo, 1982b).

Job involvement, alternatively, represents an individual's beliefs that a specific job may or may not have the potential to meet their current needs. Therefore, a job represents a specific category of work, and due to both current needs and long term needs for fulfillment at work, there should be a positive relationship between work ethic and job involvement (Elloy & Terpening, 1992; Kanungo, 1979). Therefore, as an individual’s degree of work ethic increases, so should their degree of job involvement.

While theoretical linkages of work ethic as an antecedent to job involvement have been proposed, little research has empirically examined the multivariate relationships between dimensions of work ethic and work outcomes through job involvement. The majority of work ethic research has focused on unidimensional or incomplete work ethic definitions. The MWEP validation studies examined the correlations between the individual dimensions of work ethic and job involvement and found significant positive
relationships between six of the seven dimensions defined in the MWEP: centrality of work, delay of gratification, hard work, leisure, self-reliance, and wasted time. There was not a significant relationship between morality/ethics and job involvement (Meriac, et al., 2012; Miller et al., 2002). Furthermore, of the seven dimensions of work ethic, four of the dimensions were found not to have a direct relationship with performance outcomes. That is, hard work, centrality of work, and wasted time were not directly related to overall performance (Miller et al., 2002). One possible reason for a lack of evidence for hard work, centrality of work, and wasted time not having a direct relationship with performance is that there is an indirect effect (e.g., job involvement) which better explains how these dimensions of work ethic effect performance. Alternately, this relationship between work ethic dimensions and performance may hold in this specific occupation/setting, the performance criteria in previous research could have measurement problems, or the dimensions of work ethic may be more predictive of contextual performance.

Centrality of work focuses on the “belief that work is central to a persons’ existence” (Miller et al., 2002). Therefore if work is central to one’s own beliefs, then an individual will want to work for work sake. Due to the broad nature of centrality of work, previous research has not found a direct relationship between centrality of work and performance outcomes (Miller et al., 2002); however, of all the dimensions of work ethic, the most closely related dimension to the mediating mechanism of job involvement is centrality of work. The original job involvement construct definition created by Lodal and Kejner (1965) included the definition of centrality of work; however, the job involvement definition has been narrowed down and the differences between the two constructs made
more definitive. That is, centrality of work is a broader concept, referencing perceived work in context of life careers and job involvement is specific in the job and timeframe a person is in right now (Diefendorff et al., 2002; Fortner, Crouter, & McHale, 2004). As a result, centrality of work and job and work involvement are distinct constructs (Paullay et al., 1994). Previous research has found a significant positive relationship between centrality of work and job involvement in organizational settings ($r = .41$; Miller et al., 2002).

The hard work dimension is the belief that hard work will lead to success. Individuals who are high in this dimension may have a stronger sense of guilt when they believe they are not working as hard as they should. In addition, individuals high in hard work are likely to have strong internal feelings surrounding the value of hard work. These feelings may manifest in a focus that allows the individual to maintain levels of hard work despite stressful working conditions that may occur in the fast pace restaurant industry (Brockner, Grover, & Blonder, 1988). That is, the hard work dimension does not suggest that hard work means working hard, rather that hard work leads to future success. One laboratory study included individuals with differing levels of work ethic and had those individuals performed a task under different conditions. That is, they either received negative feedback, positive feedback or no feedback on their performance. (Greenberg, 1977). Results found the biggest differences occurred in the negative feedback condition. Those individuals identifying with high levels of in work ethic generally worked harder than those who identified as low in work ethic. To those high in work ethic, the negative message may have implied a failure to meet the experimenter's request to work hard. Those high in work ethic may have coped with the stress by increasing their efforts on the
further task, increasing their output and outperforming their low work ethic counterparts. This behavior would be consistent with high work ethic individuals’ ambition and interest in hard work, and thus these people are more likely to be job involved than persons with lower levels of hard work (Merens & Garrett, 1975; Mirels & Garrett, 1971; Shamir, 1986). While the belief in hard work may not directly affect performance, it seems to affect the amount of job involvement a person has, which in turn may affect the level of performance. Previous research has found hard work to have a correlation ($r = .46$) with job involvement in an organizational setting (Miller et al., 2002).

Finally, wasted time is concerned with “attitudes and beliefs reflecting active and productive use of time” (Miller et al., 2002, p.349). If employees are enthusiastic about their job and related tasks, the implication is that the individual would be highly involved in their job (Allport, 1943), and in turn see their own performance as an example of their own self-worth (Gurin, Veroff, & Feld, 1960). Taken in context, the wasted time construct impacts job involvement because the beliefs reflecting productivity and efficiency will engender the employee to the job; and therefore has a vital role in increasing job involvement (Khan, Jam, Akbar, Khan, & Hijazi, 2011). Previous research has found that those high in work ethic were significantly more likely to spend time on repetitive tasks and were more productive on those tasks when compared to those low in work ethic (Merrens & Garrett, 1975). In the above mentioned laboratory experiment by Greenberg (1977), participants with varying work ethic received one of three feedback conditions (i.e., none, positive, negative) before performing a task based on their historical task performance in the experiment. Individuals in the low work ethic condition became discouraged by the negative feedback and accepted the failure by reducing their efforts.
That is, those low in work ethic were not overly concerned with the failure, because they already lack ambition and had less emphasis on the value of exerting effort to achieve success. Wasted time has been found to have a significant positive relationship with job involvement in previous research \( r = .34; \) Miller et al., 2002.

In general, employees with a high work ethic are more likely to put in their share of work and find contentment in a job well done. An individual with a strong work ethic may even be motivated to apply effort at work even when they become bored, tired, or stressed, and more likely to accept responsibility for their work. A high work ethic employee is more likely to feel obligated to perform at their best, and be prone to a sense of guilt if they are not working to the maximal ability. These circumstances can lead an individual to be more job involved rather than suggesting an individual has low work ethic (Cohen, A, 1999). Shamir (1986) argued that the expectation is a positive attitude affects the specific job, but that if an individual is predisposed to higher values of work in general, this will directly affect the attitude towards the job, which in turn influences direct job involvement.

**Hypothesis 6:** The work ethic dimensions of (a) hard work, (b) centrality of work, and (c) wasted time will be positively related to job involvement.

**Job Involvement and Performance**

Previous research has concluded that personality variables may be primary predictors of elements of motivation (Schmidt, Cortina, Ingerick, & Weichmann, 2003). That is, “traits are stable consistencies in expressive or stylistic behavior that affect the expression of motives” (Spangler, House, & Palrecha, 2004, p.252). A motive, such as job involvement, may then affect the outcome, in this case job performance (Latham, 2012). In this study, dimensions of work ethic influence job involvement; however, work ethic is
often categorized as a distal predictor of behavior. Therefore, dimensions of work ethic should best be viewed as antecedents of behavior; in addition, they should be considered in terms of indirect effects, (i.e., job involvement) in explaining their effects on behavioral outcomes at work, (i.e., job performance).

Although antecedent relationships with job involvement have been established, it is less clear what relationships connect job involvement to job behaviors and outcomes. While job involvement has been linked with outcomes such as being committed to one’s employer, increased job satisfaction, heightened work effort, reduced absenteeism, and reduced turnover, there has been less evidence of work performance relationships (Blau & Boal, 1989; Chen & Chiu, 2009; Diefendorff, Brown, Kamin, & Lord, 2002). In fact, a previous meta-analysis on job involvement does suggests smaller relationships between job involvement and performance relationships. Brown (1996) found a correlation of only .084 (corrected for unreliability) in 18 studies focused on the relationship between job involvement and performance relationships. Brown (1996) meta-analysis had two major short-comings: (1) the job involvement relationship was examined only with an overall job performance construct, (i.e., a unidimensional performance construct) and (2) he combined multiple measures of job involvement outside the specifically defined job involvement construct in this study. By examining dimensions of performance with a more precisely measured job involvement construct, this could give a clearer picture of how individuals choose to invest themselves into varying types of performance.

Historically, performance has been conceptualized as the quality and/or quantity of an employee's work product (Campbell, 1990). More recently, organizations have begun to take a multi-dimensional view of job performance including measuring task
performance, as well as citizenship behaviors, and workplace deviance (Borman & Motowidlo, 1993). An operational definition of job performance allows researchers to effectively measure the impact of on the job performance. In this case, job performance is defined as the value an organization receives based on individual behaviors completed by a person over a set timeframe (Motowidlo, 2003). In order to better understand job performance, researchers have created a multitude of ways to evaluate performance. Some may argue that “the number of job performance dimensions is as infinite as the number of discrete jobs around the world” (Viswesvaran, Schmidt, & Ones, 2005); however, there is not final agreed upon set of job performance dimensions. Currently, job performance is defined by dimensions levels of performance that can vary by specificity of the behavior observed and defined (Viswesvaran, Schmidt, & Ones, 2005). For this study, those job performance dimensions include: task performance, OCBs, and workplace deviance.

**Task Performance and Job Involvement.** To create a more holistic yet objective structure to evaluate job performance, Borman and Motowidlo (1993) created two performance dimensions: task performance and contextual performance. To differentiate between the two dimensions, task performance was defined as activities that “directly transform raw materials into the goods and services that are the organization’s products” (Borman & Motowidlo, 1993, p. 72). For example, task performance includes activities that allow the organization to function effectively and efficiently through planning, coordinating, and supervising (Borman & Motowidlo, 1993).

From a theoretical point of view, one possible mechanism to explain why job involvement and work performance are related is social exchange theory. Social exchange theory come from Homans (1961) and Blau (1968) and “focuses on the exchange of
activity, tangible or intangible, and more or less rewarding or costly, between at least two people” (Homans, 1961, p. 13). Continued exchange of benefits between two individuals is likely a case of reciprocity, (i.e., receiving a benefit incurs the indebtedness of the receiving party and must then be reciprocated thorough another exchange; Blau, 1968; Gouldner, 1960). Therefore, the “cycle of indebtedness and repayment would continue the social exchange relationship and increase the commitments felt by the parties involved; however, habitual non-reciprocation would weaken the relationship” (Blau, 1968, p.70).

Previous research supports job involvement as a precursor to organizational commitment (Cohen, 1999). For example, those with high levels of job involvement may come from positive job experiences, and the individual returns the gratuity in the form of work back to the organization (Kanungo, 1979; Witt, 1993). In a manner of speaking, if an employee receives benefits from the organization, there would be reciprocity from the employee in a form of higher job involvement (Rotenberry & Moberg, 2007). Cohen asserted that “to the extent that positive experiences are attributed to the efforts of organizational officials, these are reciprocated with increased affective organizational commitment to the persons who caused them” (1999, p. 292). This logic may have applications for the proposed study.

That is, employees who describe high levels of job involvement might reciprocate in the form of increased in-role performance and OCB, as well as, decreased workplace deviance.

Previous empirical research examining the relationship between job involvement and task performance has found positive significant relationships. In the Diefendorff et al., (2002) study a student population was recruited with the requirement that they had their current work supervisor fill out a performance review. The reported relationship was positive and significant between job involvement and in-role performance ($r = .19$). A
second study examining the job involvement – in-role performance relationship in a large home healthcare company across the United States found a significant relationship ($r = .15$). A third study, surveying full-time university faculty members found a positive correlation ($r = .30$) between job involvement and in-role performance. In addition, they found that job involvement had a significant relationship with job performance even when taking into account the variance from OCBs (Chughtai, 2008).

**Hypothesis 7:** Job involvement will be positively related to task performance.

**Organizational Citizenship Behavior and Job Involvement.** Contextual performance, differs from task performance, in that the impact to organizational effectiveness is not limited to specific behaviors but can include any context including psychological, social, and organizational and beyond (Borman & Motowidlo, 1993). Some examples of contextual behaviors include carrying out work that is valuable to the organization, maintaining emotional stability in the work environment (removing hostile or emotionally charged conflicts), and creating trust between colleagues (Borman & Motowidlo, 1993). Individuals can also contribute to work by taking actions that affect the organization’s bottom line. For example, an individual that helps others, perform their tasks, and efficiently uses company resources will contribute to their work.

A related construct to contextual performance was provided by Organ (1988) who described “OCB as individual behavior that is discretionary, not directly recognized by formal rewards systems, and that aggregates to promote the effective functioning of the organization” (p.4). A more recent conceptualization of contextual performance defined OCB as behaviors that supports organizational task performance through “maintenance and enhancement of the social and psychological context” (Organ, 1997, p.86). Current
research supports delineating task and OCB performance (Hoffman, Blair, Meriac, & Woehr, 2007).

OCBs provide context to improve organizational efficiency and effectiveness by providing resource allocation, agility, and creativeness for employees (Organ, 1988). A study completed with 40 undergraduate students, found that work ethic was positively related to task performance on a repetitive administrative task in a lab study (Merrens & Garrett, 1975). Greenberg (1977) studied college students performing repetitive tasks. In the Greenberg study, results showed that students with self-reported work ethic performed at higher levels even when they were told the opposite; however, those with lower levels of work ethic cut back their effort when told of their poor performance. Furthermore, even when students with high work ethic, could have reduced effort and depended on co-worker support, they maintained high levels of performance (Greenberg, 1977). The implications for job involvement and OCB might be that individuals with higher levels of work ethic will continue to engage in positive behaviors that benefit the organization, regardless of poor treatment or poor performance evaluations.

The more proximal mediating mechanism of job involvement can further help to explain how work ethic relates to OCB. As part of the definition of job involvement, the cognitive implication of one’s relationship to work can affect a variety of other factors influencing work. For example, an employee’s motivation and the corresponding effort put into their job, and other defined antecedents, such as job satisfaction (Holmes & Srivastava, 2002; Diefendorff et al.2002). Extrapolating from previous research it follows that job involvement has the potential to affect OCB in the work place. Previous observational research has found individuals who identified with high levels of job
involvement were more independent and self-confident, and that taking this research one step further could suggest that the internal satisfaction one receives from being involved in their job could produce higher levels of job performance that comes in the form of increased OCB (Wood, 1974).

Evidence from empirical research suggests a strong relationship between job involvement and OCB (Cohen, 1999; Diefendorff et al., 2002; Rotenberry & Moberg, 2007). All three studies showed there was a relationship between an individual’s commitment to the job and the likelihood of exhibiting substantial OCB. In one study, a group of nurses from an Israeli hospital, found having positive job involvement increased the amount of OCB (Cohen, 1999). Diefendorff et al. (2002) identified the relationship between job involvement and sub-dimensions of OCB including, altruism, civic virtue, sportsmanship, and conscientiousness. Finally, Rotenberry and Moberg (2007) found that with a more specifically defined job involvement construct there were significant relationships between job involvement and OCB – I ($r = .32$) and OCB – O ($r = .13$).

Hypothesis 8: Job Involvement will be positively related to OCB.

Workplace Deviance and Job Involvement. Workplace deviance is defined as “voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its member, or both” (Robinson & Bennett, 1995, p. 556). The three specific components identified by Robinson and Bennett (1995) in describing what comprises workplace deviance are; (1) voluntary and motivate behaviors, (2) violations of norms defined by the dominant culture of the organization and (3) deviation from norms violating and organization or individuals.
Workplace deviance can start in the workplace through unfair or poor working conditions. These may lead to disparity between what the employee thinks is lacking and what was expected and the requisite negative emotional reaction to the disparity (Bordia, Restubog & Tang, 2008; Robinson & Bennett, 1995). There are a wide variety of reasons why employees may engage in workplace deviance ranging from “perceived injustice and dissatisfaction to thrill-seeking” (Bennett & Robinson, 2000). Despite the reasons why employees may engage in deviance behavior, when demonstrated, it happens in the workplace. Therefore, the act of deviance is constrained by the work environment (i.e., the situation) they are in and which will be most feasible or least costly due to the situation (Robinson & Bennett, 1997).

As noted earlier, workplace deviance encompasses a wide variety of behaviors. Using a theoretical framework to explain groups of deviant behaviors, Bennett and Robinson (1995) created a two-factor self-reported measure. The two scales reflected the organizational deviance and the interpersonal deviance theoretical framework. Within these two dimensions, deviant behaviors could be classified as either minor or serious depending on the level of violation.

The theoretical typology created assesses serious organizational deviance as Property Deviance, which includes sabotaging equipment, accepting kickbacks, and stealing from the company. Minor organization deviances, termed Production Deviances, include leaving early, taking excessive breaks and wasting resources. Serious interpersonal deviances are considered Personal Aggressions, and include sexual harassment, verbal abuse and stealing from peers. The fourth category is the minor interpersonal deviance
behaviors, considered Political Deviances. These include showing favoritism, gossiping, blaming co-workers and competing non-beneficially (Robinson & Bennett, 1995).

Concerns for reporting behaviors that are counterintuitive to the workplace norms are a major concern in research that takes place with employees. However, previous results suggest that large numbers of employees have completed the self-report workplace deviance scale and were willing to admit engaging in socially unacceptable behaviors (Bennet & Robinson, 1995; Gruys & Sackett, 2003).

Workplace deviance has implications for both practice and theory. While job performance has been defined with many sub-dimensions, one key dimension includes workplace deviance (Rotundo & Sackett, 2002). In addition, research on workplace deviance adds additional linkage to overall performance and a broader scope to understanding the relationship between different types of performance. Workplace deviance has been identified as being typical within organizations and can lead to expensive consequences (Bennett & Robinson, 2000). Understanding and identifying antecedents of workplace deviance can help organizations by taking actions before deviant behaviors manifest.

The importance of measuring workplace deviance cannot be overlooked. One study showed that “90% of all employees had committed at least one type of interpersonal workplace deviance (e.g., mocking a colleague) or organizational deviance (e.g., using business material for one’s personal use) in the last 6 months” (Rioux, Roberge, Brunet, Savoie, & Courcy, 2005). Another survey found that one third of respondents had observed verbally harassing behaviors in their work environment (Björkqvist, Österman, & Hjelt-Back, 1994).
The majority of research has focused on the Big 5 personality traits as antecedents of workplace deviance (Berry, Ones, & Sackett, 2007; Colbert, Mount, Harter, Witt, & Barrick, 2004). Little to no research currently exists looking at the relationship between the motivational construct of job involvement and workplace deviance. However, job involvement appears to theoretically align with both organizational and interpersonal deviance behavior. Previous meta-analytic research on job involvement has focused on the negative relationships between absenteeism ($r = -0.20$) and turnover intentions ($r = -0.38$; Brown, 1996). Both absenteeism and turnover intentions are considerably similar to minor workplace deviances against the organization (i.e., production deviances), including: leaving early, taking excessive breaks, and wasting resources.

Furthermore, no research has examined the effects of job involvement with minor interpersonal workplace deviance (i.e., political deviances - showing favoritism, gossiping, blaming co-workers and competing non-beneficially; Robinson & Bennett, 1995). While there is no empirical evidence to support workplace deviance relationships with job involvement, employees with high job involvement have been shown to be more independent and self-confident. Moreover, employees are more likely to perform their job tasks in line with their organizations requirements and rules, but also in line with their manager’s perception of how likely they are to perform in their job (Wood, 1974). Therefore, those high in job involvement would be less likely to show favoritism, gossip, or blame others.

**Hypothesis 9:** Job Involvement will be negatively related to (a) Production Deviance and (b) Political Deviance.

**Work Ethic and Performance.**
The distinction between task and contextual aspects of performance is important when differentiating between dimensions of work ethic. Whereas, some aspects of work ethic should not have a direct relationship to task performance, they may likely have a direct effect on the contextual aspect of performance. Because OCBs are often deemed non-compulsory, and cannot be demanded by the employer to fulfill job requirements, employees may perform or withhold OCBs in the workplace. From a manager’s point-of-view, OCBs can provide additional employee effort that impacts the bottom line of the organization, both in effectiveness and efficiency. Examples of OCBs in entry level work could include: additional onboarding help of new employee, outside of task specific roles, and supporting employees who are sick or absent through filling in at work.

One work ethic dimension that may have a direct impact on OCBs is delay of gratification. Delay of gratification reflects the “ability to forgo short-term rewards in order to reap some benefit in the future” (Joy & Witt, 1992, p. 298). For example, an individual with high delayed gratification is more likely to stick to a course of action and not be distracted by outside forces; all while focusing on the future and delaying reception of rewards (Reynolds & Schiffbauer, 2005). In the Greenberg (1977) repetitive clerical tasks, the experiment looked at how college student reacted when told they had subpar performance compared to their colleagues; however, their colleagues high status levels would make them look good despite differences in performance efforts. Those who identified as having higher PWE, despite poor performance feedback, continued to perform at high levels; this is in spite of still being successful based on their colleague’s perceived status. Those identifying as having low levels of PWE were found to cut back in their performance efforts when told they would still be successful because of their colleague’s
perceived status. Based on this experiment, extrapolating the relationship between PWE and OCB could lead to individuals with higher levels of delay of gratification are more likely to engage in OCBs that are productive to the organization, despite receiving treatment that is unfair or receiving subpar performance evaluations, because of insight to future rewards. Another study involving students found a positive relationship between student OCB and delay of gratification ($r = .12$; Meriac, 2012). Previous research could explain the underlying rationale for a relationship between delay of gratification and OCB. That is, a person willing to delay gratification may have a strong sense of duty. This enforces behaviors that lead a person to resist temptations that are for personal gain only (Jones, 1995).

*Hypothesis 10*: Delay of gratification will be positively related to OCB.

Typically, large correlations are found between individual differences (i.e., personality traits) and employee behavior, based in grounded theory. For example, personality influences individual’s reaction to their environment and situations (Colbert et al., 2004). In this study, the leisure dimension of work ethic focuses on attitudes and beliefs that are positively focused on leisure, especially the importance of activities associated with leisure outside of the work context. Previous theoretical research on leisure evolved around work being a human necessity to produce goods and services that enable a person to earn money; whereas, human fulfillment was found in leisure activities, where one had a choice regarding the use their time to pursue activities of interest to them. Leisure activities allow a person to invest their time in activities that allow them to follow creative pursuits. Therefore, the fewer hours one spends working the more leisure time they have available; putting work and leisure as opposite of each other (Buchholz, 1978). It is then assumed,
that an individual who is more interested in leisure activities will receive fewer benefits from work (Miller et al., 2002).

If spending more hours at work is viewed as an unfavorable situation, those who have a higher pro-leisure orientation may react more negatively towards their job. Employees who are more interested in leisure activities are more likely to avoid work or skip work than to find enjoyment in work and more likely to leave early or arrive late. In addition, those individuals who are more focused on leisure activities are more likely to engage in behaviors that would allow them more time for creative pursuits, such as: making personal calls on company time, taking excessive breaks, calling in sick when they are not, or avoiding work duties while on the clock. Therefore, a person who considers themselves high in leisure would be more likely to engage in deviant behavior that is reflected against the organization (i.e., production deviances).

_Hypothesis 11_: Leisure will be positively related to Production Deviance.

As previously discussed in Study 1, the morality/ethics dimension of work ethic is combined to describe the “belief in a just and moral existence” (Miller et al., 2002, p.11). While the other dimensions of work ethic function as predictors of workplace deviance through job involvement, the morality/ethics dimension has less to do with the cognitive identification of one’s specific job; rather, an individual perception of the goodness and morality of work will function as a predictor of workplace deviance and not supervisor reported performance outcomes. This is supported by previous research that shows a small, non-significant relationship \( r = .12 \) between job involvement and the morality/ethics dimension and the lack of predictive validity of the morality/ethics dimension on supervisor performance appraisals \( \beta = -.01, p = .99; \) Miller et al., 2002).
The PWE theory suggests that to be good, one must persevere regardless of the environment they are in (Blau & Ryan, 1997). This value implies that engaging in deviant behavior at work, such as gossiping or stealing, is morally reprehensible and indicative of weak character. Maintaining consistency with values instills in individuals the belief that they have done what is right (Maertz & Griffith, 2004). Thus, maintaining consistency with a “moral and ethical existence” constitutes a need to avoid deviant behavior.

In addition, theorists have argued that moral judgment is composed of idealism, which has a similar definition to the morality/ethics dimension of work ethic. Individuals high in idealism believe that “desirable consequences can, with the ‘right’ action, always be obtained” (Forsyth, 1980, p. 176) and feel that it is always possible to avoid harming others (Forsyth, 1992). Research has found individuals who are high in idealism are more likely to produce caring and helpful behaviors (Forsyth et al., 1988). In addition, idealism is also negatively related to social dominance (Griffith & Wilson, 2003) and Machiavellianism (McHoskey and Hicks, 1999). Henle (2005) argued that “because workplace deviance involves ethically questionable activities, employees will vary in their decision to engage in it as a function of differences in their personal ethical ideology” (p. 220). As expected, the Henle (2005) study found that idealists were less likely to engage in deviance regardless if it impacts other individuals or organizational entities.

**Hypothesis 12:** Morality/ethics will be negatively related to (a) Production Deviance and (b) Political Deviance.

**Study 2 Method**

**Participants**
Participants in study 2 included 252 entry level employees from a national franchise fast food pizza chain restaurant across the east coast (i.e., the same organization as study 1). The average tenure for the employee population was between 7-12 months in entry level positions. Fifty-seven percent (143) of subjects were female, the average age ranged between 18-22 years old, and 51% (127) were Caucasian [34% (85) African American, .4% (1) Asian, 3.2% (8) Hispanic/Latin American, 9.2% (23) other, and 2.8% (7) chose not to respond]. Employees were sampled from 40 different stores across four North American states (Maryland, Virginia, North Carolina and South Carolina). No store had more than 10 employees sampled, however there were more store locations in Maryland and North Carolina and the majority of employee responses were based from these two states. A comparison of scores aggregated at the state level showed no significant differences in scoring profiles for either performance appraisal data (task and OCB) or employee data (all other constructs measured) across the four states. Descriptive information for Study 2 can be found in Table 8.

Study 2 included current employees (i.e., were already hired at the time of data collection) and data were collected from October to December in 2016. Study 2 measures were distributed to all employees and performance appraisal data were collected from managers before Study 1 measures to avoid confusion as to who had completed different measures. Therefore, cross-sectional data for Study 2 were collected first, and the longitudinal data collection for Study 1 began (only for new employees) second. Employees for Study 1 and Study 2 did not overlap. Managers did not complete performance appraisals for any employee in the turnover study (i.e., Study 1) as Study 2 was completed before Study 1 recruitment began.
The Satorra-Saris approach was taken to determine the number of participants needed to test the null hypothesis using SEM (Satorra & Sarris, 1985); for a total of 300 employees needed. Current employees (incumbents) were asked to complete work ethic, job involvement, and workplace deviance measures (See scales below). Employees were given the optional measures to complete and had the choice to complete them during company time or to take them home and complete at a later time. Included with the paper questionnaires was a stamped return addressed envelope to mail the completed questionnaire directly back to the researcher.

The following written instructions were given to the participant:

Please read all instructions before completing the survey. You are being asked to take part in a study looking at examining attitudes towards work. Your organization is working with the University of Missouri- St. Louis to help understand why some individuals perform better at work, and why some individuals are more likely to leave their job.

The following survey WILL NOT affect your current employment and is NOT a requirement for your job. This is an optional survey and the researchers at the University of Missouri- St. Louis will be the only people to see your individual responses. Managers will not have access to your individual responses. Please read each question carefully and give your honest rating. Once you have completed the survey please fold and place in the attached stamped return addressed envelope. Once you have sealed the envelope please sign the back of the envelope over the seal. This way the researchers can verify that no one else has accessed your answer.
Please drop in a mailbox or give to your local postmaster for delivery. Your time and effort is greatly appreciated!

Step 1: Read the Informed Consent Document. You have two copies of an informed consent. One is yours to keep; the second will be mailed back to us.

Step 2: If you agree to participate: Please Sign & Print your name on both of the Informed Consent Documents. The informed consent attached to the survey will be mailed with the survey. Please leave these stapled together.

Step 3: Complete the survey questions.

Step 4: Place survey in envelope and seal the envelope.

Step 5: Place in the mail.

Step 6: If you have any questions or concerns please contact the Work Ethic Study at (workethicstudy@gmail.com).

In addition to employee measures, direct line managing supervisors were asked to complete performance measures (OCB and task performance) for all incumbents that directly reported to them (See Appendix for all items). By completing performance appraisals for all employees, the manager was not notified which employee completed a questionnaire. For those employees who did not provide responses ($N = 378$), the subsequent performance appraisal data were not used in this study (i.e., it was removed from analysis). Whether intentionally or not, if the employee did not participate in the study, they were acknowledging that they did not want their performance data included, and the researcher removed from further analysis.

The performance appraisal form was completed online by each manager and asked for employee name being evaluated and store number. The online form was completed
during company time. The performance rating was marked as being used for research purposes and came back to the research team. Names and store locations were used to match performance records with individual questionnaires that were returned, by the research team. Store numbers were collected in case of duplicate names.

**Procedures**

All measures and informed consent forms were shipped, either electronically or through the mail, to the individual store location. Prior to handing out any measures, all managers were given the same briefing and written instructions by the researcher. This briefing and written instructions for the study included the following: (1) an explanation of the current study taking place, (2) instructions on handing out the questionnaires, (3) possible questions from the employee, (4) information on how to complete the manager performance appraisal for all current hourly employees, (5) contact information for the researcher, and (6) Manager IRB paperwork (Please see Appendix for a copy of instructions).

**Measures**

All scale items can be found in the Appendix.

**Demographics.** Age, race, gender, and tenure with the organization were collected. In addition, for managers, how long they have known the individual they are rating was collected. See Table 8 for results.

**Social Desirability.** Social desirability was measured using the same scale as study 1. Five questions were asked to check for socially desirable answers. Further, social desirability was controlled for in one of the comparison models below. These True/False
questions have been adapted from the Crowne-Marlowe Social Desirability scale. Historic reliability has been found to range from .52 to .77. Reliability for study 2 was $\alpha = .45$.

**Job Involvement.** As a result of the original multi-dimensional conceptualization of job involvement, the comparison of definitions for the theoretical versus operational definitions is vastly different for the Lodahl and Kejner 20-item scale (Morrow, 1983). To account for this, researchers have shortened the Lodahl and Kejner (1965) scale to only represent a single dimension of job involvement (i.e., psychological identification; Lawler & Hall, 1970). The shortened 6-item scale eliminates dimensions that related to performance and self-esteem. This should help to reduce redundancy that has been found in other studies. Internal consistency for the overall construct was $\alpha = .78$.

**Work Ethic.** The Multidimensional Work Ethic Profile (MWEP; Meriac et al., 2013) was used to measure the seven dimensions of work ethic by self-report. This is the same measure used in Study 1. Internal consistency for the overall construct was $\alpha = .76$, and for the second order dimensions were self-reliance ($\alpha = .70$), morality and ethics ($\alpha = .73$), leisure ($\alpha = .74$), centrality of work ($\alpha = .84$), hard work ($\alpha = .88$), wasted time ($\alpha = .78$), and delay of gratification ($\alpha = .74$). The leisure scale was not reverse coded for the individual analyses; however, before combining the leisure dimension into the overall MWEP dimension, the leisure dimension was reverse coded to align directions with the other six dimensions.

**Task Performance.** Given task performance activities can vary across different types of jobs, and specifically for this study, the organization does not measure performance for entry level employees, a generic task related performance scale was used. To measure in-role performance items were selected and adapted from both Tsui, Pearce, Porter, and Tripoli
(1997) and Greenhaus, Parasuraman, and Wormley (1990). Eleven items were used to assess in-role performance; six items focus on the quality, quantity and efficiency of employees: “the employee’s efficiency is higher than average.” An additional 5 items measure core related task behaviors: “employee’s accuracy when performing core job tasks.” The internal consistency for the task performance scale was $\alpha = .94$.

**Workplace Deviance.** The workplace deviance scale was adapted from Bennett and Robinson’s (2000) taxonomy. The questions assessed two dimensions of workplace deviance discussed earlier and were placed at the end of the questionnaire. Example items for the Interpersonal dimensions include: (1) political deviance: “repeated a rumor or gossip about a co-worker or manager at work” and “made an obscene comment at work” and (2) production deviance, “put little effort into your work.” The response scale is based on the following: 1 = never, 2 = several times a year, 3 = monthly, 4 = weekly and 5 = daily. The internal consistency for the overall deviance scale was $\alpha = .70$, production deviance ($\alpha = .65$) and political deviance ($\alpha = .43$). The political deviance scale had very low reliability. Further examination of political deviance suggested removal of three of the items due to lack of consistency between item content (i.e., focused on organization level deviance rather than individual based deviances). Removal of those three items increased the reliability to ($\alpha = .50$). See Appendix for items removed.

**OCB.** OCB was measured with the 9 item scale created by Tsui, Pearce, Porter and Tripoli (1997) and captured by supervisor ratings. The response scale ranged from 1, "strongly disagree," to 7, "strongly agree." The internal consistency for the task performance scale was $\alpha = .97$.

**Study 2 Results**
Performance data

A total of 85 managers completed the online manager performance measures in October 2016 through May 2017. Each manager provided appraisals for between one and 15 employees. A total of 630 employee performance appraisals were completed. Of those 630 there were a total of 23 duplicate responses for individuals (based on employee name, manager name, and store number). The 23 duplicates were removed, for a final performance appraisal sample of 607 employee appraisals completed.

Of the final 607 performance appraisals, 252 were matched to individual employee’s based on name and store location. Of the matched sample 41% (103) had worked with their direct manager for 3 months or less. In order to maintain almost half of the sample, an ANOVA with post hoc tests were examined comparing individuals with 3 months or less performance against the remaining sample groups (4-6 months; 7 months to 1 year, 1-2 years, and 2+ years) to determine any significant differences in performance ratings. There were no significant differences in ratings between those with 3 months or less experience and other employees who had been with the company up to 1 year. Significant differences in performance only appeared for employees who had been with the organization for beyond 1 year. Due to the majority of the sample (82.5%, 207) being below 1 year tenure and that employees in this specific role can master the job within 45 days, all individuals were retained for analysis.

Measurement Model

Given the large number of scale items, item parcels (composites based on the means of items) were used as indicators for several these scales in the model (i.e., job involvement, task performance, OCB performance, political deviance, and production
deviance). The rationale for this approach was (1) the complexity of the model (i.e. using parcels will allow building replicable models based on solid and meaningful indicators of core constructs that can be reproduced across samples and studies (Little et al., 2002)), (2) the psychometric properties of the model, such as a higher level of reliability, and (3) the hypothesized interactions (i.e. hypotheses were based at highest level of the latent variables, therefore the theoretical rationale matched the structural model). Previous research supports this approach to parceling. That is, composite-level indicators have been shown to produce easier to understand and potentially more meaningful results compared to an approach that used a large numbers of individual items (e.g., Gibbons & Hocevar, 1998; Hall, Snell, & Foust, 1999; Landis, Beal, & Tesluk, 2000). That is, compared with item-level data, models based on parceled data will have fewer parameter estimates leading to (1) more parsimonious fit, (2) fewer opportunities for residuals to correlate, and (3) lead to reductions in various sources of sampling error (MacCallum et al., 1999).

For political deviance, one of the two dimensions of work place deviance, the six items were examined for reliability. Due to low levels of reliability, lack of variance and poor loadings in the confirmatory factor analysis, three of the six were removed from the scale to increase model fit. Upon examination of the three items, all three items had less than 5% of the sample that answered anything other than “never”. The first item (start negative rumors about the company) was the only item focused on the organization rather than deviance against another person and had only one response other than “never. The second item removed (compete in a non-beneficial way) had only six responses other than “never” and the last item removed (blame co-workers for mistakes) had 11 people who responded something other than “never.”
To begin, the two-step structural equation modeling procedure suggested by Anderson and Gerbing (1988) was used. For the first step of the process, the fit of the measurement model was assessed prior to the evaluation of the full structural model (measurement and structural model combined). That is, confirmatory factor analysis (CFA) was used to assess the overall fit of the measurement model, the convergent validity of items on their proposed constructs, and the discriminant validity between the various constructs. The following recommended fit indices were used: (1) the chi square statistic, (2) standardized root mean square residual (SRMR; Hu & Bentler, 1999) (3) comparative fit indices (CFI; Bentler, 1990) and (4) root-mean-square error of approximation (RMSEA; Steiger, 1990). In addition, the Akaike Information Criterion (AIC: Tanaka, 1993) was reported to provide a comparison between non-nested models reported for supplemental analyses. Typically chi-squared fit indices are used as an absolute fit criteria and because it’s highly sensitive to sample size and larger models (i.e., more pathways) will reject anything but near-perfect fit. Change in chi square is also commonly used to compare models in parameter-nested sequences; whereas, information-theoretic criteria, like AIC, are better for testing non-nested models. The AIC is a comparative statistic, and used to compare two models with the lower number implying a better fit.

Conventional rules of thumb were used to examine model-data fit. With a sample size less than 500, the SRMR should be less than .06 (Hu & Bentler, 1999). The CFI value should be greater than .95. RMSEA values of less than .08 indicate relatively good fit and RMSEA values below .05 indicate a close fit between a hypothesized model and observed data (Hu & Bentler, 1999). Using these fit statistics should result in the least sum of Type I and Type II error rates.
The second step of the process was to test the fit of the hypothesized structural model by comparing the hypothesized structural model with and without the paths from the latent products and the criteria variables, as recommended by Matheiu, Tannenbaum, and Salas (1992). To test the hypotheses, a SEM model was run using IBM SPSS Amos 23 and used the procedure outlined by Matheiu et al. (1992). The substantive model includes six latent exogenous variables (hard work, centrality of work, delay of gratification, leisure, wasted time, and morality/ethics) and five latent endogenous variables (job involvement, political deviance, production deviance, OCB, and task performance). While the hypothesized model is the relationship that is theoretically expected, to verify the hypothesized paths are the strongest relationships, additional models were tested and fit statistics are reported in Table 4. The purpose of testing additional models is to show the strongest relationships are found in the hypothesized model. Therefore, in addition to testing the hypothesized model, another model (Model 4) tested was one with direct paths from work ethic variables to performance variables (i.e., no job involvement). Stronger fit statistics for a model with only direct relationships would suggest that job involvement does not strengthen the relationship between work ethic and performance outcomes. Also, models (Models 13-15) with only work ethic variables that have shown to have direct relationships with performance were tested (i.e., centrality of work, hard work, and wasted time; along with job involvement were removed). Stronger fit statistics for this model may suggest that some work ethic variables do not strengthen the relationship with performance. Even if the secondary models are found to be a better fit to the data, these findings would still support examining work ethic at a dimension level, as only certain work ethic-performance relationships would exist. Neither of the secondary models was
hypothesized, as they are used only as comparison models for the theoretically based hypothesized model.

**Analyses**

Descriptive statistics and correlations can be found in Table 8 and Table 9. The measurement model showed acceptable fit ($\chi^2 = 1221.3, p < .001, \text{SRMR} = .06, \text{RMSEA} = .052, \text{CFI} = .91, \text{AIC} = 1495.26$). To test the second step of the Mathieu et al. (1992) procedure Model 1, the hypothesized model, was tested against Model 3, a model with no paths between the latent variables and observed variables. The fit for Model 1 ($\chi^2 = 1610.04, p < .001, \text{SRMR} = .11, \text{RMSEA} = .067, \text{CFI} = .84, \text{AIC} = 1826.04$) had significantly better fit ($\Delta \chi^2 = 94.81, p < .001$) than Model 3 ($\chi^2 = 1704.85, p < .001, \text{SRMR} = .13, \text{RMSEA} = .07, \text{CFI} = .82, \text{AIC} = 1898.85$). While the hypothesized model had better fit than a model with no paths, the best fitting model ($\Delta \chi^2 = 14.83, p < .001$), compared against the hypothesized model and included all endogenous and exogenous variables originally tested was Model 2 ($\chi^2 = 1595.21, p < .001, \text{SRMR} = .11, \text{RMSEA} = .067, \text{CFI} = .84, \text{AIC} = 1813.21$). Model 2 had the best fit of the models tested with all hypothesized exogenous and endogenous variables; however, all of the comparison models (including models where paths were freed and constrained) still failed to reach acceptable fit statistics. Therefore, simplified models (removing exogenous and endogenous variables) that retained some of the hypothesized pathways, were tested.

Three additional configurations of exogenous and endogenous variables (based on hypotheses and theory) were estimated to examine for better model fit, including a model that removed job involvement, centrality of work and hard work. A second model that removed job involvement, centrality of work, hard work, and task performance, and finally
a third model that removed job involvement, centrality of work, hard work, delay of gratification, and task performance. Model statistics for the three additional configurations can be found in Table 10.

To test the hypotheses, the best fitting model that includes the most predicted variables was used. As Model 10 (in Table 10) had acceptable fit and was significantly better than other models tested this was used to evaluate the hypotheses. Standardized path coefficients for each of the models are reported in Figures 3-11.

Hypotheses (6a) hard work, (6b) centrality of work, and (6c) wasted time were expected to have a positive relationship with job involvement; however, the best fitting model (Model 10) removed job involvement from the analysis, therefore hypotheses 6a-6c were not supported. If the hypothesized model (Model 1) containing job involvement had acceptable fit statistics, the relationship between hard work and job involvement ($\beta = .21, p = .10$) would be approaching significance and in the correct direction, potentially lending some supporting for Hypothesis 6a. The relationship between centrality of work and job involvement ($\beta = .36, p < .05$) was significant and in the hypothesized direction, supporting Hypothesis 6b and the relationship between wasted time and job involvement ($\beta = -.07, p = .60$) was non-significant and in the opposite direction hypothesized, not supporting Hypothesis 6c.

Hypotheses 7 and 8 examined the relationship between job involvement and both task and OCB performance, respectively. Again, the best fitting model (Model 10) removed job involvement, therefore not supporting either hypothesis 7 or hypothesis 8; however, had hypothesis 7 been evaluated using the original model, job involvement was positively associated with task performance ($\beta = .03, p = .65$), but non-significant, lacking
support for hypothesis 7 and hypothesis 8, was not significant ($\beta = -.02, p = .78$).

Therefore, a non-significant relationship was found between job involvement and OCB, not lending support for Hypothesis 8.

Hypothesis 9a and 9b examined the relationship between job involvement and workplace deviance. No support was found for 9a and 9b as job involvement was removed from the best fitting model; however, in the original hypothesized model job involvement was found to have significant negative relationships with both (a) production deviance ($\beta = -.21, p < .05$), and (b) Political Deviance ($\beta = -.24, p < .05$).

In the best fitting model (Model 10), there was a direct relationship between wasted time and OCB that was not originally hypothesized. Standardized path coefficients were examined, and the relationship between wasted time and OCB ($\beta = .17, p < .05$) suggested a significant positive relationship. While not hypothesized, wasted time is examined further in the discussion.

For the remaining hypotheses, everything was evaluated only against the best fitting model (Model 10 in Table 10). For hypothesis 10, a direct relationship between delay of gratification and OCB was examined ($\beta = -.09, p = .22$); however, this relationship was not significant and was in a negative direction. Hypothesis 11 examined the relationship between the work ethic dimension leisure and production deviance. Specifically, leisure was found to be significant and positively associated with production deviance ($\beta = .20, p < .05$); supporting hypothesis 11. For hypothesis 12, the relationships between morality/ethics and workplace deviance were examined (i.e., (12a) production deviance and (12b) political deviance). Standardized path coefficients were examined and the relationship between morality/ethics and (a) production deviance ($\beta = -.31, p < .001$)
was significant and (b) political deviance ($\beta = -.45, p < .001$) was significant; both in a negative direction, supporting both hypotheses 12a and 12b.

**Study 2 Discussion**

The present study attempted to clarify the unique effects of work ethic dimensions on job involvement, task performance, OCB, and minor workplace deviance. While the many of the hypotheses were not supported because of the removal of job involvement (hypotheses 6 – 9), there are contributing factors that could have influenced these outcomes. Further, hypotheses 10, 12a and 12b were supported, and wasted time had significant relationships with manager rated performance worth investigating further.

This study investigated the mediating role of job involvement in the relationships between work ethic dimensions (centrality of work, hard work, and wasted time) and work outcomes. By examining dimensions of both work ethic and performance with a more precisely measured job involvement construct, this research examined potential contributing factors that could influence performance. With clearly defined variables, the next step in this research process is to understand and establish relationships within these variables and their relationships with each other. This line of inquiry is important because it develops theory and logical basis for behaviors and actions in our field of study. Thus, to answer this call, this study found that specific work ethic dimensions had stronger influence directly on OCB performance outcomes rather than influencing performance outcomes through job involvement.

The lack of support for job involvement was a limitation of this study and requires further investigation. There may be multiple factors that influenced why job involvement failed to make the final model, including poor manager ratings of task performance and
potentially a lack of relevance for the job involvement construct to this specific sample of entry level employees. One potential explanatory mechanism is that job involvement was actually relevant to some of the individual work ethic relationships, but failed to make the final model because manager-based performance ratings were biased. Job involvement did have significant correlational relationships with six of the seven work ethic dimension (all but leisure); however, the hypothesized model with job involvement had non-significant parameter estimates and failed to achieve acceptable fit with the two manager rated performance dimensions (task and OCB). That is, manager ratings may have potentially been biased. While research-only performance appraisals were collected to reduce potential for other factors affecting rating scores (Jawahar & Williams, 1997), manager rated performance may have still suffered from different types of rating errors, including halo, similarity, and leniency ratings (Murphy & Cleveland, 1995). In this case, managers may have felt nervous to report any kind of negative task behavior for fear that would reflect poorly on their own performance, therefore, may have been lenient in their ratings of individuals. To examine this further skewness of the task performance variable was calculated, and while the task performance variable may have been negatively skewed -.29 (SE = .15), it was still within the acceptable limits (±2; Trochim & Donnelly, 2006; Gravetter & Wallnau, 2014).

Another potential explanation for job involvement is that the job involvement construct was not an appropriate mediating measure for the work ethic – performance relationship. This may have been due to this specific sample, as SEM model fit is relevant to the sample where it was collected. Another potential reason could have been that work ethic variables were better as direct relationships to performance than through a mediating
mechanism. For example, previous research has found significant mediating effects of effort on the job involvement - performance relationship (Brown & Leigh, 1996), which may explain why wasted time had stronger direct relationships with performance than through job involvement.

One finding that was not hypothesized, was the significant relationship between wasted time and OCB. While initially thought a relationship between wasted time and OCB would be strengthened by job involvement, individuals who reported high levels of wasted time had significantly higher direct levels of OCB, not mediated by job involvement. This may be due to individuals who feel obligated to perform at their best or who value using their time in an efficient manner are more inclined to provide discretionary effort to get the job done; even if those tasks required are outside the purview of the written job tasks. For example, supporting team members or efforts in accomplishing a goal, in this case completing a fast food order, may require additional effort outside of just taking cash or just preparing a pizza. Working together and potentially overlapping job tasks and providing that discretionary effort, to make the process more efficient and streamlined, could explain why managers rated those who value being active and productive with their time as a priority.

While previous research has examined the ability of work ethic to predict overall performance (Miller et al., 2002), there was no distinction between what parts of performance were affected. In addition, although research has examined work ethic predicting student OCB and counterproductive behavior in academic performance (Meriac, 2012), data were collected in an academic setting. The relationship between OCB and workplace deviance has many implications. From a theoretical perspective, deviance and
OCB both contribute to overall job performance (Rotundo & Sackett, 2002). Furthermore, research on differing aspects of performance can help to create the nomological network that creates an overall performance dimension. In the case of hypotheses 12a and 12b, there were significant negative relationships between morality/ethics and both political and production deviant type behaviors. While the current study examined minor workplace deviance behaviors, such as gossiping or wasting company time, it’s not a far leap to see the implications for more major workplace deviant behaviors, such as theft or destruction of property.

Previous research has examined distinct dimensions of conscientiousness and their alignment to distinct dimensions of work ethic; for example, being proactive was linked to constructs that measured wasted time, whereas, being inhibitive or dutiful was linked to self-reliance and morality/ethics (Christopher et al., 2008). This type of evidence for the Miller et al. (2002) work ethic dimensions provides discriminant validity; however, with strong negative relationships between those who were higher in morality/ethics and deviant behaviors, future research should look at examining the potential theoretical relationships, discriminant validity and incremental variance between the morality/ethics dimension and other potential individual constructs. For example, dark triad behaviors that have significant relationships with deviance. Future research could expand on the nomological network of behavioral traits, examining if dimensions of work ethic (such as morality/ethics and wasted time) are negatively related to behaviors such as narcissism, psychopathy, and Machiavellianism (Paulhus & Williams, 2002) and further, what potential moderating mechanisms work ethic dimensions could play. Research has found individuals can change behavior through mechanisms of influence or manipulation (Ames,
Future research could examine the potential interaction effects individuals higher in work ethic behaviours play in those interactions.

A limitation to Study 2 is the SEM testing model, which analyzes the data against a specific sample and is not necessarily generalizable the general US population. Previous studies on work ethic have examined college students (e.g., Meriac, 2012; Meriac et al., 2015; VanNess et al., 2010), managers (Miller et al., 2002), college educated professionals (Christopher et al., 2008; VanNess et al., 2010) and US Air Force cadets (Miller et al., 2002). The sample in this study was composed exclusively of entry-level workers in a fast food industry. While this is a representative sample for this specific organization, future data should continue to be collected to examine if these relationships were specific to this organization or if they would potential be relevant to other industries and/or types of employees.

Another key limitation of Study 2 was the size of the sample. A power analysis was conducted, estimating a needed sample of at least 300 people (Satorra & Sarris, 1985). That is, in order to reach the probability of rejecting the null hypothesis given the null is false, would require that a minimum of 300 people to be included in the model testing. While over 300 individual were original in the study, after cleaning the data and matching performance metrics to each employee a final sample of fell short of the 300 required. This may be a key factor in why the hypothesized model failed to reach acceptable model fit. By removing some of the exogenous and endogenous variables, we were able to achieve more parsimonious and acceptable fit with a smaller sample size.

One additional finding to note was a comparison between performance rating data collected from managers. While there were 630 manager responses, the final sample of
data only contained 252 matching employee responses. A comparison of average manager task rated performance for individuals who completed the measures ($M = 5.04$ on a seven point scale, $N = 252$) versus task rated manager performance for those who did not complete any measures ($M = 4.94$ on a seven point scale, $N = 378$) showed no significant differences ($t = -1.045$, $p = .30$). The same comparison was run comparing manager rated OCB. The average manager OCB rated performance for individuals who completed a survey ($M = 4.65$ on a seven point scale, $N = 252$) compared against manager ratings without a matching employee survey (mean = 4.50 on a seven point scale, $N = 378$) was verging on significant ($t = -1.96$, $p = .06$). These results suggest the potential for differences in the responding sample and could have impacted why the hypothesized model did not reach acceptable fit (i.e., restriction of the sample due to voluntary completion of survey). While the finding is not surprising, (i.e., individuals who were willing to go above and beyond their job to complete a survey were those who were rated higher on discretionary effort), this does suggest there was a restriction of range for survey responses for Study 2. As this research was conducted voluntarily, we do not have information on individuals who did not complete Study 2 paperwork (other than the comparison of aggregated performance ratings from managers above). Therefore, results may have been different had all individuals currently employed completed the survey.

This study collected data from employees who are currently employed (i.e., incumbents). As previous research has shown, research completed with personality variables in an incumbent sample may have differing results compared to applicants applying to the same job due to motivation levels. That is, incumbents don’t necessarily have the same level of motivation as applicants applying for a new job. While new applicants are more likely to try to give the “best answer” or answer they think the
organization wants to hear, incumbents are less likely to care how they answer because they already have the job. This could be a reason why we see a decrease in the relationship between work ethic and outcome variables, as exhibited in the poor model fit. Also, while this study breaks down the difference in performance variables, there could be additional performance variables that are affected by work ethic. While this study looks at multiple performance perspectives these are not all-encompassing.

**General Discussion**

The results of study 1 and study 2 provided additional information in the understanding of individual differences and personality on work performance outcomes. This study contributes to job performance, turnover, and their relationships with work ethic dimensions. Additionally, this study addresses how individual dimensions of work ethic had stronger direct relationships with performance outcomes and were not explained through a mediating mechanism (i.e., job involvement).

**Advancing Work Ethic Theory and Implications**

Combining the results of both study 1 and study 2 provide us with more robust profiles of entry level employees in the fast food world. Based on the relationships between dimensions of work ethic and organizational outcomes, these individual have a unique behavioral profile worth investigating. Constructs that are too broad or too transparent may not capture some of the specificity unique to entry level employees (i.e., are some of our broad level constructs too easy to fake to provide variance between individuals applying for entry level jobs?). Specific aspects of work ethic may help to define some of those behavioral parameters to better understand this population in a way that is less transparent. For example, identifying individuals who are more self-reliant, while not
considered a negative trait, may actually have negative implications for entry level employees, depending on their job requirements and the nature of the work they are completing.

Self-reliance in study 1 was a key contributor in identifying people who are more apt to leave their entry level job in the short term (i.e., less than 6 months). As hypothesized, this aligns with previous research that has found individuals who are less inclusive or less likely to be a team player exhibit higher levels of self-expression, more apt to working independently, prefer high levels of responsibility, and are able to make decisions (Taylor & Thompson, 1976; VanNess et al., 2010). Study 2 results support these findings, in that those individuals who were more efficient and productive with their time were more inclined towards discretionary effort, which could play into helping teams and team oriented behaviors. Had work ethic only been examined at a broad construct level, we lose the dimension level definition that allows us examination of the distinct work ethic behaviors and their differing results (i.e., negative relationship between self-reliance and turnover and positive relationship between wasted time and OCB).

Morality/ethics played a significant role in both Study 1 and Study 2 as a predictor for turnover and counterproductive behaviors. There is consistent research on morality/ethics including dimensions such as, morality reasoning, moral development, and ethical decision-making (Bruess & Pearson, 2002, Nill & Schibrowsky, 2005, VanNess et al., 2010) that have found higher levels of morality/ethics type traits play a positive role in career development and career progression; however, historically this research has looked at the increase in morality/ethics as individuals progress upwards in their career. VanNess et al. (2010) examined the morality/ethics dimension between new employees just out of
college to workforce professional employees, and found that morality/ethics was stronger in individuals who were further along in their career.

This study adds to the growing body of research on morality/ethics, in that even in lower level jobs (i.e., jobs not requiring a college degree) morality/ethics predicts pertinent job-related outcomes. Recent research on morality/ethics also found that individuals are more likely to choose and persist on difficult tasks, rather than opting to complete easier tasks (Parkhurst, Fleisher, Skinner, Woehr & Hawthorn-Embree, 2011) and when individuals are left unsupervised, those with higher levels of morality/ethics, have higher levels of task persistence and intensity (Meriac, Thomas, and Milunski, 2015). Taken together, previous research supports the hypothesis that those with higher levels of morality/ethics are more likely to persist in their job (i.e., less likely to turnover).

Another objective of this study was to investigate these relationships at a dimension level to gain understanding of the mechanisms that help explain why dimensions of work ethic are good predictors of work related outcomes for theoretical advancement. While meta-analyses have provided examinations of individual relationships with some of these outcome variables, this study tested several different hypotheses within a single sample, and drew conclusions that have the potential to influence selection methodology and theory incorporating dimensions of work ethic as predictors. This information can be used in conjunction to create a robust profile of an entry level employee that will be successful in these entry-level, low-skill types of environments.

What does that robust profile look like? Like historical research done on conscientiousness, research found that when delineating dimensions clarified relationships. For example, Christopher et al. (2008) found relationships between dutifulness (an
inhibitive aspect of conscientiousness) with self-reliance and morality/ethics and relationship between achievement striving (a proactive aspect of conscientiousness) with avoidance of wasted time and delay of gratification. In line with that research and taking it one step further, this study has provided additional supporting evidence for the delineation between the dimensions of work ethic and turnover. That is, for entry level employees, as self-reliance behaviors increase, voluntary turnover increases; while at the same time as morality/ethics increases involuntary turnover decreases. By breaking out to the dimension level, this study provides us a broader understanding of how work ethic dimensions related to turnover in entry level jobs and how work ethic relates to manager rated performance based outcomes and self-rated outcomes of minor work place deviances.

Finding behaviors that provide multiple insights into individuals can also provide practical implications by help organizations quickly identify individuals who would be a good fit for these type of low level, low skill jobs. Further, utilizing morality/ethics as a way to both predict if an individual is more likely to get fired, or more likely to create minor deviant behaviors at work during the selection process can save an organization both time and money in the hiring process, onboarding process, and we theorize potentially theft and shirk once in the job. In addition, having a single variable to that has the potential to predict multiple components of an employee’s behavior also means asking candidates less questions and can potentially create a more smooth and enticing employee experience.

**Study Limitations and Future Directions**

To account for potential limitations, some variables factors were measured and controlled for in the analysis (i.e., social desirability); however, there were other factors outside the control of the research that potentially influenced findings. These limitations
were discussed in the study 1 and 2 discussions, including multicollinearity of the work ethic variables, potential issues with manager rated performance, poor model fit requiring removing of some hypothesized variables (i.e., job involvement), small sample sizes, and generalizability of the sample to other populations.

One potential line of future research should be examining non-linear relationships with work ethic dimensions and outcomes. While work ethic dimensions in this study were not found to be curvilinear (i.e., quadratic or cubic), there is potential for dimensions such as morality/ethics and leisure to support future testing to see if higher work ethic dimension scores could impact or have potential consequences on the outcomes being tested.

Research understanding the dimensions of work ethic and its relationship with outcomes and other individual difference constructs have become more abundant in the last 10 years, there are still many questions that remain to better help understand the relationships between work ethic and job performance. For example, research should continue to examine dimensions of work ethic (specifically self-reliance and morality/ethics) in both the short term and long term relative to turnover. In study 1, turnover was examined for a short duration. Previous research suggested, organizations were more likely to reap a benefit when employees had stayed a minimum of 45 days (Wynhurst Group, 2007). The sample in this study was very small for comparison, only having nine individuals, of the total 32 who turned over, in the first 45 days. Future research could examine the validity of the 45 day benchmark by collecting data for an entire year, potentially increasing the sample size and also collecting data over a one year cycle. This sample was collected during the months of December to May and additional
variables could have influenced turnover in the summer and fall months, including children out of school summer holiday, planned vacations, back to school, and potentially more job opportunities.

A second potential avenue of future research is examining other demographic variables within the sample population that could influence responses to work ethic items. Historic research on work ethic variables often use subjects who are, at minimum, college educated (Christopher et al., 2008; Meriac, 2012; Meriac et al., 2015; Miller et al., 2002; VanNess et al., 2010). The majority of individuals who have responded to previous work ethic type surveys all have a comparable higher education background. Past research has shown differential item function for the leisure dimension based on generational cohorts (Meriac et al., 2010), which could imply there are other demographic factors that may influence responding. This study did not collect education information on individuals; however, it would be important to understand if there were potential differences in interpretation of the work ethic dimension variables in an entry level sample that would make it different to a college educated, more skilled workforce. Looking at item equivalence based on education level, socio-economic status, or cultural differences could affect interpretation of item understanding/meaning.

One interesting finding was that only wasted time was related to manager-rated task performance, as shown in the alternate models and bivariate correlations. However, none of the other work ethic dimensions demonstrated significant relationships with this outcome. It is possible that given the nature of the work in this sample, efficiency is the key driver of performance – accordingly, individuals who value efficiency and spend more time planning their days are as a result higher performers. In other industries or in other
positions, other dimensions of work ethic may have a stronger influence on other elements of performance that are not inherent in this particular job.

Another potential avenue of research would be to examine other types of performance and potentially other types of raters. For example 360 degree feedback, peer rated performance, or customer ratings could provide insight into the influence of work ethic on performance outcomes (LePine, Hanson, Borman, & Motowidlo 2000; Stevens & Campion, 1999). Peer ratings of team based performance have been shown to have significant positive relationships with other predictors, including skills and cognitive ability (Stevens & Campion, 1999). Future research could examine more specifically team based performance where managers do not have a direct line of sight.

**Conclusion**

This study’s results emphasize the relevance of work ethic dimensions in the prediction of voluntary and involuntary turnover, as well as, OCB and work place deviance behaviors. Organizations that attract and hire entry level, low skilled employees, may find the work ethic construct advantageous in assessing their candidate pool against during the recruitment process. It remains relevant to continue to evaluate individual difference (i.e., work ethic) constructs, not just in a closed environment, but in a real world job-related context to better understand the impact work ethic places on different industries and working environments. While introduced as a concept over 100 years ago, work ethic remains an important individual difference contributor to predicting work outcomes.
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Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational


Sage.


Miller, M. J., Woehr, D. J., & Hudspeth, N. (2002). The meaning and measurement of
work ethic: Construction and initial validation of a multidimensional inventory.  

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### Table 1

**MWEP Dimensions, Definitions, and Sample Item**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Definition</th>
<th>Sample item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrality of Work</td>
<td>Belief in work for work’s sake and the importance of work.</td>
<td>Even if I inherited a great deal of money, I would continue to work somewhere.</td>
</tr>
<tr>
<td>Self-Reliance</td>
<td>Striving for independence in one’s daily work.</td>
<td>I strive to be self-reliant.</td>
</tr>
<tr>
<td>Hard Work</td>
<td>Belief in the virtues of hard work.</td>
<td>If you work hard you will succeed.</td>
</tr>
<tr>
<td>Leisure</td>
<td>Pro-leisure attitudes and beliefs in the importance of non-work activities.</td>
<td>People should have more leisure time to spend in relaxation.</td>
</tr>
<tr>
<td>Morality/Ethics</td>
<td>Believing in a just and moral existence.</td>
<td>People should be fair in their dealings with others.</td>
</tr>
<tr>
<td>Delay of Gratification</td>
<td>Orientation toward the future; the postponement of rewards.</td>
<td>The best things in life are those you have to wait for.</td>
</tr>
<tr>
<td>Wasted Time</td>
<td>Attitudes and beliefs reflecting active and productive use of time.</td>
<td>I try to plan out my workday so as not to waste time.</td>
</tr>
</tbody>
</table>

*Note.* Taken from Miller et al., (2002).
Table 2

*Expanded Avoidability Taxonomy*

<table>
<thead>
<tr>
<th>Employee Control</th>
<th>Yes / Voluntary</th>
<th>No / Involuntary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes / Avoidable</td>
<td>• Better paying job elsewhere</td>
<td>• Poor performance</td>
</tr>
<tr>
<td></td>
<td>• Better hours/More hours somewhere else</td>
<td>• Did not get along with coworkers</td>
</tr>
<tr>
<td></td>
<td>• Problems with management</td>
<td>• Consistently late for work/Tardiness</td>
</tr>
<tr>
<td></td>
<td>• Feel they should be promoted</td>
<td>• Did not get along with management</td>
</tr>
<tr>
<td></td>
<td>• Problems with co-workers</td>
<td>• Calling off from work too much</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Poor Attitude</td>
</tr>
<tr>
<td>No / Unavoidable</td>
<td>• Moved too far from work</td>
<td>• Missing shifts/Failing to call for scheduled shifts</td>
</tr>
<tr>
<td></td>
<td>• Career Change/Going back to School</td>
<td>• Poor customer service</td>
</tr>
<tr>
<td></td>
<td>• Children/family member conflicts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• School conflicts/Sports conflicts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Physical Work too demanding</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Severe medical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Death</td>
</tr>
</tbody>
</table>

*Note.* Taken from Abelson (1987).
Table 3

Study 1 Demographics

<table>
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<th>Demographics</th>
<th>Frequency</th>
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<td><strong>Age (Band)</strong></td>
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<td>Under 18 years</td>
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<tr>
<td>18-22 years</td>
<td>66</td>
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<tr>
<td>22-29 years</td>
<td>48</td>
</tr>
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<td>30-39 years</td>
<td>10</td>
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<td>40-49 years</td>
<td>4</td>
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<td>50-59 years</td>
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</tr>
<tr>
<td>60 years or older</td>
<td>2</td>
</tr>
<tr>
<td>Prefer not to respond</td>
<td>8</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>94</td>
</tr>
<tr>
<td>Female</td>
<td>98</td>
</tr>
<tr>
<td>Prefer not to respond</td>
<td>10</td>
</tr>
<tr>
<td><strong>Race</strong></td>
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</tr>
<tr>
<td>White</td>
<td>87</td>
</tr>
<tr>
<td>Black/African American</td>
<td>84</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6</td>
</tr>
<tr>
<td>Asian</td>
<td>2</td>
</tr>
<tr>
<td>Two or more races</td>
<td>12</td>
</tr>
<tr>
<td>Prefer not to respond</td>
<td>11</td>
</tr>
<tr>
<td><strong>State Locations</strong></td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td>61</td>
</tr>
<tr>
<td>North Carolina</td>
<td>124</td>
</tr>
<tr>
<td>South Carolina</td>
<td>5</td>
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<td>Virginia</td>
<td>11</td>
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Table 4

*Study 1 Means, Standard Deviations, and Intercorrelates*

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<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Self-reliance</td>
<td>4.02</td>
<td>0.77</td>
<td>(.83)</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Delay of gratification</td>
<td>3.92</td>
<td>0.80</td>
<td>0.35**</td>
<td>(.83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Morality/Ethics</td>
<td>4.59</td>
<td>0.65</td>
<td>0.48**</td>
<td>0.35**</td>
<td>(.86)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Leisure</td>
<td>2.91</td>
<td>0.99</td>
<td>0.15*</td>
<td>0.08</td>
<td>-0.11</td>
<td>(.85)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Centrality of work</td>
<td>4.50</td>
<td>0.68</td>
<td>0.56**</td>
<td>0.39**</td>
<td>0.78**</td>
<td>-0.11</td>
<td>(.90)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Hard work</td>
<td>4.65</td>
<td>0.65</td>
<td>0.47**</td>
<td>0.43**</td>
<td>0.73**</td>
<td>-0.15*</td>
<td>0.79**</td>
<td>(.85)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Wasted Time</td>
<td>4.51</td>
<td>0.65</td>
<td>0.47**</td>
<td>0.33**</td>
<td>0.76**</td>
<td>-0.21**</td>
<td>0.79**</td>
<td>0.80**</td>
<td>(.81)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 MWEP Overall</td>
<td>4.16</td>
<td>0.49</td>
<td>0.63**</td>
<td>0.59**</td>
<td>0.83**</td>
<td>-0.20**</td>
<td>0.87**</td>
<td>0.87**</td>
<td>0.85**</td>
<td>(.84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Turnover Overall</td>
<td>0.16</td>
<td>0.37</td>
<td>0.04</td>
<td>0.00</td>
<td>-0.13</td>
<td>-0.08</td>
<td>-0.05</td>
<td>-0.08</td>
<td>-0.0</td>
<td>-0.08</td>
<td>(-)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Quit Turnover</td>
<td>0.13</td>
<td>0.34</td>
<td>0.09</td>
<td>0.06</td>
<td>-0.08</td>
<td>-0.09</td>
<td>-0.05</td>
<td>-0.09</td>
<td>-0.0</td>
<td>-0.05</td>
<td>-</td>
<td>(-)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Fired Turnover</td>
<td>0.03</td>
<td>0.18</td>
<td>-0.09</td>
<td>-0.13</td>
<td>-1.18*</td>
<td>-0.01</td>
<td>-0.03</td>
<td>-0.01</td>
<td>-0.05</td>
<td>-0.11</td>
<td>-</td>
<td>-</td>
<td>(-)</td>
<td></td>
</tr>
<tr>
<td>12 Social Desirability</td>
<td>2.93</td>
<td>0.84</td>
<td>0.27</td>
<td>0.19</td>
<td>0.17</td>
<td>0.25</td>
<td>0.15</td>
<td>0.10</td>
<td>0.13</td>
<td>0.12</td>
<td>-0.10</td>
<td>-0.07</td>
<td>-0.10</td>
<td>(.69)</td>
</tr>
</tbody>
</table>

*Note.* Internal consistency estimates on diagonal. *An asterisk indicates correlation was statistically significant at p<.05. **Two asterisks indicate correlation was statistically significant at p<.001. Turnover was coded as 1 = Turnover and 0 = Stayed. Quit Turnover and Fired Turnover are subsets of the overall turnover variable. Quit implies the employee voluntarily left the organization, whereas Fired term implies the employee was involuntarily let go. All scales were on a 1 -7 Likert scale. Sample size N = 201; for Turnover sample N = 32.
Table 5

Study 1 Logistic Regression of Turnover on Work Ethic Dimensions.

<table>
<thead>
<tr>
<th>Model</th>
<th>β</th>
<th>Wald χ²</th>
<th>Exp (β)</th>
<th>-2 LL</th>
<th>R²</th>
<th>***Raw Relative Wt.</th>
<th>Rescaled Relative Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All 7</td>
<td>Self-reliance</td>
<td>.63†</td>
<td>3.16†</td>
<td>1.89†</td>
<td>.0118</td>
<td>.2445</td>
</tr>
<tr>
<td></td>
<td>MWEP</td>
<td>Morality/Ethics</td>
<td>-.99†</td>
<td>3.64†</td>
<td>.37†</td>
<td>.0137</td>
<td>.2827</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leisure</td>
<td>-.39†</td>
<td>3.40†</td>
<td>.68†</td>
<td>.0096</td>
<td>.1989</td>
</tr>
<tr>
<td></td>
<td>Together</td>
<td>Hard Work</td>
<td>-.34</td>
<td>.34</td>
<td>.71</td>
<td>.0044</td>
<td>.0744</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Centrality of Work</td>
<td>.45</td>
<td>.52</td>
<td>1.56</td>
<td>.0035</td>
<td>.0901</td>
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<tr>
<td></td>
<td></td>
<td>Wasted Time</td>
<td>-.11</td>
<td>.03</td>
<td>.90</td>
<td>.0037</td>
<td>.0774</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delay of Gratification</td>
<td>.16</td>
<td>.30</td>
<td>1.17</td>
<td>165.69 * .09</td>
<td>.0015</td>
</tr>
<tr>
<td>2a</td>
<td>Social Desirability</td>
<td></td>
<td>-.10</td>
<td>1.88</td>
<td>.91</td>
<td>173.99 * .02</td>
<td></td>
</tr>
<tr>
<td>2b</td>
<td>All 7</td>
<td>Self-reliance</td>
<td>.69†</td>
<td>3.68†</td>
<td>1.99†</td>
<td>.0124</td>
<td>.2439</td>
</tr>
<tr>
<td></td>
<td>MWEP</td>
<td>Morality/Ethics</td>
<td>-1.00†</td>
<td>3.54†</td>
<td>.37†</td>
<td>.0138</td>
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<tr>
<td></td>
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<td>Leisure</td>
<td>-.31</td>
<td>1.92</td>
<td>.73</td>
<td>.0085</td>
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<tr>
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<td>Together</td>
<td>Hard Work</td>
<td>-.45</td>
<td>.58</td>
<td>.64</td>
<td>.0037</td>
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</tr>
<tr>
<td></td>
<td>Social Desirability</td>
<td>Centrality of Work</td>
<td>.39</td>
<td>.40</td>
<td>1.48</td>
<td>.0048</td>
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<tr>
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<td>.01</td>
<td>.94</td>
<td>.0039</td>
<td>.0757</td>
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<td>.34</td>
<td>1.19</td>
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<td>.91</td>
<td>163.79 * .10</td>
<td>.0022</td>
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<tr>
<td>3</td>
<td>Individual</td>
<td>Self-reliance</td>
<td>.16</td>
<td>.39</td>
<td>1.17</td>
<td>175.82 * .00</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Dimensions</td>
<td>Morality/Ethics</td>
<td>-.45†</td>
<td>3.23†</td>
<td>.64†</td>
<td>.173.20 * .03</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Leisure</td>
<td>-.22</td>
<td>1.21</td>
<td>.80</td>
<td>174.99 * .01</td>
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</tr>
<tr>
<td>5</td>
<td></td>
<td>Hard Work</td>
<td>-.30</td>
<td>1.35</td>
<td>.74</td>
<td>174.97 * .01</td>
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</tr>
<tr>
<td>6</td>
<td></td>
<td>Centrality of Work</td>
<td>-.19</td>
<td>.51</td>
<td>.83</td>
<td>175.72 * .00</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Wasted Time</td>
<td>-.29</td>
<td>1.20</td>
<td>.75</td>
<td>175.10 * .01</td>
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<tr>
<td>8</td>
<td></td>
<td>Delay of Gratification</td>
<td>.01</td>
<td>.00</td>
<td>1.01</td>
<td>176.21 * .00</td>
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</tr>
</tbody>
</table>

Note. N = 201. LL = Log likelihood; R² = Nagelkerke R²; † p < .10; * p < .05; ** p < .01 (1–tailed); Turnover is coded as 0 = Remain and 1 = Turned Over; ***RWA Raw relative weights add up to Cox & Snell R².
## Table 6

**Study 1 Logistic Regression of Voluntary Turnover on Work Ethic Dimensions**

<table>
<thead>
<tr>
<th>Model</th>
<th>β</th>
<th>Wald $\chi^2$</th>
<th>Exp (β)</th>
<th>-2 LL</th>
<th>$R^2$</th>
<th>***Raw Relative Wt.</th>
<th>Rescaled Relative Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All 7</td>
<td>Self-reliance</td>
<td>.98*</td>
<td>5.14*</td>
<td>2.67*</td>
<td>.0247</td>
<td>.3809</td>
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<tr>
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<td></td>
<td>Morality/Ethics</td>
<td>-33</td>
<td>.26</td>
<td>.71</td>
<td>.0050</td>
<td>.0759</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leisure</td>
<td>-.49*</td>
<td>4.66*</td>
<td>.61*</td>
<td>.0110</td>
<td>.1641</td>
</tr>
<tr>
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<td>Together</td>
<td>Hard Work</td>
<td>-.86</td>
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<td>.42</td>
<td>.0084</td>
<td>.0574</td>
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<td>.00</td>
<td>.98</td>
<td>.0040</td>
<td>.1291</td>
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<tr>
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<td></td>
<td>Wasted Time</td>
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<td>.07</td>
<td>.84</td>
<td>.0041</td>
<td>.0628</td>
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<tr>
<td></td>
<td></td>
<td>Delay of Gratification</td>
<td>.46</td>
<td>1.87</td>
<td>1.58</td>
<td>140.08</td>
<td>.12</td>
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*Note.* N = 201. LL = Log likelihood; $R^2$ = Nagelkerke $R^2$; † $p < .10$; * $p < .05$; ** $p < .01$ (1-tailed); Turnover is coded as 0 = Remain and 1 = Voluntary Turned Over; ***RWA Raw relative weights add up to Cox & Snell $R^2$. 
Table 7

Study 1 Logistic Regression including only Involuntary Turnover Sample

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<td>0.0094</td>
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Note. N = 201. LL = Log likelihood; R² = Nagelkerke R²; † p < .10; * p < .05; ** p < .01 (1 – tailed); Turnover is coded as 0 = Remain and 1 = Involuntary Turned Over; ***RWA Raw relative weights add up to Cox & Snell R²

Note. N = 201. LL = Log
Table 8

**Study 2 Demographics**

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<td>40-49 years</td>
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<td>50-59 years</td>
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Table 9

*Study 2 Means, Standard Deviations, and Intercorrelations*

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<td>5</td>
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<tr>
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*Note.* Internal consistency estimates on diagonal. *An asterisk indicates correlation was statistically significant at p<.05. **Two asterisks indicate correlation was statistically significant at p<.001. N = 252. Age coded as 1 = under 40 and 2 = 40 and above, Gender coded as 1 = male and 2 = female and Race coded as 1 = minorities and 2 = majority (white). Production, political and deviance were measured on a 1-5 Likert scale. All other scales were on a 1-7 Likert scale. For the overall MWEP Dimension, Leisure was reverse coded before combining into an overall score. The individual Leisure dimension was not reverse coded.
### Study 2 Means, Standard Deviations, and Intercorrelations

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*Note.* Internal consistency estimates on diagonal. *An asterisk indicates correlation was statistically significant at p<.05. **Two asterisks indicate correlation was statistically significant at p<.001. N = 252. Age coded as 1 = under 40 and 2 = 40 and above. Gender coded as 1 = male and 2 = female and Race coded as 1 = minorities and 2 = majority (white). Production, political and deviance were measured on a 1-5 Likert scale. All other scales were on a 1-7 Likert scale. For the overall MWEP Dimension, Leisure was reverse coded before combining into an overall score. The individual Leisure dimension was not reverse coded.
Table 10

**SEM Model Statistics**

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<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
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<th>CFI</th>
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*Note. N = 252. Model 1: Figure 3; Model 2: Figure 4; Model 3: Figure 5; Model 4: Figure 6; Model 5: Figure 7; Model 7: Figure 8; Model 11: Figure 9; Model 13: Figure 10. An asterisk indicates statistical significance at p<.001.*
Figure Caption Page

Figure 1. Study 1 Hypothesized Model

Figure 2. Study 2 Hypothesized Model

Figure 3. Study 2 Results from SEM modelling of Hypothesized Model with path coefficients

Figure 4. Study 2 Results from SEM modelling of Hypothesized Model with wasted time direct paths

Figure 5. Study 2 Results from SEM modelling of Hypothesized Model with no paths

Figure 6. Study 2 Results from SEM modelling of Hypothesized Model with direct paths

Figure 7. Study 2 Results from SEM modelling of Hypothesized Model and controlled for social desirability

Figure 8. Study 2 Results from SEM modelling of Hypothesized Model with wasted time direct paths and controlled for social desirability

Figure 9. Study 2 Results from SEM modelling new model with removed Job Involvement, Centrality of Work and Hard Work

Figure 10. Study 2 Results from SEM modelling new model with removed Task Performance, Job Involvement, Centrality of Work and Hard Work

Figure 11. Study 2 Results from SEM modelling new model with removed Task Performance, Delay of Gratification, Job Involvement, Centrality of Work and Hard Work
Figure 1. Study 1 Hypothesized Model
Figure 2. Study 2 Hypothesized Model

**Dimensions of Work Ethic**

- H6a: Centrality of Work
- H6b: Hard Work
- H6c: Wasted Time
- H6d: Delay of Gratification
- H6e: Leisure
- H6f: Morality/Ethics

**Variables**

- Job Involvement
- Task
- OCB
- Production Deviance
- Political Deviance

**Hypotheses**

- H7
- H8
- H9a
- H9b
- H10
- H11
- H12a
- H12b
Figure 3. Study 2 Hypothesized Model

Note. * $p < .05$
Figure 4. Study 2 Model 2

Note. * $p < .05$
Figure 5. Study 2 Model 3

Note. * $p < .05$
Figure 6. Study 2 Model 4

Note. * $p < .05$
Figure 7. Study 2 Model 5

Dimensions of Work Ethic

- Centrality of Work
- Hard Work
- Wasted Time
- Delay of Gratification
- Leisure
- Morality/Ethics

Social Desirability

Job Involvement

Task

OCB

Production Deviance

Political Deviance

Dimensions of Work Ethic

Note. * p < .05
Figure 8. Study 2 Model 6

Dimensions of Work Ethic

- Social Desirability
- Centrality of Work
- Hard Work
- Wasted Time
- Delay of Gratification
- Leisure
- Morality/Ethics

Job Involvement

- Task
- OCB
- Production Deviance
- Political Deviance

Note. * p < .05
Figure 9. Study 2 Model 7

Dimensions of Work Ethic

- Wasted Time
- Delay of Gratification
- Leisure
- Morality/Ethics

- Task
- OCB
- Production Deviance
- Political Deviance

Notes:
- * \( p < .05 \)

\[ .20^* \]
\[ -.11 \]
\[ .20^* \]
\[ -.31^* \]
\[ -.45^* \]
Figure 10. Study 2 Model 10

Note. * $p < .05$
Figure 11. Study 2 Model 13

Dimensions of Work Ethic

- Wasted Time
- Leisure
- Morality/Ethics

OCB

Production Deviance

Political Deviance

Correlation coefficients:

- Wasted Time to OCB: 0.14*
- Leisure to Production Deviance: 0.21*
- Morality/Ethics to Political Deviance: 0.31*
- Morality/Ethics to Production Deviance: 0.45*
Appendix A– Items

Employee Questions

**Demographics**

What is your current age?
1. Under 18
2. 18-22
3. 22-29
4. 30-39
5. 40-49
6. 50-59
7. 60 or older
8. Prefer not to respond

What is your gender?
1. Male
2. Female
3. Prefer not to respond

What is your race?
1. White/Caucasian
2. Black or African American
3. Hispanic
4. Asian
5. American Indian
6. Native Hawaiian or Pacific Islander
7. Two or More Races
8. Prefer not to respond

**Job Involvement – 6 Item** (Lodahl & Kejner, 1965; Lawler & Hall, 1970)

*Based on your current job, indicate the extent to which you agree with the following statements:*

1. My job brings me satisfaction.
2. The most important things that happen to me involve my job.
3. I live, eat, and breathe my job.
4. I am very involved personally in my work.
5. I'm really a perfectionist about my work.
6. Most things in my life are more important than work.

1. Strongly Disagree
   2. Neither agree or disagree
   3. Agree

Strongly Agree

1 2 3 4 5 6 7
MWEP-SF items and scoring instructions (Meriac et al., 2013)

This section lists a series of statements. Please choose the alternative that best represents your agreement with how well each statement describes you.

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<td>Neither agree or disagree</td>
<td>Strongly Agree</td>
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1. It is important to stay busy at work and not waste time.
2. I feel content when I have spent the day working.
3. One should always take responsibility for one's actions.
4. I would prefer a job that allowed me to have more leisure time.
5. Time should not be wasted, it should be used efficiently.
6. I get more fulfillment from items I had to wait for.
7. A hard day's work is very fulfilling.
8. Things that you have to wait for are the most worthwhile.
9. Working hard is the key to being successful.
10. Self-reliance is the key to being successful.
11. If one works hard enough, one is likely to make a good life for oneself.
12. I constantly look for ways to productively use my time.
13. One should not pass judgment until one has heard all of the facts.
14. People would be better off if they depended on themselves.
15. A distant reward is usually more satisfying than an immediate one.
16. More leisure time is good for people.
17. I try to plan out my workday so as not to waste time.
18. The world would be a better place if people spent more time relaxing.
19. I strive to be self-reliant.
20. If you work hard you will succeed.
21. The best things in life are those you have to wait for.
22. Anyone who is able and willing to work hard has a good chance of succeeding.
23. It is important to treat others as you would like to be treated.
24. I experience a sense of fulfillment from working.
25. People should have more leisure time to spend in relaxation.
26. It is important to control one's destiny by not being dependent on others.
27. People should be fair in their dealings with others.
28. A hard day's work provides a sense of accomplishment.

Social Desirability: Adapted from Crowne-Marlowe Scale (1960)

Read each item and decide whether it is true (T) or false (F) for you. Try to work rapidly and answer each question by on the T or the F.
1. I am always willing to admit when I make a mistake.  True  False
2. I have never intensely disliked anyone.  True  False
3. I am always courteous even to people who are disagreeable.  True  False
4. I am sometimes irritated when people ask favors of me.  True  False
5. I sometimes feel resentful when I don’t get my way.  True  False

**Minor Workplace Deviance – (Robinson & Bennett, 1995)**

*Based on your current job, please indicate the extent to which you do the following:*

1  2  3  4  5
Never Several Times Monthly Weekly Daily

**Production Deviance**

1. Make personal calls during work.
2. Waste company resources.
3. Come in late or leave early.
4. Leave a job in progress.
5. Take excessive breaks.
6. Call in sick when not.
7. Intentionally work slowly.
8. Work unnecessary overtime.
9. Hide in the back doing other things besides work.
10. Endanger yourself.
11. Eating food without paying

**Political Deviance**

1. Talk with coworker instead of working.
3. Start negative rumors about the company.*
4. Blame co-workers for mistakes.*
5. Gossip about managers or co-workers.
8. Compete in a non-beneficial way.*

*Items removed from the final analysis.*
Manager Questions

**OCB - Tsui, Pearce, Porter, & Tripoli, 1997**

*Based on your employee’s current job, indicate the extent to which you agree with the following statements about employee _______________________(add employee’s name):*

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<td>Neither agree or disagree</td>
<td>Strongly Agree</td>
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1. Makes suggestions to improve work procedures.
2. Expresses opinions honestly when others think differently.
3. Keeps doubts about a work issue to yourself even when everyone else disagrees.
4. Makes suggestions to improve organization.
5. Calls management attention to dysfunctional activities.
6. Makes innovative suggestions to improve department.
7. Informs management of potentially unproductive policies and practices.
8. Is willing to speak up when policy does not contribute to goal achievement of department.
9. Suggests revisions in work to achieve organizational or departmental objectives.

**Task Performance – Tsui, Pearce, Porter, & Tripoli (1997) and Greenhaus, Parasuraman, and Wormley (1990).**

*Based on your employee’s current job, indicate the extent to which you agree with the following statements about employee _______________________(add employee’s name):*

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1. Employee’s quantity of work is higher than average.
2. The quality of work is much higher than average.
3. The employee’s efficiency is much higher than average.
4. Employee’s standards of work quality are higher than the formal standards for this job.
5. Employee strives for higher quality work than required.
6. Employee upholds highest professional standards.

*Based on your employee’s current job, indicate the extent to which you agree with the following statements about employee _______________________(add employee’s name):*
7. Employee’s ability to perform core job tasks.
8. Employee’s judgment when performing core job tasks.
9. Employee’s accuracy when performing core job tasks.
10. Employee’s job knowledge with reference to core job tasks.
11. Employee’s creativity when performing core job tasks.

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Appendix B – Manager Training

Explanation of the current study

The following study is being conducted to determine what work attitudes possibly predict turnover in entry level employees. By allowing your employees to participate in this study you are helping to understand what attitudes are best at predicting which employees will remain at your organization.

What are you being asked to do?

PART 1 (Include survey in your hiring paperwork)

When a new employee starts at your location, please include a survey packet in their hiring paperwork. The packet should include (paper clipped together):
(1) 1 Consent form
(2) 1 Survey
(3) 1 Stamped return addressed envelope.

The employee has the option to complete the survey now or take home and complete later. Once the employee has completed the survey, they should place the survey in the envelope and sign the back of the sealed envelope. The employee should then take the envelope and drop it in the mailbox.

PART 2

When an employee quits and you submit termination paperwork to the main office, you will be asked to identify why the employee quit from the following options:

Please select the reason for quitting. Please pick only 1 reason. If the employee left for more than 1 reason pick the most relevant reason why based on your knowledge. If further information is required for explanation please include that in the “additional information” box.

PART 3

You will be asked to complete an online performance review for each of your current employees. This should take less than 5 minutes for each employee.

Contact information & Employee Questions

If you or the employee has any questions about the survey or the study please direct them to Work Ethic Study at the University of Missouri St. Louis (workethicstudy@gmail.com) for any inquires. The email and contact information will also be included on the first page of their survey.

Manager completes IRB paperwork

If the manager agrees to participate in Study 1 and Study 2 they will read and sign IRB paperwork and return to the research team.
Appendix C – Turnover Reason for Manager Forced Choice (Online)

Today’s Date:

Date Employee Terminated:

Employee Full Name:

Store Number:

Manager Name:

Please pick the **PRIMARY** reason why the employee quit or was fired:

Employee **VOLUNTARILY QUIT** because:
- □ Better paying job elsewhere
- □ Better hours/More hours somewhere else
- □ Problems with management
- □ Feel they should be promoted
- □ Problems with co-workers
- □ Moved too far from work
- □ Career Change/Going back to School
- □ Children/family member conflicts
- □ School conflicts/Sports conflicts
- □ Physical Work to demanding

Employee was **FIRED** because:

- □ Poor performance
- □ Did not get along with coworkers
- □ Consistently late for work/Tardiness
- □ Did not get along with management
- □ Calling off from work too much
- □ Poor Attitude
- □ Missing shifts/Failing to call for scheduled shifts
- □ Poor customer service

Additional Information: