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The Path of a Stressed Temporary Worker to CWB

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THE PATH OF A STRESSED TEMPORARY WORKER TO CWB

by

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ABSTRACT

Temporary workers may experience unique and oftentimes stressful work situations that can precipitate negative outcomes for these workers, their coworkers, and their organizations. The current study considered broader implications of the various work experiences among temporary workers by testing the relationships of workplace stressors to temporary workers' behaviors. The workplace stressors examined were chosen based on their salience to temporary workers as shown throughout the current temporary worker literature, and included economic stressors, interpersonal mistreatment, and organizational constraints. It was hypothesized that these stressors would predict temporary workers' behaviors via emotional exhaustion and moral disengagement pathways, predicting the performance of counterproductive work behaviors (CWB). Three waves of data were collected from multiple sources, including at a temporary staffing agency, at a large university, and using the MTurk platform. Results showed that the temporary workers varied in their experiences of workplace stressors, which were linked to both cognitive and emotional reactions, which consequently predicted CWB. More specifically, temporary workers who experienced higher levels of workplace stressors reported higher levels of emotional exhaustion and moral disengagement, and then these reactions were linked to an increased likelihood of performing behaviors that are harmful to the organization and/or others within the organization.

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INTRODUCTION

The Temping of America: As stable jobs disappear, Americans are being forced to adjust to a fragile and frightening new order. –Time Magazine

In contrast to permanent workers who are employed indefinitely, temporary workers are workers who are employed for a particular length of time, often with short-term contracts (Kalleberg, 2000). This trend, known colloquially as the temping of America, was labeled back in 1993, yet continues to raise concerns today as reflected by *The Economist* stating that as temporary work has continued to grow, "the quality of jobs it provides has deteriorated" ("America's Growing Temporary Workforce", 2016). Research addressing these speculated concerns from the past few decades is overdue. Thereby, this paper will explore potentially unique and stressful working conditions of temporary workers that could precipitate unfavorable outcomes for at least some of these workers, their coworkers, and their organizations.

The pervasiveness of these jobs speaks to the relevance of these concerns. The Bureau of Labor Statistics reports that 7.3 million workers hold temporary positions making up around 4.7% of the total workforce (BLS, 2018). While this growth has slowed in recent years, the Organization for Economic and Co-Operation and Development predicts that the emergence of temporary positions will continue upward with now 11.2% of the global workforce depending on temporary employment (OECD, 2018). As these jobs preponderate, researchers have started finding that temporary positions are increasingly stressful for these temporary workers (De Cuyper et al., 2007). For example, researchers revealed that temporary employees talked differently about stress in interviews and reported higher levels of overall stress compared to permanent employees in the same job (Madden et al., 2017). Moreover, there have been

questions about whether these conditions result in negative behaviors as suggested by managers who report temporary workers showing up late, leaving and not coming back, and stealing from the organization (Rogers, 2000). However, beyond anecdotal complaints, the reasons underlying these negative behaviors and the connection to work-related stressors experienced by at least some temporary workers remain unclear. Accordingly, as the number of organizations hiring temporary workers grows, the need for research related to variability in temporary workers' experiences becomes more consequential (Clark et al., 2010).

Despite initial work suggesting some temporary workers have particularly stressful experiences that could lead to negative outcomes (Moscone, Tosetti, & Vittadini, 2016), organizations often presume that hiring temporary workers will save money and allow for greater adaptability and flexibility. From the organization's standpoint, temporary workers involve less risk considering it is easier to terminate contracts than layoff full-time workers (Burke & Ng, 2006). That being said, employers should consider the potential tradeoff that might exist between flexibility and adverse consequences of hiring temporary workers. As mentioned above, temporary workers have experiences that may trigger behaviors that go against the organization's goals. For example, temporary workers are in work environments that often lead to lower levels of commitment and loyalty (Burke & Ng, 2006), and temporary workers express more negative feelings related to work quality compared to permanent workers (Sverke, Gallagher, & Hellgren, 2002). While researchers have considered these concerns related to temporary workers' attitudes and perceptions, less is known about the subsequent behavioral outcomes such as counterproductive work behavior (CWB). I address these concerns by exploring the relationship between workplace stressors and CWB in a sample of temporary workers (rather than comparing temporary and permanent workers). As shown by the numerous categories of temporary workers

discussed throughout the literature, there is likely meaningful variability among temporary workers that may result in different experiences leading to varying outcomes. Despite the variability in temporary workers, three categories of stressors (economic stressors, interpersonal mistreatment, and organizational constraints) are prevalent across all types of temporary workers. Thus, using these categories allows me to be inclusive and pertinent without being exhaustive.

Leveraging the conservation of resources theory (Hobfoll, 1989), I explain the hypothesized links between economic stressors, interpersonal mistreatment, and organizational constraints experienced by temporary workers and CWB. I use the conservation of resources theory to delineate how each of these categories of stressors might lead to CWB via two paths, as shown in Figure 1. First, I explain how stressors could lead to employees feeling emotional exhaustion, a state that manifests as being physically tired along with feeling psychologically and emotionally drained (Wright & Cropanzana, 1998). Emotional exhaustion here is considered an emotional reaction to economic stressors, interpersonal mistreatment, and organizational constraints as opposed to the more cognitive reaction: moral disengagement. Second, I explain moral disengagement as a social-cognitive process that essentially allows individuals to disregard their collective norms and values, thereby allowing them to dissociate from anticipated counterproductive actions (Fida et al., 2015). In other words, resource depletion has both emotional and cognitive consequences that might trigger negative behaviors. Temporary workers could become emotionally exhausted from workplace stressors and/or morally disengage to cope with these stressors, motivating them to perform CWB.

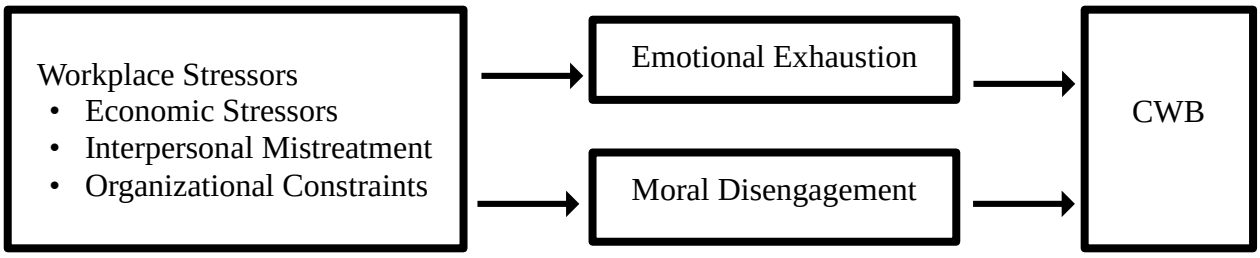

Figure 1. Proposed model of the impact of stressors on CWB for temporary workers.

I begin by defining temporary workers and outlining the three categories of stressors I identified as salient to these workers based on their repeated appearances throughout the temporary worker literature. Next, I define emotional exhaustion and moral disengagement, explaining their links to the stressors as emotional and cognitive reactions using the conservation of resources framework. Finally, I describe the theoretical paths from emotional exhaustion and moral disengagement to CWB. This research not only builds upon the vast literature on stressors at work (e.g., Beehr & Bhagat, 1985; Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Spector & Jex, 1998), but also considers emotional exhaustion and moral disengagement as mechanisms through which stressors prompt CWB. In brief, this paper fills a current gap in the literature by empirically testing the variability among temporary workers' in how their perceptions of workplace stressors influence their reactions and resulting behaviors.

Defining Temporary Workers

Workers in the U.S. are commonly separated into categories of permanent workers and temporary workers. Permanent employment was first defined as a job started upon graduation that provided training and then lasted until the employee retires (Cole, 1979). In the U.S., employees are considered permanent if they are not labeled as temporary help, independent contractors, contract company workers, or on-call workers in a job that is planned to end (BLS,

2005). In contrast, temporary workers do not have specified minimum hours and may be hired directly by an organization, work seasonally, or work for an agency (Connelly & Gallagher, 2004). The Bureau of Labor Statistics determines whether a worker is temporary by asking the following survey questions: “Some people are in temporary jobs that last for a limited time or until the completion of a project. Is your job temporary?” and “Provided the economy does not change and your job performance is adequate, can you continue to work for your current employer as long as you wish?” An employee would be categorized as temporary if he or she answered yes to the first question or no to the second. This is consistent with Kalleberg’s (2000) definition of temporary workers as workers employed for a particular length of time in contrast to permanent workers who are employed indefinitely.

When more specifically defining a temporary worker, it is necessary to recognize that the literature does not currently agree on a single definition. For example, some researchers use contingent work as an umbrella term that encompasses temporary workers (e.g., Kalleberg, 2000; Pedulla, 2013) while others use contingent and temporary worker interchangeably (e.g., De Cuyper, De Witte, Sverke, Hellgren, & Näswall, 2014; Borgogni, Consiglio, & Tecco, 2016). Nonstardard worker is another label seen throughout the literature that conflicts with the permanent-temporary dichotomy. In an attempt to reconcile the variety of labels used throughout the literature, Figure 2 provides a hierarchical conceptualization that divides workers into either temporary or permanent workers. As they are defined in the previous and following paragraphs, contingent workers, independent contractors, nonstandard workers with limited temporal or administrative attachment, temporary help agency workers, and seasonal workers are included as types of temporary workers. Permanent workers include noncontingent workers, nonstandard

workers with limited physical attachment or telecommuters, along with standard and normal workers.

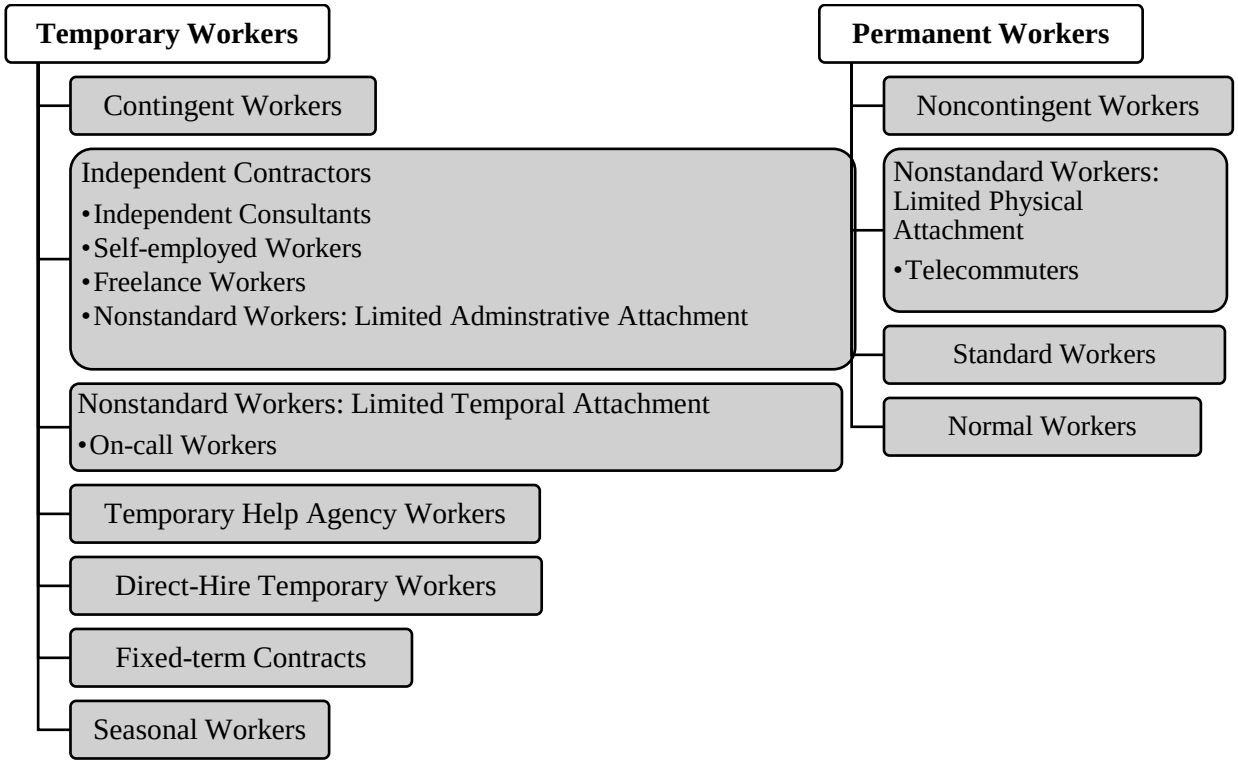

Figure 2. A hierarchical conceptualization of types of workers.

Beginning with the label nonstandard worker, researchers have created three categories based on the type of attachment between the organization and the worker: workers with limited administrative attachment, workers with limited physical attachment, and workers with limited temporal attachment (Pfeffer & Baron, 1988). Examples of limited administrative attachment workers are independent or third-party contract workers (Pfeffer & Baron, 1988). Also referred to as freelance workers, these contracted workers are self-employed, performing services to clients on a fixed-term basis (Connelly & Gallagher, 2004). This type of worker is commonly seen in the area of information systems development as companies attempt to keep up with regular new computer software (Ang & Slaughter, 2001). A limited administrative attachment

worker is considered by the Bureau of Labor Statistics to be an example of an independent contractor, which I will define in later paragraphs.

The second type of nonstandard workers are called limited temporal attachment workers, which includes on-call workers and temporary workers (Pfeffer & Baron, 1988). The definition of a temporary worker has already been discussed, but an on-call worker, according to the Bureau of Labor Statistics, is an individual only called into work as needed such as a substitute teacher (BLS, 2018). On-call workers are often on the organization's payroll but may be hired either directly or indirectly by the organization without an explicit or implicit contract for long-term employment (Polivka & Nardone, 1989). The Bureau of Labor Statistics considers on-call work as an alternative employment arrangement that is separate from contingent work.

The third category of nonstandard workers, workers with limited physical attachment, are typically known as telecommuters (Pfeffer & Baron, 1988). Telecommuting allows individuals to complete work assignments from remote locations, such as at home or at a satellite office, by communicating using technology (Bailey & Kurland, 2002). Unlike other nonstandard workers, telecommuters commonly work full-time, either entirely remotely or alternating between home and a company location (Gajendran, Harrison, & Delaney-Klinger, 2014). According to the Bureau of Labor Statistics, telecommuters are traditional workers who are employed indefinitely, meaning they are a type of permanent worker. Other labels used to represent permanent workers include normal, standard, and noncontingent workers who are in positions not susceptible to seasonal or short-term variability in demand (Rousseau & Libuser, 1997).

Moving into subcategories of temporary workers, contingent work is defined as excluding an implicit or explicit contract for continuing employment and "whether a job is temporary or not expected to continue" (BLS, 2018, p. 9). Regarding the second type of

temporary workers, independent contractors, researchers have also produced conflicting definitions. Some consider independent contract work as a type of contingent work (e.g., Connelly & Gallagher, 2004; Pedulla, 2013) while others label it as an alternative employment arrangement separate from contingent work (e.g., Ang & Slaughter, 2002; BLS, 2018). In agreement with the second group of publications, I consider independent contractors as distinct from contingent workers because, by definition, individuals who work for themselves have an ongoing employment arrangement, although it is with themselves (Polivka, 1996). Independent contractors often have specialized skillsets making them a good option for organizations looking to hire skilled workers on an as-needed basis (Pedulla, 2013). According to the Bureau of Labor Statistics (BLS), examples of independent contractors include independent consultants, self-employed workers, and freelance workers, which is why I consider independent contractors as temporary workers, but not contingent workers. Although self-employed workers may not intuitively seem like temporary workers, their work is often project-based without specified minimum hours, which, in agreement with the BLS and current literature definitions, makes them temporary workers.

Another commonly seen category of temporary worker is temporary agency workers who are paid by a temporary help agency (BLS, 2018) and are sometimes referred to as temporary-help service workers (Connelly & Gallagher, 2004). A temporary agency worker holds a legal work relationship with his or her agency, which provides resources and job offerings (Kalleberg, 2000). Temporary agency workers also maintain a relationship with their assigned client who acts as the direct supervisor of the worker (Kalleberg, 2000). The key point in this three-way relationship is that the work lasts only a fixed amount of time, and many countries regulate how long these workers can be assigned to one client (Connelly & Gallagher, 2004). These temporary

workers complete short-term assignments, sometimes attempting to form an ongoing relationship with their organization, hoping to be offered additional temporary jobs in the future (Connelly & Gallagher, 2004). However, there is no guarantee of this, which reflects the reason the work arrangement is considered temporary.

Distinct from temporary help agency workers are direct-hire temporary workers who are employed directly by an organization on a prearranged short-term contract (Pedulla, 2013). Direct-hire temporary workers are on the payroll of the organization instead of the temporary help agency and are not necessarily prescreened like temporary agency workers (Pedulla, 2013). They are almost identical to fixed-term contract workers who are hired to fill a provisional need (Blanchard & Landier, 2002). Fixed-term contracts can be viewed by employees as a stepping stone to a permanent job (Babos, 2014), but are more commonly short-term positions created after an adverse shock or event within an organization (Fernandez-Kranz, Paul, & Rodriguez-Planas, 2014). The fixed-term contract label is not utilized by the Bureau of Labor Statistics, but is commonly used in the European labor market. Fixed-term contract workers, temporary agency workers, and direct-hire temporary workers all perform work for an organization that is either contingent or for a specified term (Gallagher & Connelly, 2008). They are commonly hired during times of unexpected demand or for staffing specific projects (Pedulla, 2013) and are each considered subcategories of temporary workers.

A final category of temporary worker seen throughout the literature is seasonal workers. Seasonal workers are commonly found in the tourism industry, working at resorts, or working in hospitality (Connelly & Gallagher, 2004). These contracts are classified as temporary work due to the certain number of weeks that employees are assigned to work without a long-term legal

arrangement (Connelly & Gallagher, 2004). Further, the BLS (2018) qualifies individuals filling a seasonal job only available at certain times in the year as a temporary.

In summary, I will consider contingent workers, independent contractors, on-call workers, temporary help workers, direct-hire temporary workers, fixed-term contract workers, and seasonal workers as temporary workers, in line with definitions provided by the Bureau of Labor Statistics. Integrating the three categories of nonstandard workers, I will also consider limited administrative attachment and limited temporal attachment workers to be temporary workers. Although the types of temporary work can be somewhat unclear and overlapping, the divergence between temporary work and permanent work is well-established and most relevant to this paper. In short, permanent employees are given open-ended contracts while temporary employment lasts a limited period of time (OECD, 2002). In comparison to permanent workers, temporary jobs are considered unstable, with the organization's immediate needs dictating the schedule and number of hours temporary employees can work (Nollen, 1996). It is important to note that although I organize the aforementioned jobs as temporary, I am not suggesting that all types of temporary workers have identical work-related experiences. The uniqueness of different types of temporary workers is critical to understanding the temporary work experience and is investigated in this study. But first, having defined and organized workers considered to be temporary, I will now describe the theory on which my model is built and how, based on this theory, I expect certain stressors to impact temporary workers.

Conservation of Resources Framework

Based on the conservation of resources theory, employees try to retain, protect, and generate resources, and they are threatened by the possible or actual loss of these resources

(Hobfoll, 1989). This theory defines stress as either a reaction to losing resources (e.g., losing friendships), a threat of losing resources (e.g., losing status or a work position), or a failure to gain resources after investing resources (e.g., investing energy) (Hobfoll, 1989). In the context of the workplace, a resource is a social, psychological, physical, or organizational aspect of a job that helps workers reduce physiologically or psychologically exhausting demands, accomplish work goals, or motivate personal development (Bakker, Demerouti, De Boer, & Schaufeli, 2003).

According to the conservation of resources theory, the threat, loss, or failure to gain resources results in emotional, cognitive, and behavioral outcomes. From an emotional perspective, workplace stressors can lead to emotional exhaustion, which serves as an indication of a diminished pool of resources or threatened resources. From a cognitive perspective, employees engage in efforts to either devalue the resource that is threatened or to cope with the loss or anticipated loss of a resource. In the workplace, these emotional and cognitive outcomes have been demonstrated to lead to negative behaviors such as CWB (e.g., Bolton et al., 2011; Fida et al., 2015; Krischer et al., 2010). For example, an emotionally exhausted worker may take unapproved breaks. In the realm of moral disengagement, a worker without access to resources needed to complete a task may justify stealing from the organization.

If temporary workers lose resources or see their valued resources as being threatened, they will experience strains (Hobfoll & Freedy, 1993). Here, my model suggests that the loss of resources or the threat to work-related resources might give rise to negative emotional or cognitive outcomes. Emotional exhaustion, the emotional outcome, is a strain that involves workers feeling physically and mentally fatigued (Wright & Cropanzano, 1998). Moral disengagement, the cognitive outcome, is a thought process that attempts to alleviate mental or

emotional strain by allowing temporary workers to rationalize unethical or retaliatory behaviors (Bonner, Greenbaum, & Mayer, 2016). In subsequent sections I will further elaborate how temporary workers' resource depletion may lead to emotional exhaustion or moral disengagement, reactions that in turn influence negative behavioral outcomes such as CWB. However, I first will highlight certain stressors that threaten or deplete temporary workers' various resources.

Stressors with a Particularly Salient Impact on Temporary Workers

The nature of temporary work has led to concerns such as that a lack of experience, incomplete training, and limited career development may inhibiting workers from building human capital for future employment (Nollen, 1996). Although individual workers could experience countless stressors, this paper will focus only on three categories of workplace stressors. Stressors here are defined simply as the stressful aspects of one's job (Spector & Jex, 1998), that may have a particularly salient impact on temporary workers based on their frequent reoccurrences throughout the literature surrounding temporary work (e.g., Crozier & Cassell, 2016; De Cuyper, De Witte, & Van Emmerik, 2011; De Cuyper et al., 2007; Gracia et al., 2011; Kirves et al., 2011; Tooren & De Jong, 2014; Vahle-Hinz, 2016). These categories include economic stressors, interpersonal mistreatment, and organizational constraints.

Economic Stressors. Economic stressors are threats to an individual's work and financial security that stem from both objective and subjective perceptions about a worker's employment and income (Probst, 2005). Examples of objective economic stressors include unemployment, underemployment, and economic deprivation, meaning the inability to fulfill financial needs, while examples of subjective stressors include job insecurity and strain from insufficient income

(Sinclair, Sears, Probst, & Zajack, 2010). Subjective income stress stems from the perceived inability to fulfil financial obligations and relates to both an affective reaction and cognitive evaluation of a worker's financial situation (Sinclair & Cheung, 2016). An affective reaction corresponds to feelings of financial confidence and security while a cognitive evaluation of financial stressors involves a worker's financial ability to meet basic needs and lifestyle wants (Sinclair & Cheung, 2016).

Due to their limited tenure with an organization, temporary workers' contracts often do not pay sufficiently and may not include employee benefits (Probst, 2005). Temporary workers from around the world have been found to make less money than permanent workers performing the same job (Booth, Francesconi, & Frank, 2002; Kim & Skott, 2016). This could be a byproduct of their employment status or because organizations use lower salaries to motivate temporary workers to become full-time (Skott & Guy, 2007). In fact, a majority of temporary workers accept positions with the intention of being promoted to a permanent position, making them especially hard workers despite the unfair wage gap (Kim & Skott, 2016).

Furthermore, temporary workers are particularly vulnerable to economic downturns (Boeri, 2011) and have low levels of employment protection due to a lack of regulation in the U.S. (Booth, Francesconi, & Frank, 2002). This lack of regulation allows employers to choose whether temporary workers receive any type of pay protection, benefits, or entitlements (De Cuyper, De Jong, De Witte, & Schalk, 2008). Regarding economic deprivation, workers who are not permanently employed are burdened by potential monetary losses due to market shifts and other elements outside their control (Feldman & Bolino, 2000).

One of the most frequently cited economic stressors, job insecurity, is clearly relevant to temporary workers who are by definition missing the security of a long-term job. Job insecurity

is defined here as the threat to the continuity and stability of a job as it is currently experienced (Shoss, 2017). Unlike permanent workers, temporary workers commonly experience objective job insecurity, which is the genuine risk of job loss due to the temporary nature of the job (De Witte & Naswall, 2003). Further, because a temporary contract by definition lasts only a limited time, temporary workers also experience feelings of subjective job insecurity (Pearce, 1998). Subjective job insecurity is the feeling of powerlessness and insecurity surrounding the unknown future of a job (De Witte & Naswall, 2003). In sum, many studies demonstrate that economic stressors, such as financial insecurity and both objective and subjective job insecurity, are relevant and largely impactful stressors for many temporary workers.

Interpersonal Mistreatment. The second category of stressors that has repeatedly been linked to temporary workers is interpersonal mistreatment. Interpersonal mistreatment is a broad term that includes actions such as bullying, emotional and workplace abuse, incivility, sexual harassment, and behaviors such as being disrespectful, verbally abusing a coworker, or isolating coworkers (Lim & Cortina, 2005). Interpersonal mistreatment involves a specific instance where at least one member of the organization goes against the norms by acting destructively against another member (Cortina & Magley, 2003). In addition to the behaviors listed above, interpersonal mistreatment encompasses rudeness, apathy, and any CWB targeting a coworker, with conduct ranging from a petty disagreement to becoming physically aggressive toward another employee (Spector & Jex, 1998). These conflicts require a significant amount of effort and often create strain leading to job stress (De Drea & Weingart, 2003).

Interpersonal mistreatment is especially relevant today as organizations often foster a competitive environment that requires employees to either compete for rewards or for necessary resources. This sense of competition has become so central in work that it has been referred to as

"an American cultural addiction" and "our state religion" (Kohn, 1992, p. 2). As outsiders of their organizations, temporary workers may feel they must compete with permanent employees. This is due to many temporary workers looking to eventually gain full-time employment. As organizations increasingly attempt to gain competitive advantages through the use of teams and collaborative networks, temporary workers may feel pressure to outperform their permanent counterparts leading to higher motivations for mistreatment (Gloor, 2006). Team or group project work implies that temporary workers must collaborate with permanent employees who they might view as their competition and who are oftentimes receiving better pay and job security (De Cuyper et al., 2008). These feelings of competition and perceptions of unfairness may create tension in work groups that sparks interpersonal mistreatment.

Additionally, interpersonal mistreatment may arise because temporary workers feel less committed to their organizations and fail to form meaningful connections with their employers (Reevy & Deason, 2014). One reason temporary workers might not form meaningful connections and experience conflict with other workers is their lack of concern with the way others view them. Previous researchers have found evidence of temporary workers being less concerned with impression management surrounding their performance and also less frequently seeking feedback (Sias, Kramer, & Jenkins, 1997). The combination of a lack of concern about other's opinions and disinterest in feedback may mean lower performance of citizenship behaviors (Bolino, 1999), defined as discretionary behaviors that are not required but help improve organizational efficiency or effectiveness (Dekas et al., 2013; Organ, 1988). Choosing not to go above and beyond at work could frustrate other employees and in turn provoke rudeness, incivility, or other hurtful actions against temporary workers.

Temporary workers with an outsider mentality or lack of connections within the organization may also be more likely to experience ostracism, a subset of interpersonal mistreatment that has been shown to hurt employees' self-esteem and well-being (Cortina & Magley, 2003). Ostracism is inherently ambiguous, defined as the degree to which an employee feels excluded or ignored by others (Ferris et al., 2008). While interpretations of others' actions as exclusionary depend on the individual, temporary workers may regularly perceive they are being ostracized, and employees frequently perceiving this stressor are more likely to feel helpless, anxious, and depressed (Cortina & Magley, 2003). Further, researchers have suggested that if employees fail to identify with their organization, a task more challenging and complex for temporary workers, they are more vulnerable to ostracism (Koslowsky, 2009).

Organizational Constraints. The third category of stressors that may be particularly salient to temporary workers is organizational constraints. According to Ashford, George, and Blatt, "many nonstandard workers also experience great constraints, whether self-imposed or imposed by others" (2007, p. 80). An organizational constraint can be anything or any situation that blocks employees' efforts or abilities to successfully perform their job (Spector & Jex, 1998). These constraints have been shown to relate to both frustration and job dissatisfaction (Peters & O'Connor, 1980), along with creating stress from hindering work conditions that are out of the employee's control (Campbell & Pritchard, 1976). Two major constraints facing temporary workers include the lack of training opportunities and safety education provided by organizations (De Cuyper, de Jong, De Witte, & Schalk, 2008; Galais & Moser, 2009). The absence of training can help explain why temporary workers have greater risks of injuries at work compared to permanent workers in the same position (Foley, 2017). By 2016, the lack of adequate training on hazards at work had become such a widespread issue that the Occupational

Safety and Health Administration created a Temporary Worker Initiative and published documents specifically aimed at protecting temporary workers (OSHA, 2016).

Another commonly cited organizational constraint is when company rules or procedures make it difficult to perform the required work (Spector & Jex, 1997). In the case of temporary agency workers, the client organization and temporary agency rarely justify work schedule changes to temporary workers and can terminate an assignment without notice (Henson, 1996; Rogers, 1995). Additionally, with the lack of procedures surrounding the scheduling process of a temporary agency worker, temporary workers who struggle to complete work due to discrimination rarely have enough information to make a legitimate case (Rogers & Henson, 1997).

Temporary workers also experience organizational constraints related to accessing jobs. These workers might urgently need work for financial stability but are constrained by current organizational needs, meaning they may not be assigned work and forced into downtime (Rogers & Henson, 1997). Even if they are able to find work, temporary workers may have restricted hours and too short an employment duration to meet their financial obligations (Broschak & Davis-Blake, 2006).

Working together, economic stressors, interpersonal mistreatment, and organizational constraints might help explain previous findings that the longer individuals hold temporary positions, the more commonly they experience negative outcomes such as worse physical health (Hammarstrom, Virtanen & Janlert, 2010; Waenerlund, Virtanen & Hammarstrom, 2011). While these stressors have been explored by other researchers in the context of temporary workers, the impact of the stressors on temporary workers' behaviors remains unclear.

Workplace Stressors and Emotional Exhaustion

Focusing on economic stressors, interpersonal mistreatment, and organizational constraints, the following section will use the conservation of resources theory to explain how perceiving these stressors might lead to emotional exhaustion or moral disengagement in temporary workers. These links between workplace stressors and either an emotional or cognitive reaction represent the first half of the proposed model with emotional exhaustion and moral disengagement functioning as parallel mediators between stressors and CWB.

Beginning with the link between stressors and emotional exhaustion, emotional exhaustion is defined as the feeling that one's emotional resources have been depleted leading to negative affect and drained energy (Maslach & Jackson, 1986). Emotional exhaustion is a key component of burnout (Evans & Fisher, 1993; Koeske & Koeske, 1993; Lee & Ashforth, 1993) and can be experienced when employees feel they lack the resources needed to handle stressors (Hobfoll, 1989). More specifically, it is a type of strain (Wilk & Moynihan, 2005) which could stem from temporary workers experiencing economic stressors, interpersonal mistreatment, or organizational constraints.

Each of these stressors discussed as being particularly salient to temporary workers can be linked with emotional exhaustion as a pathway to CWB using the conservation of resources framework. In the case of economic stressors, temporary workers may invest resources in their job and organization when initially hired. However, these resources may fail to be replenished if the organization does not adequately invest in them by providing a sufficient income, anticipated benefits, or job security. Because money is a resource expected to be gained from performing work, temporary workers are likely to feel cheated or underappreciated when a permanent coworker performing the same job is receiving higher pay. Further, when workers do not receive

their preferred or expected monetary resources, they are likely to experience strain in the form of emotional exhaustion (Halbesleben et al., 2014), and financial stress can drain resources which is why it has been considered as an antecedent of emotional exhaustion (Hunter & Devine, 2016).

In the case of job security, the resource valued by temporary workers is a condition, or more specifically, their job. Temporary workers strive to protect and have control over their jobs, but often show high levels of both objective and subjective job insecurity (De Witte & Naswall, 2003), which are threats to workers' valued resource of employment (Sender, Arnold, & Staffelbach, 2017). Temporary workers who experience high levels of job insecurity will attempt to protect themselves from further losing resources, which depletes energy that is not replenished and eventually results in emotional exhaustion (De Cuyper, Makikangas, Kinnunen, Mauno, & De Witte, 2012). This link is supported by previous researchers who found that job insecurity predicted emotional exhaustion (De Cuyper et al., 2012; Vander Elst et al., 2014). Considering the combined effects of all aforementioned economic stressors, I predict the following:

Hypothesis 1a: Economic stressors will positively relate to emotional exhaustion.

Moving to the second category of stressors, the relationship between interpersonal mistreatment and emotional exhaustion may be a product of resources being drained or an individual failing to replenish the resources invested in interpersonal relationships (Martínez-Íñigo & Totterdell, 2016). Supporting this idea, interpersonal conflicts at work have been linked to negative emotional outcomes (e.g., Frone, 2000; Spector & Jex, 1998) that workers must regulate, thereby consuming resources (Liu et al., 2015). This is especially likely for temporary workers because permanently employed coworkers might be aware that temporary jobs are short-term and therefore may not feel motivated to form high-quality relationships with temporary

workers. Chances of interpersonal mistreatment may further increase because of physical distance if a temporary worker is less frequently on-site (Rogers, 2000).

Along with some temporary workers being unlikely to receive an invitation to company events, conflict might stem from temporary workers feeling ostracized from their permanent colleagues because of distinctive dress codes such as being required to wear different color badges (Forster, 2000). Research has also shown that certain temporary workers have a more difficult time building social networks and can experience ostracism due to their peripheral work status (Allen, 2011). Any of these situations can provoke interpersonal mistreatment and deplete energy or emotional resources resulting in greater chances of emotional exhaustion (Whitman, Halbesleben, & Holmes, 2014).

Furthermore, a permanent employee may see greater future rewards from maintaining positive relationships with other full-time workers, meaning they will invest fewer resources in temporary workers. This favoritism might make interactions with temporary coworkers more likely to result in interpersonal mistreatment, thereby draining emotional resources or not providing returns on resources invested in relationships by some temporary workers. When their invested resources fail to be replenished, these workers may become aversive to connecting with other coworkers in the future (Wright & Cropanzano, 1998), and perceiving inequity related to workplace relationships may increase feelings of emotional exhaustion (Martínez-Íñigo & Totterdell, 2016). If temporary workers recognize that they are not valued by their coworkers, they may feel emotionally exhausted due to depleted cognitive, emotional, and physical resources (De Jonge & Dormann, 2006).

Additionally, if temporary workers come into a new environment without any prior understanding of company norms or practices, they will be forced to rely heavily on

collaboration, leading to more social interactions and thereby more chances for interpersonal mistreatment (Jaramillo et al., 2011). If an individual is working for a large company, having an extensive social network is especially valuable because the resource of information must often be gathered from multiple sources (Hobfoll, 1989). As demonstrated above, temporary workers at a large organization will likely face more challenges to forming this network and if they fail to make the interpersonal connections essential for job success after investing their resources of time and energy, these workers could experience emotional exhaustion (Wright & Cropanzano, 1998). In summary, the continuous stress from interpersonal mistreatment depletes resources leading to emotional exhaustion (Whitman et al., 2014), and this relationship may fail to be buffered because many temporary workers lack a strong social support network due to the nature of the position. Based on this rational, I predict the following:

Hypothesis 1b: Interpersonal mistreatment will positively relate to emotional exhaustion.

The third stressor expected to relate to emotional exhaustion for temporary workers is organizational constraints. These constraints can simultaneously prevent employees from accessing needed resources and also directly deplete resources. In connection to negative outcomes, studies have shown that constraints lead to strain by obstructing work conditions that cannot be controlled by the worker (e.g., Campbell & Pritchard, 1976; Spector et al., 1988). Organizational constraints have been found to correlate with anger and depression (Liu, Spector, & Shi, 2007), high anxiety (Spector, Dwyer, & Jex, 1988), and frustration (Pindek & Spector, 2016). Similar to the negative emotions from experienced interpersonal mistreatment, those caused by organizational constraints can drain resources and induce emotional exhaustion. Although organizational constraints such as inadequate support from coworkers, deficiency of time, and lack of necessary tools and resources can impact all workers (Peters & O'Connor,

1980), certain temporary workers may be especially likely to experience these constraints and consequently experience emotional exhaustion. Their relationships with coworkers are less likely to be adequately established, their time is limited, and some begin working without experience or previous connections within the company, all of which result in problems accessing necessary resources and leading to exhaustion (De Cuyper et al., 2008).

Similarly, the conservation of resources theory states that employees who already possess resources more easily gain resources, and initial gains lead to future gains (Chen, Westman, & Eden, 2009). Thus, if an employer does not provide resources of adequate job and safety training, temporary workers will have a more difficult time gaining resources such as job-specific skills and safety knowledge. Further, insufficient job training might force temporary workers to obtain the necessary skills or knowledge independently, and a lack of safety training may result in accidents on the job. These scenarios can drain temporary workers' personal resources, both physical and mental, and lead to emotional exhaustion.

Going a step further, many temporary workers do not feel their organization invests in them in terms of promotion opportunities, fringe benefits, or support, and these constraints make them less willing to invest personal resources such as loyalty and long-term organizational commitment (De Cuyper et al., 2008). If workers are deprived of support, opportunities, and the required tools for work, that means they are lacking the resources found to be effective in preventing strain (Hobfoll, 2001). More specifically this implies a lack of resources for preventing emotional exhaustion. Temporary workers who have poorer job conditions may additionally feel emotionally exhausted from constraints such as fewer opportunities to practice their skills, less autonomy, and more monotonous tasks (De Cuyper et al., 2008). Shorter work contracts have also been found to relate to limited responsibility and less interesting work

(Feldman, 2006). Any of these constraints can deplete or prevent the establishment of resources, ultimately leading to emotional exhaustion, which warrants my third hypothesis:

Hypothesis 1c: Organizational constraints will positively relate to emotional exhaustion.

Workplace Stressors and Moral Disengagement

In addition to examining emotional exhaustion as an emotional reaction that temporary workers may have in response to workplace stressors, I also suggest a cognitive reaction to stressors: moral disengagement. Similar to the theory outlined above, the relationship between my three categories of stressors and cognitive reactions can be explained using the conservation of resources framework. Moral disengagement is the cognitive process that allows individuals to momentarily ignore or obscure collective norms, values, and models (Detert et al., 2008; Moore, 2008). Morally disengaging allows workers to cognitively remove the moral component from an otherwise unethical behavior (Bandura et al., 1996). This is important because acting against one's typical moral standards would cause personal discomfort and self-condemnation (Bandura, 1986) meaning a loss of resources. Temporary workers may attempt to prevent these losses or alleviate these negative feelings by morally disengaging.

When morally disengaging, a worker deactivates his or her internal control and self-sanction in order to avoid emotional reactions such as feelings of emotional exhaustion (Fida et al., 2015). After removing the moral component or deactivating internal controls and sanctions, workers are able to rationalize unethical actions and accept any resulting consequences (Bandura et al., 1996). Acting immorally would typically violate workers' moral standards and cause psychological discomfort, which is the idea behind cognitive dissonance (Festinger, 1957).

However, moral disengagement provides a dissonance-reduction strategy by allowing for rationalization of unethical behaviors (Bonner, Greenbaum, & Mayer, 2016).

The actions or decisions that workers make are dependent not only on behavior, but also personal factors and environmental factors (Bandura, 1986). In light of morals, workers utilize a self-regulatory process to translate decisions into either moral or immoral behaviors (Bandura, 2002). This self-regulatory process is driven by the perceived consequences of such behaviors (Bandura, 2002), but can be stopped or circumvented through moral disengagement (Detert et al., 2008). In relation to the current study, I conceptualize moral disengagement as a coping mechanism that may be used by temporary workers reacting to the previously described categories of stressors: economic stressors, interpersonal mistreatment, or organizational constraints.

Research has suggested that workers deactivate moral standards using three types of cognition (Bandura et al., 1996). The first type of cognition for deactivating standards is known as reframing, where an individual reframes an unethical action in a way that it no longer feels wrong (Huang et al., 2017). An example of this might be a temporary worker stealing a laptop from his organization but viewing this as an action that is necessary for completing the tasks required by that organization. Another example could be a worker withholding negative information about a product or service in order to uphold the organization's positive reputation (Moore, 2008). Once a worker has relabeled an unethical behavior, he or she can feel comfortable performing that behavior (Bonner et al., 2016).

The second type of cognition used to deactivate moral standards involves ignoring, belittling, or misconstruing the consequences of an unethical action (Huang et al., 2017). These moral disengagement mechanisms allow workers to distance themselves from or distort the

negative effects of an unethical behavior (Bonner et al., 2016). An example of this might be temporary workers wasting company resources because they know the company has an excess of those resources. Internally minimizing any negative outcomes that may come from wasting resources, workers focus instead on potential benefits of their actions. This cognitive effect is also seen when workers show absolute obedience to their boss and consequently fail to report unethical behavior demonstrated by that boss (Trevino et al., 1999). Workers experience a displacement of responsibility, believing that their boss, and not themselves, is responsible for any harmful outcomes associated with the unethical action (Bandura, 1986). Finally, workers may avoid unpleasant feelings through the diffusion of responsibility, which exists when harmful consequences of an unethical behavior are ascribed to many people, protecting anyone from feeling individually responsible (Bonner et al., 2016).

The third type of cognition for deactivation during moral disengagement is devaluing a target by attributing blame or dehumanizing that target (Huang et al., 2017). This allows workers to diminish their identification with the target of the unethical act. When utilizing dehumanization, workers ignore the target's human characteristics, viewing them as undeserving of fundamental human considerations (Moore et al., 2012). For example, a temporary worker might ignore a coworker in need because the temporary worker feels that his coworker never provides assistance and therefore do not deserve assistance. Here, the temporary worker is directly blaming the victim, believing that the coworker is at fault and deserves this immoral treatment. In short, temporary workers may react to workplace stressors through moral disengagement by reframing planned behaviors, ignoring or misconstruing consequences of planned behaviors, and blaming the target of their anticipated harmful actions.

Relating back to the conservation of resources theory, many temporary workers will invest valued resources such as time and energy into their organization upon being hired. However, the organization may not always invest in these workers in terms of ensuring their financial stability or affording feelings of job security. When that occurs, temporary workers may use moral disengagement to reduce their identification with their organization, faulting it for the perceived economic stressors. Regarding financial insecurity, money has widely been supported as a key motivator of action (e.g., Lawler, 1973; Vroom, 1964; Meudell & Rodham, 1998) and motives are directly related to perceptions and cognitions (Locke & Baum, 2007). This implies that temporary workers who perceive themselves as financially insecure will be motivated to retaliate, but they must first justify any future retaliatory actions using moral disengagement.

Temporary workers may also be motivated to morally disengage as part of their struggle for job security. Due to its long-term and ambiguous nature, job insecurity has been recognized as a chronic stressor that can lead to more stress along with decreased mental and physical health (Cheng & Chan, 2008; Hellgren & Sverke, 2003; Sverke et al., 2002). Because it is human nature to place some blame on others for negative experiences (Miller & Ross, 1975), temporary workers who experience feelings of job insecurity may blame others (Huang et al., 2017). This cognitive reframing of blaming others is an example of moral disengagement being used as a reaction to job insecurity, a link that has received empirical support (e.g., Huang et al., 2017). Considering the needs for financial and job security as a powerful motives, temporary workers may morally disengage by focusing on gaining these resources while ignoring any unethical actions occurring along the way, leading to the following prediction:

Hypothesis 2a: Economic stressors will positively relate to moral disengagement.

Temporary workers might also morally disengage as a reaction to interpersonal mistreatment. Interpersonal mistreatment experienced at work can easily drain temporary workers' valuable resources. For example, contingent workers and contractors are often stigmatized, marginalized, and either treated as outsiders or ignored by coworkers (Barker, 1998) provoking negative emotions toward these coworkers. These negative emotions may drain temporary workers' resources such as attention and mental energy needed for work, which may increase their likelihood of morally disengaging. Another example of mental resources being drained is if temporary workers feel ostracized and their need to belong is violated, which often occurs without their inducement (Williams, 2007). This harmful impact of drained mental resources is supported by the finding that feelings of personal distress can provoke moral disengagement (Paciello et al., 2013).

Interpersonal mistreatment can also arise if permanent employees working beside temporary employees question their own job security resulting in negative attitudes toward these temporary employees (Smith, 1997). Considering organizations occasionally hire temporary workers to determine if they are suitable for a full-time job, permanent workers may feel pressure to protect their jobs from temporary coworkers (Geary, 1992). If temporary workers view permanent coworkers as unfriendly or threatening, they may seek retribution by displaying unethical behaviors. However, temporary workers must first morally disengage in order to discount these subsequent unethical behaviors and maintain their mental resource of positive self-perceptions. Similarly, previous research has shown that individuals who perceived a situation as threatening were more prone to act on their propensity for moral disengagement (Chugh et al., 2014).

Additionally, research has shown that as the number of temporary workers in a work group increases, trust and interpersonal attraction decreases between all workers (Chattopadhyay & George, 2001). This might increase the likelihood of interpersonal mistreatment, such as some temporary workers not being trusted and thereby having their ideas ignored, resulting in a loss of resources through feelings like frustration. In attempt to gain back those resources, these workers may plan to retaliate against others in the work group. Similarly, conflict may stem from temporary workers being viewed as a package of skills as opposed to being viewed as individual workers (Inkson, Heising, & Rousseau, 2001). In an attempt to cope with these resources lost or threatened by coworkers, temporary workers might use moral disengagement to reduce tensions (D'Arcy, Herath, & Shoss, 2014).

In a similar vein, researchers have found a positive relationship between the lack of social support and moral disengagement (Fida et al., 2015). Many temporary workers spend less time in their work roles compared to more traditional workers, which means less time to establish and cultivate interpersonal work relationships (Rogers, 2000). Temporary workers who lack meaningful affiliation or are constantly in conflict with their coworkers or supervisors may feel more inclined to act unjustly. In order to avoid the resulting unpleasant feeling of cognitive dissonance, meaning tension due to actions that go against one's beliefs (Festinger, 1957), these workers might engage in moral disengagement, which leads me to predict the following:

Hypothesis 2b: Interpersonal mistreatment will positively relate to moral disengagement.

As outlined in the paragraphs above and demonstrated in previous studies (e.g., Fida et al., 2015), moral disengagement is an instrumental coping mechanism used to buffer the harmful effects of workplace stressors on strains, indicating it could also be utilized to deal with stressors beyond one's control such as organizational constraints. If resources are lost or fail to be gained

after they are invested because of organizational constraints, temporary workers may attempt to protect their remaining resources by morally disengaging (Wright & Hobfoll, 2004). For example, one type of temporary worker, contingent workers have been oftentimes found to resent their organizations (e.g., Feldman et al., 1994; Jordan, 2003) making them more prone to morally disengaging, specifically through deactivation or attributing blame to their organization. Furthermore, temporary workers may perceive their work as threatened because they are recruited only as long as they are making valuable contributions (Inkson, Heising, & Rousseau, 2001). The stress from organizational constraints such as inadequate training or rules that make work difficult can evoke feelings of anxiety and frustration (Peters & O'Connor, 1980), pushing temporary workers toward unethical behaviors directed at the organization. Providing support for this idea, previous researchers have found a positive link between organizational constraints and moral disengagement (Fida et al., 2015) leading me to predict the following:

Hypothesis 2c: Organizational constraints will positively relate to moral disengagement.

CWB as an Outcome of Emotional Exhaustion and Moral Disengagement

Based on the conservation of resources theory, economic stressors, interpersonal mistreatment, and organizational constraints may lead to temporary workers performing counterproductive work behaviors (CWBs) through the two previously suggested paths of emotional exhaustion and moral disengagement. As explained above, these stressors may drain resources or threaten resources, and when stressors are appraised as threatening, they can evoke a negative emotional experience, which then energizes individuals to perform CWB (Krischer, Penney, & Hunter, 2010).

CWBs are deliberate acts that harm organizations, coworkers, clients, or supervisors (Spector & Fox, 2005). Examples of CWB include incorrectly completing tasks, avoiding work, physical or verbal aggression, theft, and sabotage (Spector & Fox, 2002). In past research, CWB has additionally been conceptualized as delinquency (Hogan & Hogan, 1989), retaliation (Skarlicki & Folger, 1997), bullying (Knorz & Zapf, 1996), organizational aggression (Fox & Spector, 1999), and deviance (Robinson & Bennett, 1995).

CWB can further be classified based on the underlying intention of the action. The two classifications are related to the intention behind CWB and are labeled reactive or instrumental CWB. Reactive CWB is a product of emotions, while instrumental CWB is a result of precise planning. Reactive CWB is described as an emotional response to stressors by multiple theories and emotion-based approaches including affective events theory (Weiss & Cropanzano, 1996), stressor-emotion theory (Spector & Fox, 2002), and the attributional model of fairness (Cohen-Charash & Mueller, 2007). Due to its theoretical foundation on affect and emotion, reactive CWB likely corresponds with the emotional exhaustion pathway linking workplace stressors to CWB. On the other hand, instrumental CWB is an intentional act meant to achieve a calculated objective (Fox & Spector, 2010), which corresponds with the moral disengagement path linking stressors to CWB. In the context of the conservation of resources theory, CWB has been suggested to be the result of a process to protect and retain resources threatened by job demands (Krischer, Penney, & Hunter, 2010; Penney, Hunter, & Perry, 2011) or conserve resources that have been threatened by stressors (Krischer et al., 2010). This means that temporary workers experiencing a loss of resources or threat to resources because of work-related stressors may react by performing CWB.

As implicated above, the first proposed path from economic stressors, interpersonal mistreatment, and organizational constraints to CWB is through emotional exhaustion. Emotional exhaustion has been defined as a strain resulting from workplace stressors that can lead to behaviors that are detrimental to an organization (Cropanzano, Rupp, & Byrne, 2003) such as CWB. For example, researchers have stated that emotionally exhausted workers are more likely to harm others (Jones, 1980) and more likely to take unauthorized breaks (Jones, 1981). Other researchers suggest such actions are a strategy for coping, saying that engaging in deviant behaviors, such as CWB, can preserve the limited resources of emotionally exhausted individuals (Liang & Hsieh, 2007).

Although workers may perform CWB for a variety of reasons, CWB is often presented as a response to negative emotions motivated by workplace stressors (Martinko et al., 2002; Spector & Fox, 2005). This idea coincides with Rodell and Judge's (2009) theory on stress appraisal and emotions, which states that workers may appraise workplace stressors as threatening, causing negative emotions that lead to performing behaviors that are harmful to the organization. In a similar vein, the stressor-emotion theory (Spector & Fox, 2002) illustrates the way a threatening situation at work, for instance experiencing the stressors highlighted in this paper (i.e., economic stressors, interpersonal mistreatment, and organizational constraints) can induce a negative emotional reaction, such as emotional exhaustion, leading to CWB.

CWB has been conceptualized as involving either the active use of resources to harm the organization or passively withholding resources at work (Bolton et al., 2011). Considering emotional exhaustion as a state of depleted emotional resources, emotionally exhausted temporary workers may be more likely to perform passive CWBs such as coming late to work or wasting time at work. These workers might also protect their remaining resources in an attempt

to prevent further losses of resources by withdrawing from their organization (Bolton et al., 2011), meaning arriving late or skipping work days. In reference to more active CWBs, stressors that threaten workers' resources may lead to appraising a situation as threatening, producing negative emotional reactions that encourage CWB (Krischer, Penney, & Hunter, 2010). Previous studies have supported this link, showing that emotionally exhausted employees were more likely to perform CWB (e.g., Banks et al., 2012; Golparvar, 2016; Jones, 1981). This leads to the following prediction:

Hypothesis 3: Emotional exhaustion will mediate the relationship between economic stressors, interpersonal mistreatment, and organizational constraints and CWB.

The second proposed path from economic stressors, interpersonal mistreatment, and organizational constraints experienced by temporary workers to CWB is through moral disengagement. Thinking of CWBs broadly as unethical behaviors, research on moral disengagement has suggested that workers reframe unethical behaviors with eight strategies that might be used together or independently (Bandura et al., 1996). These strategies are often divided into three groups that include relabeling unethical behavior, distancing or distorting the harmful outcomes of unethical behavior, and reducing identification with victims of the unethical behavior (Bandura et al., 1996; Detert et al., 2008). Beginning with the relabeling group of strategies, the first strategy, moral justification, involves framing an unethical act as serving the greater good, while the second strategy, advantageous comparison, means comparing an unethical action to another unethical action (Huang et al., 2017). The third type of relabeling, euphemistic labeling, is describing the unethical behavior in a way that reduces its severity, making the behavior seem less inappropriate (Huang et al., 2017).

Moving to the second group, moral disengagement strategies within the distorting and distancing category attempt to reframe anticipated behaviors by shifting any blame that might accompany the unethical action. One such strategy is the diffusion of responsibility, which simply means passing the responsibility of an unethical action onto others (Huang et al., 2017). Additional blame-shifting strategies include the displacement of responsibility, which implies attributing responsibility to others, and the attribution of blame, meaning explicitly blaming someone else for the unethical action (Huang et al., 2017). The final strategies for moral disengagement fall into the third group, which is reducing identification with the victims. These strategies include distortion of consequences, meaning minimizing the severity of the unethical behavior, and dehumanization, or viewing the victims of the unethical act as unworthy of basic human respect (Huang et al., 2017).

Considering these strategies within the conservation of resources framework, moral disengagement allows workers to reduce the anticipated costs of performing CWB by viewing future inappropriate actions in a way that the benefits outweigh the costs of invested resources (Tillman et al., 2017). For instance, temporary workers may feel they are not fairly rewarded for the amount of time and energy (i.e., resources) invested in work. These workers might use a moral disengagement strategy to justify wasting time on the job, convincing themselves that the organization does not deserve that time because the organization is not providing them with appropriate rewards. As demonstrated in this example, CWB can be a response to stress at work or to frustrating work conditions (Spector & Fox, 2005) such as unfair pay, conflict with coworkers, or organizational constraints, performed by temporary workers attempting to restore lost resources.

The proposed model in this paper suggests that moral disengagement takes place after temporary workers experience stressors and before these workers perform CWB. This is because moral disengagement is conceptualized as anticipatory, meaning it happens prior to the counterproductive behavior in order to allow that behavior to occur (Bandura, 2002). In this case, temporary workers may hold their coworkers or organization accountable for their experience of economic stressors, interpersonal mistreatment, and organizational constraints in order to avoid personal responsibility of future harmful behaviors. This would allow temporary workers to see CWB as a justified form of payback (Bandura, 1999). For example, empirical research has shown that job insecurity increases acts of deviance, like CWB, through moral disengagement (e.g., Huang et al., 2017). Additionally, moral disengagement has been shown to mediate the relationship between fairness at work and specific types of CWB (Hystead et al., 2014), along with the relationship between workplace stressors and CWB (Fida et al., 2014).

In summary, temporary workers perceiving economic stressors, interpersonal mistreatment, or organizational constraints may attempt to protect their valued resources from being depleted by morally disengaging before performing a retaliatory behavior. This idea is supported by a large body of research showing the disinhibitory power of moral disengagement in addition to its associations with deviant behaviors such as CWBs (e.g., Bandura et al. 1996; Bandura et al. 2000; Detert et al. 2008; Fida et al. 2015; Moore et al. 2012). In an organizational setting, researchers have found that moral disengagement increases workers' likelihood to violate safety rules (Barbaranelli & Perna, 2004), engage in deception or fraudulent behavior at work (Barsky, 2011), and that moral disengagement may influence CWB (Detert et al., 2008). Further, researchers have found strong, positive correlations between two types of CWB, interpersonal

and organizational deviance, with moral disengagement (Huang et al., 2017). This leads me to predict the following:

Hypothesis 4: Moral disengagement will mediate the relationship between economic stressors, interpersonal mistreatment, and organizational constraints and CWB.

METHOD

Participants

In order to explore the proposed hypotheses, participants were recruited from three different sources. The first subsample included temporary workers recruited from a local staffing agency. Temporary workers currently employed through the agency were emailed an invitation with a link to participate in this study by the agency's media contact. For the second subsample, a contact person in the human resources department at a large university forwarded emails containing survey invitations to temporary workers currently employed by the university. The third subsample was recruited through TurkPrime, an online research platform that uses the crowdsourcing platform Amazon Mechanical Turk (MTurk), recommended by previous researchers for efficiently collecting quality data (e.g., Buchheit et al., 2018; Litman Robinson, & Abberbock, 2017).

Subsample 1: Temporary workers employed through a local staffing agency. The staffing agency subsample consisted of 26 temporary workers employed through a temporary help agency located in the Southeast. Approximately 54.55% of the workers were male and ranged from 26-71 years old (M=46.91 years). Most of this subsample (77.27%) identified as White, 9.09% identified as Black, and the remaining 9.09% identified as Asian/Pacific Islander. A majority had earned a bachelor's degree (52.38%) while 14.29% did not have any type of degree. Only 18% of the workers reported that they were in temporary jobs by choice, meaning they could be considered voluntary temporary workers who did not currently want a permanent job. All of these participants were given the option at the end of the survey to provide their email address for two follow-up surveys. They were told that the follow-up surveys were identical to

the first, with the exclusion of demographic questions. Four participants provided their emails and were included in the second wave of data collection and only one completed the third survey as part of Time 3.

Subsample 2: Other personal services (OPS) workers employed at a university. The university workers subsample consisted of 24 OPS workers employed at a large Southeastern university. The university defined an OPS worker as an employee who is hired into a contracted temporary position without benefits, which, based on the literature review presented above, implies OPS workers can be categorized as temporary workers. Around 30.43% of the OPS workers were male and ranged from 22-76 years old (*M*=42.50 years). A majority (56.52%) of this subsample identified as White, 26.08% identified as Hispanic/Latino, and the remaining 8.69% were Black or Asian/Pacific Islander with a majority (91.30%) holding an associate's, bachelor's, master's, or doctorate degree. When asked why they were holding a temporary job, 65.21% said that they were unable to find a permanent job. Identical with participants recruited through the staffing agency, participants recruited through the university were given the option at the end of the Time 1 survey to provide their email address for two follow-up surveys. Five workers completed the survey at Time 2 and only one participated at data collection Time 3.

Subsample 3: Amazon Mechanical Turk (MTurk) workers. The last subsample consisted of MTurk workers who were required to be holding a temporary position and were offered a $1 incentive per survey. A total of 645 MTurk workers completed the first survey, but I excluded 41 participants who failed the two attention checks for a final subsample of 604 participants. Of those participants, 404 completed the survey at Time 2, and then 382 participated at Time 3. Regarding gender, these workers were 39.24% male and ranged from 18 to 69 years old (*M*=33.29 years). Around 70.86% of the MTurk workers identified as White,

11.09% identified as Black, 9.60% identified as Hispanic/Latino, 5.63% identified as Asian/Pacific Islander, and less than 1% identified as Native American. While 38.41% of these workers held a bachelor's degree, 32.8% had no degree and 15.3% held an advanced degree. Over 60% of this subsample were temporary workers because they were unable to find a permanent job.

Combining the Three Subsamples

As described above, all workers who participated in this study were, by definition, temporary workers. These temporary workers from each subsample held a variety of temporary positions. Although some temporary workers were employed through a staffing agency, they each had unique positions under the jurisdiction of multiple employers. Similarly, temporary workers employed through the university held different types of temporary positions and worked within different departments. Typically, the covariance matrices of the three subsamples would be compared before the combination into a single sample, however, this test would not be meaningful in the case of this study where the sizes of the subsamples differed dramatically. Instead, a one-way ANOVA showed that there were no significant differences in how long workers had held temporary jobs, as well as no differences on demographic variables between the three subsamples, with the exception of age and education. The university subsample was on average more educated than the MTurk subsample, and the MTurk subsample was younger than the other two subsamples. In order to see if this led to differences between the MTurk subsample and other two subsamples, I simultaneously tested all hypotheses by regressing all study variables on CWB, entering the control variables (i.e., length of assignment, age, gender, education, ethnicity) at step 1, stressors (i.e., economic stressors, interpersonal mistreatment, organizational constraints) at step 2, and emotional exhaustion and moral disengagement at step

3. I first used only the MTurk subsample, and then ran the same analyses using a combination of all subsamples into one sample representing a broader population of temporary workers. All unstandardized coefficients showed differences no greater than .01; therefore, only results from the full sample are reported below.

In order to test nonresponse bias, multivariate analysis of variance was used to compare the final sample with participants who did not complete all three waves of the survey (Lance, Vandenberg, & Self, 2000). Results showed that participants who responded only at Time 1 verses participants who responded to all three waves showed no significant differences on demographic or study variables ($F(14,626)= .03$, *ns*).

Procedure

Data were collected in three waves in order to test the proposed mediation model suggesting a casual chain of events. Each wave of data collection included all variables in order to test the stability of each variable over time and ensure that data were collected on all study variables in case of severe attrition at Time 2 or Time 3. The second and third surveys were identical to the first, with the exception of only the Time 1 survey asking for demographic information. I included gender and age among other control variables based on previous research showing that certain demographic factors influence CWBs (e.g., Huiras & Uggen, 2000).

In each survey, participants (i.e., temporary workers) were asked to report perceived economic stressors, interpersonal mistreatment, and organizational constraints. They were also asked to report self-perceived levels of emotional exhaustion and moral disengagement along with self-ratings of CWB. Similar to past researchers (e.g., Bennett & Robinson, 2000; Huang et al., 2017; Tepper et al., 2009; Tepper et al., 2008) I used a self-report measure of CWB because

these behaviors are difficult for others to see and report (Fox, Spector, & Miles, 2001). I attempted to alleviate social desirability on this measure by ensuring complete confidentiality (Podsakoff et al., 2003). Participants from the staffing agency and university subsamples were emailed the follow-up surveys approximately one week apart, while those who completed the first survey on MTurk were invited to complete the follow-up surveys each one week apart through a link posted on MTurk. This interval was chosen to accommodate for any temporary workers in positions that were specified to last under a few months.

Measures

Economic Stressors. Economic stressors were assessed using the Economic Hardship Questionnaire (EHQ; Lempers, Clark-Lempers, & Simon, 1989), the Financial Well-Being Scale (FWBS; Norvilitis et al., 2003), and the Quantitative Job Insecurity Scale (Hellgren, Sverke, & Isaksson, 1999). The EHQ included six items (e.g., "During the last few years, did your family cut back on social activities and entertainment expenses?") and used a four-point scale (1 = Never; 4 = Very often). The EHQ was used to assess the cutbacks that workers must make during times of economic adversity and had a Cronbach's Alpha value of .88 at Time 1, .89 at Time 2, and .92 at Time 3. These scale reliabilities at each wave of data collection are presented in Table 1 below. The FWBS included four items (e.g., "I am uncomfortable with the amount of debt I am in.") with a scale from 1 to five (1 = Strongly disagree; 5 = Strongly agree) and estimated individual workers' well-being in relation to their financial status. This scale had a Cronbach's Alpha value of .89 at Time 1, .91 at Time 2, and .92 at Time 3. The Quantitative Job Insecurity Scale consisted of three items related to the continuity of the participant's job itself including, "I am worried about having to leave my job before I would like to" and "I feel uneasy

about losing my job in the near future" (Hellgren, Sverke, & Isaksson, 1999). Items were measured on a five-point scale (1 = Strongly disagree; 5 = Strongly agree) which had satisfactory internal consistency reliability (T1 α = .84, T2 α = .85, T3 α = .88).

Interpersonal Mistreatment. Interpersonal mistreatment was evaluated using an interpersonal conflicts scale created by Spector and Jex (1997) along with a measure of workplace ostracism. The Interpersonal Conflict at Work Scale (ICAWS) included items such as, "How often do you get into arguments with others at work?" which were rated on a five-point scale (1 = Never; 5 = Very often). The reliability for this scale was .81 at Time 1, .77 at Time 2, and .80 at Time 3. Workplace ostracism was measured using a 10-item scale created by Ferris and colleagues (2008). Sample items include, "Others ignored you at work" and "Your greetings have gone unanswered at work." The scale's reliability at Time 1 was .93, .92 at Time 2, and .94 at Time 3.

Organizational Constraints. The final workplace stressor, organizational constraints, was measured using Spector and Jex's (1997) Organizational Constraints Scale (OCS). A sample item includes, "How often do you find it difficult or impossible to do your job because of poor equipment or supplies?" rated from 1 to 5 (1 = Less than once per month; 5 = Several times per day). The reliability of this scale was found to be good (T1 α = .90, T2 α = .91, T3 α = .91).

Emotional Exhaustion. Emotional exhaustion was measured using the six-item Job-Related Emotional Exhaustion scale (Wharton, 1993). A seven-point response scale was used ranging from 0 to 6 (0 = never felt this way while at work, 6 = feel this way every day). Sample items include, "I feel emotionally drained from my work" and "I feel used up at the end of the work day." The Cronbach's alpha for the scale was .93 at all time points.

Moral disengagement. Moral disengagement was measured using the eight-item Propensity to Morally Disengage Scale (Moore et al., 2012) in line with previous studies that used this scale to measure moral disengagement as a mediator (e.g., Beaudoin et al., 2015; Knoll et al., 2016). A five-point response scale was used ranging from 1 to 5 (1 = strongly disagree, 5 = strongly agree). Sample items include, "It is okay to spread rumors to defend those you care about" and "Taking something without the owner's permission is okay as long as you're just borrowing it." The Cronbach's alpha for the scale was found to be .80 at Time 1, .80 at Time 2, and .83 at Time 3.

Counterproductive Work Behavior. I assessed the number of CWB performed by temporary workers using the Counterproductive Work Behavior Checklist (CWB-C; Fox & Spector, 2002). The response scale asked how often workers did each of the following things on their present job with response options ranging from 1 to 5 (1 = never, 5 = every day). Sample items include, "Came to work late without permission" and "Purposely failed to follow instructions." The reliability of the scale was .90 at Time 1, .92 at Time 2, and .91 at Time 3.

Volition. A single-item asked, "Why are you holding a temporary job?" in order to control for the potential impact of the involuntary nature of the temporary position. This was based on past research suggesting that employees' contract volition, meaning their voluntary or involuntary decision to work as a temporary worker, influences the prediction of worker reactions (e.g., Connelly and Gallagher, 2004; Ellingson et al., 1998; Isaksson and Bellagh, 2002). This particular item was taken from a study by Amuedo-Dorantes (2000) on involuntary temporary employment.

Attention check items. I included two bogus items in my survey to detect careless responding. These included, "I am paid biweekly by leprechauns" (Meade & Craig, 2012) and "I

am interested in pursuing a degree in parabanjology" (Huang et al., 2015). At Time 1, 41 participants, all from the MTurk subsample, failed both attention check items and were therefore not invited to participate in the follow-up surveys and were excluded from the final sample of 683 participants.

Table 1 Cronbach's Alpha for Scales at Time 1-3

	Time 1		Time 2		Time 3		N of
Scale/Variable	*N*	α	*N*	α	*N*	α	items
Financial Well-being	662	.89	412	.91	384	.92	4
Economic Hardship	658	.88	413	.89	384	.92	6
Job Insecurity	662	.84	412	.85	384	.88	3
Organizational Constraints	662	.90	413	.91	384	.91	11
Interpersonal Conflict	660	.81	413	.77	384	.80	4
Ostracism	660	.93	413	.92	384	.94	10
Emotional Exhaustion	655	.93	412	.93	384	.93	6
Moral Disengagement	655	.80	413	.80	384	.83	8
CWB	646	.90	412	.92	384	.91	32

Note. N = Number of observations. CWB=Counterproductive work behavior.

Analytical Approach

The analytical approach was chosen in order to individually test each hypothesis while building up to the proposed mediation model. Before testing the hypotheses, I ran confirmatory factor analyses to check the appropriateness of combining the six scales used to measure workplace stressors into the three proposed categories of workplace stressors (i.e., economic stressors, interpersonal mistreatment, and organizational constraints). I then conducted linear regression analyses to test Hypotheses 1a-1c and Hypotheses 2a-2c concerning unique relationships between each of the three workplace stressors with each mediator. Building up to the proposed model, I then ran regressions that included each mediator regressed simultaneously on all workplace stressors.

The second half of the proposed model regarded the relationships between the mediators and the outcome. These links between emotional exhaustion and moral disengagement with CWB were tested separately and then together using regression analyses. Model 4 in PROCESS (Hayes, 2013) was used to test the full model. This proposed model did not suggest direct relationships between the workplace stressors and outcome of CWB. Testing the hypotheses in PROCESS allowed for the assessment of full verses partial mediation. It additionally allowed for tests of the effects of each workplace stressor through individual mediators as well as the effects for parallel mediation. Ultimately, these analyses built up to the full test of the model, using PROCESS with parallel mediators to test if the chosen workplace stressors predicted CWB through the process of moral disengagement or feelings of emotional exhaustion.

RESULTS

Descriptive Statistics

Means, standard deviations, and zero-order correlations of study variables measured at Time 1 are presented in Table 2. All study variables were significantly and positively related, with the exception of moral disengagement and economic stressors. Reflecting past empirical findings, both demographic variables, age and gender, were significantly related to CWB. Table 3 includes the descriptive statistics for all variables included in the hypothesized model, meaning predictors measured at Time 1, mediators measured at Time 2, and the outcome variable measured at Time 3. Finally, Table 4 includes all variables measured at all the time points.

Table 2 Means, Standard Deviations, and Correlations for T1 Cross-Sectional Data

Variable	*N*	*M*	*SD*	1	2	3	4	5	6	7	8
1. Gender	649	1.61	.49								
2. Age	647	34.06	10.51	.03							
3. Economic Stressors	662	3.14	.91	.20**	-.03						
4. Interpersonal Mistreatment	660	1.50	.54	.02	-.04	.33**					
5. Organizational Constraints	662	2.11	.83	.02	-.11**	.30**	.47**				
6. Emotional Exhaustion	655	2.85	.97	.06	-.14**	.36**	.47**	.58**			
7. Moral Disengagement	655	1.56	.56	-.20**	-.21**	.02	.20**	.13**	.18**		
8. CWB	646	1.19	.25	-.15**	-.13**	.10*	.42**	.27**	.33**	.39**	

Note. CWB=Counterproductive work behavior. Gender is coded as 1 (male) and 2 (female). $*p < .05$, $**p < 0.01$.

Table 3 Means, Standard Deviations, and Correlations for Hypothesized Model

Variable	*N*	*M*	*SD*	1	2	3	4	5	6	7	8
1. Gender	649	1.61	.49								
2. Age	647	34.06	10.51	.03							
3. T1 Economic Stressors	662	3.14	.91	.20**	-.03						
4. T1 Interpersonal Mistreatment	660	1.50	.54	.02	-.04	.33**					
5. T1 Organizational Constraints	662	2.11	.83	.02	-.11**	.30**	.47**				
6. T2 Emotional Exhaustion	413	2.89	.96	.11*	-.16**	.30**	.36**	.49**			
7. T2 Moral Disengagement	414	1.53	.54	-.23**	-.10*	-.05	.10*	.05	.12*		
8. T3 CWB	384	1.19	.24	-.13**	-.13**	.12*	.32**	.16**	.30**	.37**	

Note. CWB=Counterproductive work behavior. Gender is coded as 1 (male) and 2 (female). $*p < .05$, $**p < 0.01$.

Table 4 Means, Standard Deviations, and Correlations for all Variables

Variable	*N*	*M*	*SD*	1	2	3	4	5	6	7	8
1.Gender	649	1.61	.49								
2.Age	647	34.06	10.51	.03							
3.T1 Economic Stressors	662	3.14	.91	.20**	-.03						
4.T1 Interpersonal Mistreatment	660	1.50	.54	.02	-.04	.33**					
5.T1 Organizational Constraints	662	2.11	.83	.02	-.11**	.30**	.47**				
6.T1 Emotional Exhaustion	655	2.85	.97	.06	-.14**	.36**	.47**	.58**			
7.T1 Moral Disengagement	655	1.56	.56	-.20**	-.21**	.02	.20**	.13**	.18**		
8.T1 CWB	654	1.20	.25	-.15**	-.13**	.10*	.42**	.27	.33**	.36**	
9.T2 Economic Stressors	414	3.15	.89	.18**	-.01	.80**	.27**	.19**	.29**	-.07	.02
10.T2 Interpersonal Mistreatment	414	1.43	.46	-.03	-.09	.20**	.75**	.40**	.44**	.17**	.41**
11.T2 Organizational Constraints	414	2.05	.78	.07	-.07	.24**	.48**	.74**	.49**	.03	.26**
12.T2 Emotional Exhaustion	413	2.89	.96	.11*	-.16**	.30**	.36**	.49**	.77**	.08	.27**
13.T2 Moral Disengagement	414	1.53	.54	-.23**	-.10*	-.05	.10*	.05	.14**	.60**	.32**
14.T2 CWB	413	1.21	.26	-.13**	-.12*	.05	.32**	.27**	.29**	.27**	.73**
15.T3 Economic Stressors	384	3.12	.92	.18**	-.06	.81**	.28**	.16**	.28**	.01	.06

16. T3 Interpersonal Mistreatment	384	1.38	.43	-.01	-.04	.17**	.77**	.39**	.39**	.15**	.40**
17.T3 Organizational Constraints	384	2.00	.78	.08	-.10	.23**	.52**	.66**	.49**	.06	.30**
18.T3 Emotional Exhaustion	384	2.86	.93	.05	-.14**	.30**	.36**	.41**	.75**	.07	.26**
19. T3 Moral Disengagement	384	1.46	.53	-.20**	-.18**	.00	.16**	.05	.14**	.66**	.45**
20. T3 CWB	384	1.19	.24	-.13**	-.13**	.12*	.32**	.16**	.28**	.29**	.73**

Note. CWB=Counterproductive work behavior. Gender is coded as 1 (male) and 2 (female). Volition coded as 1 (Did not want a permanent job) and 2 (Not able to find a permanent job). $*p < .05$, $**p < 0.01$.

Means, Standard Deviations, and Correlations for all Variables

Variable	*N*	*M*	*SD*	9	10	11	12	13	14
1.Gender	649	1.61	.49						
2.Age	647	34.06	10.51						
3.T1 Economic Stressors	662	3.14	.91						
4.T1 Interpersonal Mistreatment	660	1.50	.54						
5.T1 Organizational Constraints	662	2.11	.83						
6.T1 Emotional Exhaustion	655	2.85	.97						
7.T1 Moral Disengagement	655	1.56	.56						
8.T1 CWB	654	1.20	.25						
9.T2 Economic Stressors	414	3.15	.89						
10.T2 Interpersonal Mistreatment	414	1.43	.46	.21**					
11.T2 Organizational Constraints	414	2.05	.78	.23**	.51**				
12.T2 Emotional Exhaustion	413	2.89	.96	.34**	.44**	.58**			
13.T2 Moral Disengagement	414	1.53	.54	-.06	.22**	.02	.12*		
14.T2 CWB	413	1.21	.26	.46**	.46**	.29**	.28**	.36**	
15.T3 Economic Stressors	384	3.12	.92	.17**	.17**	.17**	.27**	-.03	.08
16. T3 Interpersonal Mistreatment	384	1.38	.43	.85**	.85**	.49**	.42**	.15**	.38**
17.T3 Organizational Constraints	384	2.00	.78	.53**	.53**	.85**	.56	.01	.35**

18.T3 Emotional Exhaustion	384	2.86	.93	.40**	.40**	.53**	.85**	.15**	.28**
19. T3 Moral Disengagement	384	1.46	.53	.23**	.23**	.10	.14*	.68**	.39**
20. T3 CWB	384	1.19	.24	.44**	.44**	.28	.30**	.37**	.85**

Means, Standard Deviations, and Correlations for all Variables

Variable	*N*	*M*	*SD*	15	16	17	18	19	20
1.Gender	649	1.61	.49						
2.Age	647	34.06	10.51						
3.T1 Economic Stressors	662	3.14	.91						
4.T1 Interpersonal Mistreatment	660	1.50	.54						
5.T1 Organizational Constraints	662	2.11	.83						
6.T1 Emotional Exhaustion	655	2.85	.97						
7.T1 Moral Disengagement	655	1.56	.56						
8.T1 CWB	654	1.20	.25						
9.T2 Economic Stressors	414	3.15	.89						
10.T2 Interpersonal Mistreatment	414	1.43	.46						
11.T2 Organizational Constraints	414	2.05	.78						
12.T2 Emotional Exhaustion	413	2.89	.96						
13.T2 Moral Disengagement	414	1.53	.54						
14.T2 CWB	413	1.21	.26						
15.T3 Economic Stressors	384	3.12	.92						
16. T3 Interpersonal Mistreatment	384	1.38	.43	.19**					
17.T3 Organizational Constraints	384	2.00	.78	.23**	.56**				
18.T3 Emotional Exhaustion	384	2.86	.93	.37**	.38**	.55**			
19. T3 Moral Disengagement	384	1.46	.53	.00	.23**	.08	.12*		
20. T3 CWB	384	1.19	.24	.10	.41**	.31**	.27**	.46**	

Measurement Model

In order to assess the factor structure of the study measures, I tested a series of confirmatory factor analyses (CFAs), shown in Table 5. Only the Time 1 cross-sectional data were included for these analyses. Workplace stressors were conceptualized as three constructs (i.e., economic stressors, interpersonal mistreatment, and organizational constraints), however, these constructs were measured using six scales. The CFAs tested whether each construct should be treated as a general factor or if the items loaded onto separate factors. The economic stressors construct was operationalized using measures of economic hardship, financial well-being, and job insecurity. The model with all items loading onto a single construct (Model A) did not fit the data well ($\chi^2(65, N = 658) = 2010.15$, $p < .01$, CFI = .58, SRMR = .15, RMSEA = .21), nor did a two-factor model that treated job insecurity as a separate variable with economic hardship and financial well-being as one variable (Model B), $\chi^2(64, N = 658) = 1373.13$, $p < .01$, CFI = .71, SRMR = .12, RMSEA = .18. Testing a three-factor model (Model C) resulted in the best fit: $\chi^2(62, N = 658) = 293.15$, $p < .01$, CFI = .95, SRMR = .04, RMSEA = .07. A significant chi-square difference was shown between this one-factor model (Model A) compared to both Model B, $\Delta\chi^2(1) = 637.02$, $p < .001$ and Model C, $\Delta\chi^2(3) = 1717.00$, $p < .01$. The CFI exceeding .90, the SRMR value close to .08, and a RMSEA value close to .06 all indicate good model fit to the data (Hu & Bentler, 1999). These fit indices were correspondingly used to determine the best fitting models for the remaining predictor constructs (i.e., interpersonal mistreatment and organizational constraints), presented in the subsequent paragraph.

Interpersonal mistreatment, as conceptualized in this study, was operationalized using measures of ostracism and interpersonal conflict. When specified as one factor, the model (Model D) showed a poor fit to the data, $\chi^2(75, N = 660) = 875.65$, $p < .01$, CFI = .85, SRMR =

.08, RMSEA = .13. A two-factor model (Model E) was a better fit to the data (χ^2(74, N = 660) = 379.67, p < .01, CFI = .94, SRMR = .04, RMSEA = .08). The chi-square difference between this one-factor model (Model D) compared to the two-factor model (Model E) was significant, $\Delta\chi^2$(1) = 495.98, p < .01. The third workplace stressor, organizational constraints, was measured with 11 items treated as a unitary construct. This model (Model F) showed a modest fit to the data, χ^2(44, N = 662) = 684.30, p < .01, CFI = .82, SRMR = .07, RMSEA = .15. However, this was expected, seeing as the items in the organizational constraints scale are treated as one variable, but are not all considered the same construct and should not necessarily be intercorrelated (Spector & Jex, 1998).

Finally, I compared a 6-factor model of all workplace stressor items with a 1-factor model. The 6-factor model included all items from the six scales loading on their respective scales of financial well-being, economic hardship, job insecurity, interpersonal conflict, ostracism, and organizational constraints. This 6-factor model (Model G) showed a poor fit to the data χ^2(648, N = 658) = 8587.71, p < .01, CFI = .44, SRMR = .21, RMSEA = .14. Model H constrained all items from the six stressor measures to load onto one factor. This also showed a poor fit to the data χ^2(663, N = 658) = 8732.08, p < .01, CFI = .43, SRMR = .14, RMSEA = .14. Comparatively, Model G showed a better fit to the data than Model H with a significant chi-square difference $\Delta\chi^2$(15) = 144.37, p < .01.

Table 5 Measurement model statistics

Model	$\chi^2(df)$	CFI	RMSEA	SRMR	Reference model	$\Delta\chi^2(df)$
A: Economic Stressors 1 factor	2010.15**(65)	.58	.21	.15		
B: Economic Stressors 2 factors	1373.13**(64)	.71	.18	.12	A	637.02(1)
C: Economic Stressors 3 factors	293.15**(62)	.95	.07	.04	A	1717.00(3)
D: Interpersonal Mistreatment 1 factor	875.65**(75)	.85	.13	.08		
E: Interpersonal Mistreatment 2 factors	379.67**(74)	.94	.08	.04	D	495.98(1)
F: Organizational Constraints 1 factor	684.30**(44)	.82	.15	.07		
G: All Stressors 6 factors	8587.71**(648)	.44	.14	.21		
H: All Stressors 1 factor	8732.08**(663)	.43	.14	.14	G	144.37(15)

Note. $*p < .05$, $**p < 0.01$.

Tests of Hypotheses

The proposed overall model suggested that Time 1 (T1) workplace stressors would predict Time 2 (T2) emotional exhaustion and T2 moral disengagement, which would then predict Time 3 (T3) CWB. In line with the best fitting models shown above, I treated the economic stressors, meaning financial well-being, economic hardship, and job insecurity, as distinct predictors. Similarly, I used the two-factor model of interpersonal mistreatment, meaning interpersonal conflict and ostracism were treated as unique predictors. The final workplace stressor, organizational constraints, was included as a single predictor. Additionally, I included age, gender, and volition as control variables in all analyses. Volition refers to the measure of whether an individual was a temporary worker by choice or because he/she could not find a permanent job.

Hypothesis 1: Exploring Links Between Stressors and Emotional Exhaustion

The first hypotheses focused on relationships between each of the workplace stressors and the mediating variable emotional exhaustion. Hypothesis 1a suggested that economic stressors would be positively related to emotional exhaustion. Linear regression analysis showed that economic hardship (b=.20, p<.01) and job insecurity (b=.16, p<.01) measured at Time 1 were significant predictors of emotional exhaustion measured at Time 2. Financial well-being was not a significant predictor (b=.02, p=.74); therefore, this hypothesis was partially supported. These results are shown in Table 6.

Table 6 T2 emotional exhaustion regressed on T1 economic stressors

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.15	-3.20**
Gender	.08	(.08)	.04	.86
Volition	.17	(.09)	.09	1.78
F			7.51**	
R^2			.05	
Financial Well-Being	.01	(.04)	.02	.34
Economic Hardship	.19	(.05)	.20	3.73**
Job Insecurity	.13	(.04)	.16	3.09**
F			10.42**	
R^2 Change			.08	

Note. N=412. B=unstandardized regression coefficient; SE=standard error of B; β=standardized regression coefficient; df for Step 1= 408, df for Step 2=406. *p < .05. **p < .01.

Hypothesis 1b suggested that interpersonal mistreatment would be positively related to emotional exhaustion. This was tested by regressing T2 emotional exhaustion on T1 interpersonal conflict and T1 ostracism, controlling for age, gender, and volition. Results showed that interpersonal conflict significantly predicted T2 emotional exhaustion (b=.30, p<.01) while ostracism was a marginally significant predictor (b=.10, p=.06) of T2 emotional exhaustion. These results can be seen in Table 7.

Table 7 T2 emotional exhaustion regressed on T1 interpersonal mistreatment

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.15	-3.20**
Gender	.21	(.09)	.11	2.36*
Volition	.18	(.09)	.09	1.93
F			7.51**	
R^2			.05	
Interpersonal Conflict	.48	(.09)	.30	5.58**
Ostracism	.16	(.09)	.10	1.91
F			17.78**	
R^2 Change			.13	

Note. *N*=412. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 408, *df* for Step 2=406. *$p < .05$. **$p < .01$.

Hypothesis 1c suggested that organizational constraints would be positively related to emotional exhaustion. Emotional exhaustion measured at Time 2 was regressed on organizational constraints measured at Time 1, as shown in Table 8. In line with the hypothesis, T1 organizational constraints was found to be a significant predictor of T2 emotional exhaustion (b=.47, p<.01).

Table 8 T2 emotional exhaustion regressed on T1 organizational constraints

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.10	-2.32*
Gender	.18	(.08)	.09	2.16*
Volition	.13	(.09)	.06	1.45
F			7.51**	
R^2			.05	
Organizational Constraints	.54	(.05)	.47	10.85**
F			36.69**	
R^2 Change			.27	

Note. *N*=412. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 408, *df* for Step 2=407. *$p < .05$. **$p < .01$.

Testing the first two hypotheses required a somewhat piecemeal approach in order see the individual effects of each stressor on each mediator. Before moving to the tests of mediation, I tested models including all economic stressors, interpersonal mistreatment variables, and

organizational constraints, meaning a test of Hypotheses 1a-1c concurrently. I regressed T2 emotional exhaustion on all of the T1 economic stressors, interpersonal mistreatment, and organizational constraints variables. Economic hardship (b=.14, p<.01), interpersonal conflict (b=.16, p<.01), and organizational constraints (b=.36, p<.01) were all significant predictors of T2 emotional exhaustion. However, financial well-being (b=.01, p=.84), job insecurity (b=.07, p=.12), and ostracism (b=-.01, p=.80) were not significant predictors when all workplace stressors were included in the model, as shown in Table 7. While economic hardship, interpersonal conflict, and organizational constraints predicted T2 emotional exhaustion above and beyond the other included variables, job insecurity and ostracism were no longer significant predictors when all workplace stressors were included in the model.

Table 9 T2 emotional exhaustion regressed on all Time 1 workplace stressors

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.11	-2.65**
Gender	.12	(.08)	.06	1.44
Volition	.09	(.09)	.05	1.05
F			7.51**	
R^2			.23	
Financial Well-Being	.01	(.04)	.01	.21
Economic Hardship	.13	(.05)	.14	2.80**
Job Insecurity	.06	(.04)	.07	1.58
Interpersonal Conflict	.26	(.08)	.16	3.11**
Ostracism	-.02	(.08)	-.01	-.25
Organizational Constraints	.42	(.06)	.36	7.63**
F			20.78**	
R^2 *Change*			.27	

Note. *N*=412. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 403, *df* for Step 2=397. *p < .05. **p < .01.

Hypothesis 2: Exploring Links Between Stressors and Moral Disengagement

The second set of hypotheses focused on relationships between each of the workplace stressors and the mediating variable moral disengagement. Building up to the proposed model,

these hypotheses were also tested concurrently using linear regression and controlling for age, gender, and volition at step 1. Hypothesis 2a suggested that economic stressors measured at Time 1 would be positively related to T2 moral disengagement. Linear regression analysis showed that job insecurity (b=.13, p<.05) significantly predicted T2 moral disengagement, while economic hardship (b=-.11, p=.05) was a marginally significant predictor. This negative link between economic hardship and T2 moral disengagement was opposite of what was hypothesized, but additional analyses showed that economic hardship did not correlate with T1 moral disengagement (r=-.05, p=.25) or T3 moral disengagement (r=-.03, p=.53), highlighting an uncertain relationship between the two variables. Finally, financial well-being was not a significant predictor (b=.01, p=.88) of T2 moral disengagement, thereby partially supporting this hypothesis. These results are shown in Table 10.

Table 10 T2 moral disengagement regressed on T1 economic stressors

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.11	-3.20**
Gender	-.25	(.05)	-.23	.86
Volition	-.11	(.06)	-.09	1.78
F			10.06**	
R^2			.07	
Financial Well-Being	.00	(.02)	.01	.34
Economic Hardship	-.06	(.03)	-.11	3.73**
Job Insecurity	.06	(.02)	.13	3.09**
F			6.52**	
R^2 Change			.02	

Note. N=413. B=unstandardized regression coefficient; SE=standard error of B; β=standardized regression coefficient; df for Step 1= 409, df for Step 2=406. *p < .05. **p < .01.

Hypothesis 1b suggested that interpersonal mistreatment would be positively related to moral disengagement measured at Time 2. This was tested by regressing T2 moral disengagement on T1 interpersonal conflict and T1 ostracism, controlling for age, gender, and

volition. Results showed that interpersonal conflict significantly predicted T2 moral disengagement (*b*=.16, *p*<.01) while ostracism was a not a significant predictor (*b*=-.04, *p*=.50). These results are presented in Table 11.

Table 11 T2 moral disengagement regressed on T1 interpersonal mistreatment

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.11	-2.28*
Gender	-.25	(.05)	-.23	-4.77**
Volition	-.09	(.05)	-.08	-1.64
F			10.06**	
R^2			.07	
Interpersonal Conflict	.15	(.05)	.16	2.90**
Ostracism	-.03	(.05)	-.04	-.67
F			8.02**	
R^2 Change			.02	

Note. *N*=413. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 409, *df* for Step 2=407. *$p < .05$. **$p < .01$.

Although T1 ostracism was not predictive of T2 moral disengagement, bivariate correlation showed that T1 ostracism was positively related to moral disengagement measured at Time 1 (*r*=.15, *p*<.01) and at Time 3 (*r*=.12, *p*<.05). Furthermore, T2 ostracism significantly correlated with moral disengagement at all three time points and T3 ostracism was significantly related to T3 moral disengagement pointing to a potential relationship between the two variables. Supplementary linear regression analyses showed that T1 moral disengagement significantly predicted T2 ostracism (*b*=.12, *p*<.05) when controlling for age, gender, and volition. While this is opposite of what was hypothesized, these findings could be explained by considering ostracism as a consequence instead of a predictor of moral disengagement. Temporary workers who morally disengage may more frequently be involved in conflict with others at work leading to them being disliked and thereby ostracized.

Hypothesis 2c suggested that organizational constraints would be positively related to moral disengagement. Moral disengagement measured at Time 2 was regressed on organizational constraints measured at Time 1, as shown in Table 12. Not supporting this hypothesis, T1 organizational constraints was not a significant predictor of T2 moral disengagement (*b*=.05, *p*=.30).

Table 12 T2 moral disengagement regressed on T1 organizational constraints

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.10	-2.16*
Gender	.18	(.05)	-.23	-4.87**
Volition	.13	(.05)	-.08	-1.62
F			10.06**	
R^2			.07	
Organizational Constraints	.54	(.03)	.05	1.03
F			7.81**	
R^2 Change			.00	

Note. *N*=413. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 409, *df* for Step 2=408. *$p < .05$. **$p < .01$.

I additionally tested Hypotheses 2a-2c concurrently using linear regression. I regressed T2 moral disengagement on all of the Time 1 economic stressors, interpersonal mistreatment, and organizational constraints variables. Economic hardship (*b*=-.13, *p*<.05), job insecurity (*b*=.12, *p*<.05), and interpersonal conflict (*b*=.17, *p*<.01) were all significant predictors of T2 moral disengagement. However, financial well-being (*b*=.01, *p*=.83), ostracism (*b*=-.03, *p*=.56), and organizational constraints (*b*=-.01, *p*=.74) were not significant predictors when all workplace stressors were included in the model. These results reflect the individual regression results predicting T2 moral disengagement above and are presented in Table 13.

Table 13 T2 moral disengagement regressed on all T1 workplace stressors

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.11	-2.33*
Gender	-.24	(.05)	-.22	-4.55**
Volition	-.11	(.06)	-.10	-1.98*
F			10.06**	
R^2			.07	
Financial Well-Being	.01	(.02)	.01	.21
Economic Hardship	-.07	(.03)	-.13	-2.29*
Job Insecurity	.05	(.02)	.16	2.17*
Interpersonal Conflict	.16	(.05)	.17	2.94*
Ostracism	-.03	(.05)	-.03	-.58
Organizational Constraints	-.01	(.04)	-02	-.34
F			5.52**	
R^2 *Change*			.04	

Note. *N*=413. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 409, *df* for Step 2=403. *$p < .05$. **$p < .01$.

Exploring Links Between Both Mediators and CWB

Hypotheses 3 and 4 called for tests of mediation. A simple mediation model assumes that the mediator is affected by changes in the predictor variables, and that the mediator is linked to changes in the outcome variable (Shrout & Bolger, 2002). This means that the Time 1 workplace stressors should be related to T2 emotional exhaustion and T2 moral disengagement, which was demonstrated above, and that these mediators are linked to the outcome variable: T3 CWB. The link between T2 emotional exhaustion and T3 CWB along with the link between T2 moral disengagement and T3 CWB were tested using linear regression, controlling for the effects of age, gender, and volition.

First, T3 CWB was regressed on only T2 emotional exhaustion. The three control variables (i.e., age, gender, and volition) were entered in step 1. Results showed that T2 emotional exhaustion significantly predicted T3 CWB (b=.29, p<.01). These results are presented in Table 14 below.

Table 14 T3 CWB regressed on T2 emotional exhaustion

Predictor	*B*	(*SE*)	β	*t*
Age	-.01	(.00)	-.09	-1.66
Gender	.18	(.03)	-.14	-2.74**
Volition	.13	(.03)	.03	.49
F			4.14**	
R^2			.04	
T2 Emotional Exhaustion	.54	(.01)	.29	5.42**
F			10.71**	
R^2 Change			.08	

Note. *N*=326. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 322, *df* for Step 2=321. *$p < .05$. **$p < .01$.

Second, T3 CWB was regressed on only T2 moral disengagement. Identical to the previous analysis, age, gender, and volition were entered in step 1. Results showed that T2 moral disengagement significantly predicted T3 CWB (*b*=.36, *p*<.01). These results are presented in Table 15 below.

Table 15 T3 CWB regressed on T2 moral disengagement

Predictor	*B*	(*SE*)	β	*t*
Age	-.00	(.00)	-.09	-1.79
Gender	-.02	(.03)	-.05	-.95
Volition	.05	(.03)	.09	1.81
F			4.14**	
R^2			.04	
T2 Moral Disengagement	.16	(.02)	.36	6.81**
F			15.14**	
R^2 Change			.12	

Note. *N*=326. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 322, *df* for Step 2=321. *$p < .05$. **$p < .01$.

Third, T3 CWB was regressed on both T2 emotional exhaustion and T2 moral disengagement. This model included the same three control variables, age, gender, and volition, which were entered in step 1. Results showed that both T2 moral disengagement (*b*=.31, *p*<.01) and T2 emotional exhaustion (*b*=.23, *p*<.01) significantly predicted T3 CWB. These results are presented in Table 16 below.

Table 16 T3 CWB regressed on T2 emotional exhaustion and T2 moral disengagement

Predictor	*B*	(*SE*)	β	*t*
Age	-.00	(.00)	-.06	-1.25
Gender	-.04	(.02)	-.08	-1.46
Volition	.03	(.02)	.06	1.23
F			4.14**	
R^2			.04	
T2 Emotional Exhaustion	.06	(.01)	.23	4.42**
T2 Moral Disengagement	.14	(.02)	.31	6.01**
F			16.71**	
R^2 Change			.17	

Note. *N*=326. *B*=unstandardized regression coefficient; *SE*=standard error of *B*; β=standardized regression coefficient; *df* for Step 1= 322, *df* for Step 2=320. *$p < .05$. **$p < .01$.

Hypotheses 3-4: Testing Mediating Effects

In order to assess the presence of mediating effects and whether mediating effects were partial or full by examining separate indirect effects, I used Model 4 in SPSS PROCESS (Hayes, 2013). Model 4 within PROCESS allows up to 10 mediators operating in parallel to be included in the analyses and provides output for direct, indirect, and total effects of each predictor variable. For this study, the indirect and direct effects of each predictor variable on T3 CWB through T2 emotional exhaustion and T2 moral disengagement were estimated using unstandardized coefficients and bootstrapping with 5,000 resamples and 95% confidence intervals. All workplace stressor variables were included in the model, along with the control variables age, gender, and volition. Separate analyses, as presented in the following paragraphs, included mediation paths only through T2 emotional exhaustion, only through T2 moral disengagement, and then through both mediators simultaneously. Path coefficients from predictor variables to mediating variables were slightly different from the regressions presented above due to different sample sizes. Analyses run using PROCESS included only participants

with responses to T3 CWB while the regression analyses presented above included participants who had both T1 and Time 2 data, even if they did not complete the survey at Time 3.

Hypothesis 3 stated that T2 emotional exhaustion would mediate the relationship between T1 economic stressors, interpersonal mistreatment, and organizational constraints and T3 CWB. Starting with the economic stressors, results revealed a non-significant direct effect (*b*=-.02, *SE*=.01, LL=-.02, UL=.02) of T1 financial well-being on T3 CWB and a non-significant indirect effect of T1 financial well-being through T2 emotional exhaustion on T3 CWB (*b*=.00, *SE*=.00, LL=-.00, UL=.00). Results also revealed a non-significant direct effect (*b*=-.02, *SE*=.01, LL=-.05, UL=.01) of T1 economic hardship on T3 CWB, but a significant indirect effect (*b*=.00, *SE*=.00, LL=-.00, UL=.01) of T1 economic hardship through T2 emotional exhaustion on T3 CWB. For job insecurity, results showed a non-significant direct effect (*b*=.02, *SE*=.01, LL=-.00, UL=.04) on T3 CWB and a non-significant indirect effect (*b*=.01, *SE*=.01, LL=-.01, UL=.03) through T2 emotional exhaustion on T3 CWB.

The direct and indirect effects of interpersonal mistreatment and organizational constraints variables measured at Time 1 on T3 CWB through T2 emotional exhaustion were tested in the same manner. Beginning with T2 interpersonal mistreatment, results revealed a significant direct effect (*b*=.08, *SE*=.02, LL=.03, UL=.13) of T1 interpersonal conflict on T3 CWB as well as a significant indirect effect (*b*=.02, *SE*=.01, LL=.01, UL=.00) through T2 emotional exhaustion on T3 CWB. Regarding ostracism, results showed a non-significant direct effect (*b*=.04, *SE*=.03, LL=-.01, UL=.09) on T3 CWB and a non-significant indirect effect (*b*=.00, *SE*=.01, LL=-.01, UL=.01) of T1 ostracism through T2 emotional exhaustion on T3 CWB. For organizational constraints, results revealed a non-significant direct effect (*b*=-.01,

SE=.02, LL=-.05, UL=.02) on T3 CWB and a significant indirect effect (*b*=.02, *SE*=.01, LL=.01, UL=.03). These results are presented below in Tables 17 and 18.

Similar to Hypothesis 3, Hypothesis 4 stated that T2 moral disengagement would mediate the relationship between Time 1 economic stressors, interpersonal mistreatment, and organizational constraints and T3 CWB. For the economic stressors, results revealed a non-significant direct effect (*b*=-.00, *SE*=.01, LL=-.02, UL=.02) of financial well-being on T3 CWB and a non-significant indirect effect (*b*=.00, *SE*=.00, LL=-.01, UL=.01) through T2 moral disengagement on T3 CWB. Results also revealed a non-significant direct effect (*b*=-.01, *SE*=.01, LL=-.03, UL=.02) of T1 economic hardship on T3 CWB, but a significant indirect effect (*b*=-.01, *SE*=.01, LL=-.02, UL=.00) through T2 moral disengagement on T3 CWB. For job insecurity, results showed a non-significant direct effect (*b*=.01, *SE*=.01, LL=-.01, UL=.03) on T3 CWB and a significant indirect effect (*b*=.01, *SE*=.00, LL=.00, UL=.02) of T1 job insecurity through T2 moral disengagement on T3 CWB.

The direct and indirect effects of interpersonal mistreatment and organizational constraints variables measured at Time 1 on T3 CWB through T2 moral disengagement were tested using the same method. Beginning with T2 interpersonal mistreatment, results revealed a significant direct effect (*b*=.08, *SE*=.02, LL=.03, UL=.12) of T1 interpersonal conflict on T3 CWB as well as a significant indirect effect (*b*=.02, *SE*=.01, LL=.00, UL=.04) through T2 moral disengagement on T3 CWB. Regarding ostracism, results showed a non-significant direct effect (*b*=.05, *SE*=.02, LL=-.00, UL=.09) on T3 CWB and a non-significant indirect effect (*b*=-.01, *SE*=.01, LL=-.02, UL=.01) of T1 ostracism through T2 moral disengagement on T3 CWB. For organizational constraints, results revealed a non-significant direct effect (*b*=.01, *SE*=.02, LL=-.02, UL=.04) on T3 CWB and a non-significant indirect effect (*b*=-.00, *SE*=.01, LL=-.01,

UL=.01) of T1 organizational constraints through T2 moral disengagement on T3 CWB. These results are shown in Tables 17 and 18.

Table 17 Indirect effects of T1 predictor variables on T3 CWB when testing mediators separately

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	-.000	.002	[-.005, .003]
Economic Hardship	EE	.006	.004	[.001, .015]
Job Insecurity	EE	.002	.002	[-.003, .007]
Interpersonal Conflict	EE	.016	.007	[.004, .031]
Ostracism	EE	.001	.005	[-.009, .012]
Organizational Constraints	EE	.020	.007	[.008, .034]
Financial Well-Being	MD	.000	.003	[-.007, .007]
Economic Hardship	MD	-.007	.005	[-.018, .002]
Job Insecurity	MD	.010	.004	[.002, .018]
Interpersonal Conflict	MD	.021	.010	[.004, .041]
Ostracism	MD	-.007	.008	[-.022, .011]
Organizational Constraints	MD	-.002	.006	[-.015, .009]

Note. EE=T2 emotional exhaustion; MD=T2 moral disengagement; CWB=T3 counterproductive work behavior. Coefficients are unstandardized. N=326. $*p < .05$, $**p < 0.01$.

Table 18 Direct effects of T1 predictor variables on T3 CWB when testing mediators separately

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	-.00	.01	[-.02, .02]
Economic Hardship	EE	-.02	.01	[-.05, .01]
Job Insecurity	EE	.02	.01	[-.00, .04]
Interpersonal Conflict	EE	.08	.02	[.03, .13]
Ostracism	EE	.04	.03	[-.01, .08]
Organizational Constraints	EE	-.01	.02	[-.05, .02]
Financial Well-Being	MD	-.00	.01	[-.02, .02]
Economic Hardship	MD	-.01	.01	[-.03, .02]
Job Insecurity	MD	.01	.01	[-.01, .03]
Interpersonal Conflict	MD	.07	.02	[.03, .12]
Ostracism	MD	.05	.02	[-.00, .09]
Organizational Constraints	MD	.01	.02	[-.02, .04]

Note. EE=T2 emotional exhaustion; MD=T2 moral disengagement; CWB=T3 counterproductive work behavior. Coefficients are unstandardized. N=326. $*p < .05$, $**p < 0.01$.

Support for mediation is shown if the estimates of the indirect effects through the mediating variables are significant. Hypothesis 3 that T2 emotional exhaustion will mediate the relationship between Time 1 economic stressors, interpersonal mistreatment, and organizational constraints and T3 CWB was partially supported. Economic hardship, interpersonal conflict, and organizational constraints measured at Time 1 were shown to have significant indirect effects on T3 CWB. Similarly, Hypothesis 4 that T2 moral disengagement will mediate the relationship between Time 1 economic stressors, interpersonal mistreatment, and organizational constraints and T3 CWB was only partially supported. Job insecurity and interpersonal conflict, but not financial well-being, economic hardship, ostracism, and organizational constraints, showed significant indirect effects.

Testing Mediating Effects through Parallel Mediators

I additionally tested the direct and indirect effects of all predictor variables including parallel mediators. While the previous models only included either emotional exhaustion or moral disengagement, this model included all predictor variables and control variables (i.e., gender, age, volition) measured at Time 1 along with T2 emotional exhaustion and T2 moral disengagement. Reflecting the results above, only T1 job insecurity and T1 interpersonal conflict had significant indirect effects on T3 CWB; however, these were total indirect effects through both mediators. These results are shown in Table 19.

Table 19 Total direct and indirect effects of T1 predictor variables on T3 CWB through both T2 mediators

Predictor variable	DE(*SE*)	DE 95% CI	IE(*SE*)	IE 95% CI
Financial Well-Being	-.00(.01)	[-.02, .02]	-.00(.00)	[-.01, .01]
Economic Hardship	-.01(.01)	[-.04, .02]	-.00(.01)	[-.01, .01]
Job Insecurity	.01(.01)	[-.01, .03]	.01(.00)	[.00, .02]
Interpersonal Conflict	.06(.02)	[.02, .11]	.03(.01)	[.01, .06]
Ostracism	.05(.02)	[-.00, .09]	-.01(.01)	[-.02, .01]
Organizational Constraints	-.00(.02)	[-.04, .03]	.01(.01)	[-.00, .03]

Note. Mediators include T2 emotional exhaustion and T2 moral disengagement; CWB=T3 counterproductive work behavior. DE=direct effect, IE=indirect effect. Coefficients are unstandardized. N=326. $*p < .05$, $**p < 0.01$.

Finally, I report the effects of each predictor variable through T2 emotional exhaustion and T2 moral disengagement separately in Table 20. These are the true tests of my hypothesized model. Identical to the analyses reported in Table 19, the models included all control variables and predictors at Time 1, along with both mediating variables measured at Time 2. The outcome variable was CWB measured at Time 3. T1 economic hardship, T1 interpersonal conflict, and T1 organizational constraints had significant indirect effects on T3 CWB through T2 emotional exhaustion when including both mediators in the model. T1 job insecurity and T1 interpersonal conflict had significant indirect effects on T3 CWB through T2 moral disengagement with parallel mediators.

Table 20 Indirect effects of T1 predictor variables on T3 CWB when testing mediators together

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	-.000	.001	[-.003, .003]
Economic Hardship	EE	.004	.003	[.000, .011]
Job Insecurity	EE	.001	.002	[-.002, .005]
Interpersonal Conflict	EE	.011	.006	[.001, .024]
Ostracism	EE	.001	.004	[-.007, .009]
Organizational Constraints	EE	.014	.006	[.003, .028]
Financial Well-Being	MD	.000	.003	[-.006, .006]
Economic Hardship	MD	-.007	.005	[-.018, .002]
Job Insecurity	MD	.009	.004	[.002, .017]
Interpersonal Conflict	MD	.019	.009	[.004, .039]
Ostracism	MD	-.006	.008	[-.021, .010]
Organizational Constraints	MD	-.002	.006	[-.014, .009]

Note. EE=T2 emotional exhaustion; MD=T2 moral disengagement; CWB=T3 counterproductive work behavior. Coefficients are unstandardized. N=326. $*p < .05$, $**p < 0.01$.

The hypothesized model did not predict paths from predictor variables directly to the outcome variable, CWB. In line with this model and the hypotheses, the bootstrapped results showed that all predictor variables measured at Time 1, with the exception of interpersonal conflict, showed no significant direct effects on T3 CWB. However, the significant direct effect of T1 interpersonal conflict on CWB is not surprising considering earlier research that has found links between interpersonal conflict and CWB (e.g., Penny & Spector, 2005; Spector & Fox, 2005). In attempt to get a deeper understanding of the data, supplemental analyses were conducted and presented in the following section.

Supplemental Analyses

Stability of Study Variables

As discussed above, all study variables were collected at each of the three time points. Looking at variable stability can show support for the temporary workers sampled having

reliable perceptions related to their workplace stressor experiences. Bivariate correlation was used to compare the stability of these variables across the three weeks. Considering surveys were administered each one week apart, responses were not expected to differ drastically across the three waves. As shown in Tables 21-23, each variable showed strong, positive correlations with itself at each time point, showing that perceptions of stressors, emotional exhaustion, and moral disengagement were relatively stable across data collection period. Similarly, the number of CWBs reported at each wave varied, but was still strongly correlated.

Table 21 Correlations for Economic Stressors

Variable	1	2	3	4	5	6	7	8	9
1. T1 Financial Well-Being									
2. T1 Economic Hardship	.44**								
3. T1 JI	.36**	.30**							
4. T2 Financial Well-Being	*.82***	.40**	.31**						
5. T2 Economic Hardship	.43**	*.73***	.32**	.46**					
6. T2 JI	.28**	.28**	*.63***	.33**	.37**				
7. T3 Financial Well-Being	*.86***	.41**	.26**	*.90***	.42**	.24**			
8. T3 Economic Hardship	.47**	*.75***	.29**	.45**	*.82***	.28**	.51**		
9. T3 JI	.28**	.31**	*.59***	.28**	.34**	*.73***	.27**	.33**	

Note. $*p < .05$, $**p < 0.01$.

Table 22 Correlations for Interpersonal Mistreatment and Organizational Constraints

Variable	1	2	3	4	5	6	7	8	9
1. T1 Interpersonal Conflict									
2. T1 Ostracism	.53**								
3. T1 Organizational Constraints	.43**	.38**							
4. T2 Interpersonal Conflict	*.68***	.35**	.38**						
5. T2 Ostracism	.52**	*.73***	.33**	.52**					
6. T2 Organizational Constraints	.43**	.41**	*.74***	.45**	.45**				
7. T3 Interpersonal Conflict	*.67***	.38**	.32**	*.76***	.44**	.38**			
8. T3 Ostracism	.52**	*.73***	.34**	.48**	*.82***	.46**	.45**		
9. T3 Organizational Constraints	.49**	.42**	*.66***	.46**	.45**	*.85***	.46**	.50**	

Note. $*p < .05$, $**p < 0.01$.

Table 23 Correlations for Emotional Exhaustion, Moral Disengagement, and CWB

Variable	1	2	3	4	5	6	7	8	9
1. T1 Emotional Exhaustion									
2. T1 Moral Disengagement	.18**								
3. T1 CWB	.33**	.36**							
4. T2 Emotional Exhaustion	*.77***	.08	.27**						
5. T2 Moral Disengagement	.14**	*.60***	.32**	.12*					
6. T2 CWB	.29**	.27**	*.73***	.28**	.36**				
7. T3 Emotional Exhaustion	*.75***	.07	.26**	*.85***	.15**	.30**			
8. T3 Moral Disengagement	.14**	*.66***	.45**	.14*	*.68***	.39**	.12*		
9. T3 CWB	.28**	.29**	*.73***	.30**	.37**	*.85***	.27**	.46**	

Note. $*p < .05$, $**p < 0.01$.

Testing Model Using Cross-Sectional Data

I additionally tested my proposed model using cross-sectional data. Due to attrition at Time 2 and Time 3, the Time 1 sample of 646 participants was significantly larger than the 326 participants who completed all survey measures at Time 3. I chose to test my hypotheses using this larger sample in order to obtain more statistical power and potentially reveal small effect

sizes not detected in the results above. Accordingly, each hypothesis was tested using the same analytical approach as was utilized for the hypothesized model above.

To reiterate, Hypothesis 1 suggested that workplace stressors would predict emotional exhaustion. Similar to the results of the proposed model with lagged variables, multiple regression analysis of the cross-sectional data showed that economic hardship, interpersonal conflict, and organizational constraints predicted emotional exhaustion, while financial well-being and ostracism were not significant predictors. Unlike results of the hypothesized model, results using cross-sectional data showed that job insecurity was a significant predictor of emotional exhaustion.

Table 24 T1 emotional exhaustion regressed on all Time 1 workplace stressors

Predictor	β	(*SE*)	*t*
Age	-.09	(.00)	-2.89**
Gender	.02	(.06)	.72
Volition	.01	(.06)	.15
F	8.54**		
R^2	.04		
Financial Well-Being	.02	(.03)	.62
Economic Hardship	.13	(.03)	3.73**
Job Insecurity	.08	(.03)	2.40*
Interpersonal Conflict	.23	(.06)	6.21**
Ostracism	.02	(.06)	.44
Organizational Constraints	.41	(.04)	11.81**
F	53.62**		
R^2 *Change*	.39		

Note. *N*=646. β =standardized regression coefficient; *SE*=standard error of *B*; *df* for Step 1= 642, *df* for Step 2=636. *$p < .05$. **$p < .01$.

Hypothesis 2 suggested that economic stressors, interpersonal mistreatment, and organizational constraints would predict moral disengagement. Results using T1 cross-sectional data reflected results from testing the proposed model with variables measured across the three time points, such that economic hardship and interpersonal conflict were significant predictors of

moral disengagement. However, job insecurity was not a significant predictor of moral disengagement using only T1 cross-sectional data.

Table 25 T1 moral disengagement regressed on all Time 1 workplace stressors

Predictor	β	(*SE*)	*t*
Age	-.20	(.00)	-5.39**
Gender	-.19	(.04)	-5.04**
Volition	.03	(.05)	.68
F	19.94**		
R^2	.09		
Financial Well-Being	-.02	(.02)	-.42
Economic Hardship	-.09	(.02)	-2.01*
Job Insecurity	.07	(.02)	1.76
Interpersonal Conflict	.18	(.04)	4.03**
Ostracism	.03	(.04)	.71
Organizational Constraints	.02	(.03)	.51
F	11.19**		
R^2 *Change*	.05		

Note. *N*=646. β=standardized regression coefficient; *SE*=standard error of *B*; *df* for Step 1= 642, *df* for Step 2=636. *$p < .05$. **$p < .01$.

Correspondingly, after testing the links between the workplace stressors and mediators, I looked at the links between the mediators and outcome variable. T1 CWB was regressed on both T1 emotional exhaustion and T1 moral disengagement. This model included the same three control variables of age, gender, and volition, which were entered in step 1. Coefficients were similar to the hypothesized model such that there was no more than a .05 difference. Both emotional exhaustion and moral disengagement were still significant predictors of CWB.

Table 26 T1 CWB regressed on T1 emotional exhaustion and T1 moral disengagement

Predictor	β	(*SE*)	*t*
Age	-.03	(.00)	-.83
Gender	-.11	(.02)	-3.11**
Volition	.00	(.02)	.11
F	9.25**		
R^2	.04		
T1 Emotional Exhaustion	.28	(.01)	7.64**
T1 Moral Disengagement	.28	(.02)	7.49**
F	34.27**		
R^2 Change	.17		

Note. *N*=646. β=standardized regression coefficient; *SE*=standard error of *B*; *df* for Step 1= 642, *df* for Step 2=640. *$p < .05$. **$p < .01$.

Hypotheses 3 and 4 were also tested using T1 cross-sectional data. These hypotheses related to the mediating effects of emotional exhaustion and moral disengagement. Similar to the results of the hypothesized model with lagged variables, results from analyzing the cross-sectional data showed significant indirect effects for economic hardship, interpersonal conflict, and organizational through emotional exhaustion. Additionally, job insecurity had significant indirect effects on CWB through emotional exhaustion using only Time 1 data. Considering moral disengagement as the mediator, both hypothesized and T1 cross-sectional models showed significant indirect effects for interpersonal conflict. However, job insecurity no longer showed significant indirect effects on CWB through moral disengagement when using only Time 1 data.

Table 27 Indirect effects of T1 predictor variables on T1 CWB

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	.00	.00	[-.00, .00]
Economic Hardship	EE	.01	.00	[.00, .01]
Job Insecurity	EE	.00	.00	[.00, .01]
Interpersonal Conflict	EE	.01	.01	[.00, .02]
Ostracism	EE	.00	.00	[-.00, .01]
Organizational Constraints	EE	.02	.01	[.01, .03]
Financial Well-Being	MD	-.00	.00	[-.01, .00]
Economic Hardship	MD	-.01	.01	[-.02, .00]
Job Insecurity	MD	.00	.00	[-.00, .01]
Interpersonal Conflict	MD	.02	.01	[.01, .03]
Ostracism	MD	.00	.01	[-.01, .01]
Organizational Constraints	MD	.00	.00	[-.01, .01]

Note. EE=T1 emotional exhaustion; MD=T1 moral disengagement; CWB=T1 counterproductive work behavior. Coefficients are unstandardized. N=646. $*p < .05$, $**p < 0.01$.

Results of the hypothesized model only showed significant direct effects of interpersonal conflict when T2 emotional exhaustion was included in the model, and interpersonal conflict with T2 moral disengagement included. Bootstrapped estimates using the cross-sectional data measured at Time 1 showed direct effects of interpersonal conflict and ostracism on CWB with emotional exhaustion included as the mediator. The results also showed significant direct effects of interpersonal conflict, ostracism, and organizational constraints on CWB when moral disengagement was included as the mediator.

Table 28 Direct effects of T1 predictor variables on T1 CWB

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	.00	.01	[-.01, .02]
Economic Hardship	EE	-.02	.01	[-.04, .00]
Job Insecurity	EE	-.00	.01	[-.02, .01]
Interpersonal Conflict	EE	.12	.02	[.09, .16]
Ostracism	EE	.04	.02	[.01, .07]
Organizational Constraints	EE	.01	.01	[-.02, .03]
Financial Well-Being	MD	.00	.01	[-.01, .02]
Economic Hardship	MD	-.01	.01	[-.03, .01]
Job Insecurity	MD	-.00	.01	[-.02, .01]
Interpersonal Conflict	MD	.12	.02	[.09, .15]
Ostracism	MD	.04	.02	[.01, .07]
Organizational Constraints	MD	.02	.01	[.00, .05]

Note. EE=T1 emotional exhaustion; MD=T1 moral disengagement; CWB=T1 counterproductive work behavior. Coefficients are unstandardized. N=646. $*p < .05$, $**p < 0.01$.

I additionally used the Time 1 sample to test the direct and indirect effects of all predictor variables including parallel mediators. The model included all predictor variables and control variables (i.e., gender, age, volition) measured at Time 1 along with T1 emotional exhaustion and T1 moral disengagement. Reflecting the results from the hypothesized model, job insecurity and interpersonal conflict had significant indirect effects on T1 CWB. Unlike the hypothesized model, analysis of the T1 cross-sectional data showed that organizational constraints also had a significant indirect effect on CWB through both mediators.

Table 29 Direct and indirect effects of T1 predictor variables on T1 CWB through both mediators

Predictor variable	DE(*SE*)	DE 95% CI	IE(*SE*)	IE 95% CI
Financial Well-Being	.00(.01)	[-.01, .02]	-.00(.00)	[-.00, .00]
Economic Hardship	-.01(.01)	[-.03, .01]	-.00(.00)	[-.01, .01]
Job Insecurity	-.00(.01)	[-.02, .01]	.01(.00)	[.00, .01]
Interpersonal Conflict	.11(.02)	[.08, .14]	.03(.01)	[.01, .04]
Ostracism	.04(.02)	[.01, .07]	.00(.01)	[-.01, .01]
Organizational Constraints	.01(.01)	[-.02, .03]	.02(.03)	[.00, .03]

Note. Mediators include T1 emotional exhaustion and T1 moral disengagement; CWB=T1 counterproductive work behavior. DE=direct effect, IE=indirect effect. Coefficients are unstandardized. N=646. $*p < .05$, $**p < 0.01$.

Having built up to the proposed model, I lastly tested effects of each predictor variable through T1 emotional exhaustion and T1 moral disengagement separately using T1 cross-sectional data. The models tested included all control variables and predictors at Time 1, along with both mediating variables measured at Time 1. Reflecting the results of the hypothesized model, economic hardship, interpersonal conflict, and organizational constraints had significant indirect effects on CWB through emotional exhaustion while interpersonal conflict had significant indirect effects on CWB through moral disengagement with parallel mediators. Unlike results from the hypothesized model tested using lagged data, results of the cross-sectional data showed an indirect effect of job insecurity through emotional exhaustion, but no indirect effect of job insecurity through moral disengagement.

Table 30 Indirect effects of T1 predictor variables on T1 CWB when testing mediators together

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	.00	.00	[-.00, .00]
Economic Hardship	EE	.00	.00	[.00, .00]
Job Insecurity	EE	.00	.00	[.00, .00]
Interpersonal Conflict	EE	.01	.00	[.00, .02]
Ostracism	EE	.00	.00	[-.00, .01]
Organizational Constraints	EE	.02	.01	[.00, .03]
Financial Well-Being	MD	-.00	.00	[-.01, .01]
Economic Hardship	MD	-.00	.00	[-.01, .00]
Job Insecurity	MD	.00	.00	[-.00, .01]
Interpersonal Conflict	MD	.02	.01	[.01, .03]
Ostracism	MD	.00	.00	[-.01, .01]
Organizational Constraints	MD	.00	.00	[-.01, .01]

Note. EE=T1 emotional exhaustion; MD=T1 moral disengagement; CWB=T1 counterproductive work behavior. Coefficients are unstandardized. N=646. $*p < .05$, $**p < 0.01$.

Tests for Differences between Voluntary and Involuntary Workers

In addition to testing the hypotheses with a larger sample size at only the first wave of data collection, I explored potential differences between temporary workers who were in their

positions by choice compared to those who preferred a permanent position but could not find one. The analyses presented above testing the hypothesized model included CWB measured at Time 3, mediators measured at Time 2, and workplace stressors and control variables measured at Time 1. These control variables included gender, age, and volition, implying that volition was treated as a nuisance variable. Instead of just controlling for whether temporary workers were holding a temporary position by choice or because they could not find permanent work, the following additional analyses tested for meaningful differences between the two groups.

In order to compare, the data were split into two separate files: one with data from only voluntary temporary workers and the other with data from involuntary temporary workers. I first tested the links between the T2 mediators and T3 CWB above and beyond the T1 workplace stressors using regression. I then used PROCESS Model 4 to explore any indirect effects of the Time 1 workplace stressors on T3 CWB through T2 emotional exhaustion and T2 moral disengagement. These models included age and gender as control variables and parallel mediators.

First, I analyzed only the data for voluntary temporary workers, meaning the workers who were in temporary positions by choice. Linear regression analysis results for voluntary temporary workers showed that the mediators, T2 emotional exhaustion and T2 moral disengagement, were not significant predictors of T3 CWB, as shown in Table 31. Not supporting the hypothesized model, tests of mediation showed no indirect effects of any T1 workplace stressors on T3 CWB through either T2 mediator. These results are shown in Table 32.

Table 31 T3 CWB regressed on T2 mediators and T1 stressors for voluntary temps

Predictor	β	(*SE*)	*t*
Age	-.04	(.00)	-.46
Gender	-.09	(.04)	-1.01
F	1.55		
R^2	.03		
Financial Well-Being	.03	(.01)	.24
Economic Hardship	.09	(.02)	.93
Job Insecurity	.14	(.02)	1.45
Interpersonal Conflict	.17	(.04)	1.66
Ostracism	-.06	(.04)	-.60
Organizational Constraints	.05	(.03)	.49
F	2.22*		
R^2 Change	.11		
T2 Emotional Exhaustion	.14	(.02)	1.41
T2 Moral Disengagement	.18	(.03)	1.91
F	2.57**		
R^2 Change	.05		

Note. *N*=123. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Table 32 Indirect effects of T1 predictor variables on T3 CWB when testing mediators together for voluntary temporary workers

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	.00	.00	[-.00, .01]
Economic Hardship	EE	-.00	.00	[-.01, .01]
Job Insecurity	EE	.00	.00	[-.01, .01]
Interpersonal Conflict	EE	.01	.01	[-.00, .03]
Ostracism	EE	-.00	.01	[-.02, .01]
Organizational Constraints	EE	.01	.01	[-.00, .03]
Financial Well-Being	MD	.00	.00	[-.00, .01]
Economic Hardship	MD	-.01	.01	[-.02, .00]
Job Insecurity	MD	.00	.00	[-.00, .01]
Interpersonal Conflict	MD	.01	.01	[-.00, .03]
Ostracism	MD	-.00	.01	[-.02, .01]
Organizational Constraints	MD	.00	.01	[-.01, .02]

Note. EE=T2 emotional exhaustion; MD=T2 moral disengagement; CWB=T3 counterproductive work behavior. Coefficients are unstandardized. *N*=123. $*p < .05$, $**p < 0.01$.

Concerning the temporary workers who are considered involuntary because they could not find permanent work, results of linear regression analysis were more similar to results from

the full sample of temporary workers. Both emotional exhaustion and moral disengagement measured at Time 2 were significant predictors of T3 CWB above and beyond the control variables and workplace stressors. These results are shown in Table 33. The tests of indirect effects were also more reflective of the results from testing the hypothesized model including the entire sample. Data from only the involuntary temporary workers showed significant indirect effects of economic hardship, interpersonal conflict, and organizational constraints through T2 emotional exhaustion, as well as an indirect effect of interpersonal conflict through T2 moral disengagement. These results are presented in Table 34 below.

Table 33 T3 CWB regressed on T2 mediators and T1 stressors for involuntary temps

Predictor	β	(*SE*)	*t*
Age	-.08	(.00)	-1.28
Gender	-.04	(.03)	-.58
F	3.92*		
R^2	.04		
Financial Well-Being	-.03	(.01)	-.51
Economic Hardship	-.15	(.02)	2.10*
Job Insecurity	.05	(.01)	.68
Interpersonal Conflict	.15	(.03)	1.96
Ostracism	.18	(.03)	2.35*
Organizational Constraints	-.02	(.02)	-.26
F	5.65**		
R^2 Change	.15		
T2 Emotional Exhaustion	.17	(.03)	2.36*
T2 Moral Disengagement	.37	(.02)	5.82**
F	9.91**		
R^2 Change	.15		

Note. *N*=203. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Table 34 Indirect effects of T1 predictor variables on T3 CWB when testing mediators together for involuntary temporary workers

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	-.00	.00	[-.01, .00]
Economic Hardship	EE	.01	.01	[.00, .02]
Job Insecurity	EE	.00	.00	[-.00, .01]
Interpersonal Conflict	EE	.01	.01	[.00, .03]
Ostracism	EE	.00	.01	[-.01, .02]
Organizational Constraints	EE	.02	.01	[.00, .04]
Financial Well-Being	MD	-.00	.01	[-.01, .01]
Economic Hardship	MD	.00	.01	[-.02, .02]
Job Insecurity	MD	.01	.01	[-.00, .02]
Interpersonal Conflict	MD	.03	.01	[.00, .06]
Ostracism	MD	-.01	.01	[-.03, .02]
Organizational Constraints	MD	-.01	.01	[-.03, .01]

Note. EE=T2 emotional exhaustion; MD=T2 moral disengagement; CWB=T3 counterproductive work behavior. Coefficients are unstandardized. N=203. $*p < .05$, $**p < 0.01$.

These analyses clearly suggest that variance exists among different types of temporary workers. Data collected from workers holding temporary positions because of their own volition did not show that a relationship exists between T2 emotional exhaustion or T2 moral disengagement and T3 CWB. In contrast, the data from temporary workers who would prefer to have a permanent position showed significant relationships between T2 emotional exhaustion and T2 moral disengagement and T3 CWB. After establishing this link between the proposed mediators and outcome for involuntary temporary workers, results showed that economic hardship, interpersonal conflict, and organizational constraints worked through these mediators to predicted T3 CWB.

Examining these findings in greater depth, independent samples t-tests were conducted comparing involuntary and voluntary temporary workers on all study variables. Results showed that involuntary workers showed higher levels of economic hardship (M=3.20, SD=1.01)

compared to voluntary temporary workers (*M*=3.04, *SD*=1.03; *t*(647)=-1.97, *p*<.05), and worse financial well-being (*M*=3.50, *SD*=1.26) compared to voluntary temporary workers (*M*=2.90, *SD*=1.37; *t*(647)=-5.70, *p*<.01). Involuntary temporary workers also perceived higher levels of job insecurity (*M*=3.26, *SD*=1.17) compared to voluntary temporary workers (*M*=2.66, *SD*=1.16; *t*(647)=-6.37, *p*<.01), more ostracism (*M*=1.57, *SD*=.69) compared to voluntary temporary workers (*M*=1.37, *SD*=.49; *t*(647)=-3.97, *p*<.01), and greater organizational constraints (*M*=2.22, *SD*=.86) compared to voluntary temporary workers (*M*=1.93, *SD*=.73; *t*(647)=-4.40, *p*<.01). While T2 moral disengagement did not differ between the two groups, involuntary temporary workers had higher levels of T2 emotional exhaustion (*M*=2.99, *SD*=.98) compared to voluntary temporary workers (*M*=2.71, *SD*=.91; *t*(411)=-2.88, *p*<.01).

Comparing CWB-O and CWB-I as Outcome Variables

The model proposed in this study included a global measure of CWB as the outcome of workplace stressors, which worked through emotional exhaustion and moral disengagement. While CWB in the current study was conceptualized as a single outcome variable, previous researchers have suggested measuring CWB as two factors based on the target of the counterproductive behavior (Bennett & Robinson, 2000). In line with this 2-factor model, I additionally tested whether certain predictors were more strongly related to CWBs targeted at individuals (CWB-I) as opposed to CWBs targeting temporary workers' organizations (CWB-O). Considering more specific outcome criteria allowed me assess if differences existed in temporary workers' paths from stressors through emotional exhaustion and moral disengagement to CWB-I verses CWB-O.

I first examined the links between emotional exhaustion and moral disengagement with CWB by testing a regression model that included age, gender, and volition as control variables, all workplace stressors measured at Time 1, and the mediators measured at Time 2. Results of linear regression analyses showed that both T2 mediators were significant predictors of CWB-O, but only T2 moral disengagement predicted CWB-I. These results are presented in Tables 35-36 below.

Table 35 T3 CWB-O regressed on T2 mediators and T1 stressors

Predictor	β	(*SE*)	*t*
Age	-.10	(.00)	-1.98*
Gender	.01	(.03)	.19
Volition	.06	(.03)	1.19
F	4.09**		
R^2	.04		
Financial Well-Being	-.04	(.01)	-.68
Economic Hardship	-.04	(.02)	-.64
Job Insecurity	.05	(.02)	.82
Interpersonal Conflict	.04	(.03)	.62
Ostracism	.14	(.03)	2.21*
Organizational Constraints	.03	(.02)	.43
F	4.75**		
R^2 Change	.08		
T2 Emotional Exhaustion	.28	(.03)	5.20**
T2 Moral Disengagement	.18	(.02)	2.93**
F	8.24**		
R^2 Change	.11		

Note. *N*=326. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Table 36 T3 CWB-I regressed on T2 mediators and T1 stressors

Predictor	β	(*SE*)	*t*
Age	-.04	(.00)	-.68
Gender	-.14	(.03)	.-2.64**
Volition	.00	(.03)	.07
F	4.83**		
R^2	.04		
Financial Well-Being	.01	(.01)	.13
Economic Hardship	-.05	(.02)	-.89
Job Insecurity	.06	(.02)	1.05
Interpersonal Conflict	.29	(.03)	4.61**
Ostracism	.06	(.03)	.97
Organizational Constraints	-.06	(.02)	-.95
F	7.67**		
R^2 Change	.14		
T2 Emotional Exhaustion	.24	(.03)	4.62**
T2 Moral Disengagement	.06	(.02)	1.00
F	8.98**		
R^2 Change	.06		

Note. *N*=326. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Moving to tests of the hypothesized model, I used Model 4 in process to examine the indirect effects of T1 workplace stressors on T3 CWB-O and T3 CWB-I. These models included age, gender, and volition as control variables as well as both T2 emotional exhaustion and T2 moral disengagement as parallel mediators. Looking at counterproductive behaviors targeting the organization, results showed indirect effects for economic hardship, interpersonal conflict, and organizational constraints through T2 emotional exhaustion. Results also showed a significant indirect effect of job insecurity on T3 CWB-O through T2 moral disengagement. Regarding counterproductive behaviors that targeted an individual within the organization, results showed indirect effects for economic hardship, interpersonal conflict, and organizational constraints through T2 emotional exhaustion. Unlike CWB-O, results showed an indirect effect of

interpersonal conflict on CWB-I through T2 moral disengagement. These results are shown in Tables 37-38.

Table 37 Indirect effects of T1 predictor variables on T3 CWB-O with parallel mediators

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	-.00	.00	[-.01, .00]
Economic Hardship	EE	.01	.00	[.00, .02]
Job Insecurity	EE	.00	.00	[-.00, .01]
Interpersonal Conflict	EE	.02	.01	[.00, .04]
Ostracism	EE	.00	.01	[-.01, .01]
Organizational Constraints	EE	.02	.01	[.01, .04]
Financial Well-Being	MD	.00	.00	[-.01, .01]
Economic Hardship	MD	-.01	.01	[-.02, .00]
Job Insecurity	MD	.01	.00	[.00, .02]
Interpersonal Conflict	MD	.02	.01	[-.03, .01]
Ostracism	MD	-.01	.01	[-.03, .01]
Organizational Constraints	MD	-.00	.01	[-.02, .01]

Note. EE=T2 emotional exhaustion; MD=T2 moral disengagement; CWB-O=T3 counterproductive work behaviors targeting the organization. Coefficients are unstandardized. N=326. $*p < .05$, $**p < 0.01$.

Table 38 Indirect effects of T1 predictor variables on T3 CWB-I with parallel mediators

Predictor variable	Mediator	Coefficient	*SE*	95% CI
Financial Well-Being	EE	-.00	.00	[-.00, .00]
Economic Hardship	EE	.01	.01	[.00, .02]
Job Insecurity	EE	.00	.00	[-.00, .01]
Interpersonal Conflict	EE	.01	.01	[.00, .03]
Ostracism	EE	.00	.01	[-.01, .02]
Organizational Constraints	EE	.02	.01	[.00, .04]
Financial Well-Being	MD	.00	.00	[-.00, .01]
Economic Hardship	MD	.00	.01	[-.02, .02]
Job Insecurity	MD	.01	.01	[-.00, .02]
Interpersonal Conflict	MD	.03	.01	[.00, .06]
Ostracism	MD	-.01	.01	[-.03, .02]
Organizational Constraints	MD	-.01	.01	[-.03, .01]

Note. EE=T2 emotional exhaustion; MD=T2 moral disengagement; CWB-O=T3 counterproductive work behaviors targeting an individual. Coefficients are unstandardized. N=326. $*p < .05$, $**p < 0.01$.

Impact of Education

Another potential explanation for the variation found among temporary workers could be their levels of education. The temporary workers sampled had various educational backgrounds that likely influenced the type of temporary position they were holding. I tested the proposed mediators again in order to see if these educational differences were linked to variation in the relationships between workplace stressors, emotional exhaustion and moral disengagement, and CWB. The temporary workers were divided into four categories: 1) no college, 2) achieved an associate's degree, 3) had a bachelor's degree, and 4) had a master's, doctorate, or other professional degree. Results of regression analyses showed that T2 moral disengagement significantly predicted T3 CWB regardless of educational background, but T2 emotional exhaustion only predicted T3 CWB for temporary workers with an associate's degree. These results are presented below in Tables 39-42.

Table 39 T3 CWB regressed on T2 mediators and T1 stressors for temps with no college

Predictor	β	(*SE*)	*t*
Age	-.16	(.00)	-1.65
Gender	-.12	(.05)	.-1.15
Volition	-.01	(.05)	-.07
F	1.91		
R^2	.06		
Financial Well-Being	-.08	(.02)	-.77
Economic Hardship	-.05	(.03)	-.50
Job Insecurity	.27	(.02)	2.26*
Interpersonal Conflict	.13	(.04)	1.09
Ostracism	.15	(.05)	1.22
Organizational Constraints	-.10	(.04)	-.86
F	3.21**		
R^2 Change	.20		
T2 Emotional Exhaustion	.05	(.03)	.44
T2 Moral Disengagement	.29	(.05)	2.86**
F	3.64**		
R^2 Change	.07		

Note. *N*=95. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Table 40 T3 CWB regressed on T2 mediators and T1 stressors for temps with an associate's

Predictor	β	(*SE*)	*t*
Age	.09	(.00)	.53
Gender	.03	(.06)	.14
Volition	.14	(.06)	.89
F	.13		
R^2	.01		
Financial Well-Being	-.15	(.02)	-.91
Economic Hardship	-.07	(.03)	-.38
Job Insecurity	-.19	(.03)	-.98
Interpersonal Conflict	-.29	(.04)	1.66
Ostracism	.10	(.06)	.54
Organizational Constraints	.34	(.03)	1.72
F	1.08		
R^2 Change	.26		
T2 Emotional Exhaustion	.48	(.03)	2.88**
T2 Moral Disengagement	.34	(.05)	2.27*
F	3.22**		
R^2 Change	.32		

Note. *N*=36. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Table 41 T3 CWB regressed on T2 mediators and T1 stressors for temps with a bachelor's

Predictor	β	(*SE*)	*t*
Age	-.02	(.00)	-.21
Gender	-.02	(.04)	-.19
Volition	.06	(.04)	.74
F	2.44		
R^2	.05		
Financial Well-Being	.08	(.02)	.91
Economic Hardship	-.08	(.02)	-.95
Job Insecurity	-.02	(.02)	-.20
Interpersonal Conflict	.32	(.04)	3.41**
Ostracism	.11	(.04)	1.16
Organizational Constraints	-.06	(.03)	-.68
F	4.37**		
R^2 Change	.18		
T2 Emotional Exhaustion	.16	(.03)	1.63
T2 Moral Disengagement	.31	(.03)	3.82**
F	5.80**		
R^2 Change	.10		

Note. *N*=137. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Table 42 T3 CWB regressed on T2 mediators and T1 stressors for temps with a master's, doctorate, or professional degree

Predictor	β	(*SE*)	*t*
Age	-.09	(.00)	-.55
Gender	-.05	(.06)	-.33
Volition	.04	(.06)	.28
F	.22		
R^2	.01		
Financial Well-Being	-.14	(.03)	-.63
Economic Hardship	.18	(.04)	.86
Job Insecurity	.03	(.02)	.16
Interpersonal Conflict	.13	(.07)	.72
Ostracism	-.12	(.06)	-.61
Organizational Constraints	.08	(.04)	.47
F	.24		
R^2 Change	.03		
T2 Emotional Exhaustion	.07	(.04)	.36
T2 Moral Disengagement	.33	(.06)	2.19*
F	8.98**		
R^2 Change	.70		

Note. *N*=56. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Further shedding light on differences between types of temporary workers, a one-way ANOVA showed that the four groups (i.e., no college, had an associate's degree, had a bachelor's degree, and had a master's, doctorate, or other professional degree) did not show overall mean differences on any study variables except economic hardship ($F(3, 640)=2.72$, $p<.05$). Post-hoc comparisons using the LSD test showed that temporary workers with no college degree experienced higher levels of economic hardship ($M=3.28$, $SD=1.02$) compared to temporary workers with a bachelor's degree ($M=3.04$, $SD=.97$).

Impact of Temporary Position Length

In addition to investigating the differences among temporary workers stemming from their educational background, target of their counterproductive behavior, and

involuntary/voluntary nature of their positions, I considered the effects of the length of time the workers' current temporary positions were specified to last. The length of the temporary assignments ranged from less than one month to over a year. The model of T1 workplace stressors and T2 mediators (i.e., emotional exhaustion and moral disengagement) predicting T3 CWB was tested for three categories of temporary workers based on their position's specified length of time. These categories included 1) temporary positions lasting six months or less, 2) positions lasting seven months to one year, and 3) positions specified to last over a year. Results of linear regression analysis showed that T2 emotional exhaustion and T2 moral disengagement were significantly related to T3 CWB only for positions specified to last for the shortest period of time, 6 months of less. Results are shown below in Tables 43-45.

Table 43 T3 CWB regressed on T2 mediators and T1 stressors for positions 6 months or less

Predictor	β	(*SE*)	*t*
Age	-.03	(.00)	-.39
Gender	-.07	(.04)	-.84
Volition	.15	(.04)	1.84
F	3.49*		
R^2	.08		
Financial Well-Being	-.03	(.02)	-.30
Economic Hardship	-.08	(.03)	-.89
Job Insecurity	.09	(.02)	1.02
Interpersonal Conflict	.06	(.05)	.59
Ostracism	.25	(.04)	2.64**
Organizational Constraints	-.07	(.03)	-.79
F	4.12**		
R^2 Change	.16		
T2 Emotional Exhaustion	.20	(.02)	2.11*
T2 Moral Disengagement	.29	(.04)	3.38**
F	5.67**		
R^2 Change	.11		

Note. *N*=132. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Table 44 T3 CWB regressed on T2 mediators and T1 stressors for positions 7 months to 1 year

Predictor	β	(*SE*)	*t*
Age	-.11	(.00)	-.90
Gender	-.10	(.08)	-.83
Volition	.02	(.08)	.19
F	1.39		
R^2	.07		
Financial Well-Being	.03	(.03)	.17
Economic Hardship	.01	(.04)	.06
Job Insecurity	-.00	(.04)	-.02
Interpersonal Conflict	.34	(.08)	2.24*
Ostracism	.14	(.08)	.83
Organizational Constraints	.16	(.05)	1.16
F	3.14**		
R^2 Change	.29		
T2 Emotional Exhaustion	-.05	(.04)	-.30
T2 Moral Disengagement	.18	(.07)	1.43
F	2.76**		
R^2 Change	.03		

Note. *N*=62. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Table 45 T3 CWB regressed on T2 mediators and T1 stressors for positions lasting over 1 year

Predictor	β	(*SE*)	*t*
Age	.07	(.00)	.35
Gender	-.05	(.07)	-.26
Volition	.12	(.06)	.65
F	.18		
R^2	.01		
Financial Well-Being	-.24	(.02)	-1.32
Economic Hardship	-.02	(.04)	-.11
Job Insecurity	-.10	(.03)	-.46
Interpersonal Conflict	.08	(.04)	.42
Ostracism	-.31	(.05)	-1.38
Organizational Constraints	.07	(.04)	.33
F	.52		
R^2 Change	.11		
T2 Emotional Exhaustion	.41	(.04)	1.82
T2 Moral Disengagement	.25	(.06)	1.39
F	.96		
R^2 Change	.13		

Note. *N*=42. β=standardized regression coefficient; *SE*=standard error of *B*; *$p < .05$. **$p < .01$.

Further exploring the differences between these three groups based on position length, a one-way ANOVA showed no significant differences between the three groups in the amount of CWB performed, but there were differences in perceived levels of job insecurity between the three groups ($F(2, 458)=5.09$, $p<.01$). Post-hoc comparisons showed that temporary workers in positions lasting six months or less ($M=3.13$, $SD=1.13$) and 7 months to one year ($M=3.27$, $SD=1.18$) experienced significantly higher levels of job insecurity compared to temporary workers in positions lasting over a year ($M=2.77$, $SD=1.25$).

DISCUSSION

The goal of this study was to focus explicitly on the work-related stress experiences of temporary workers. Articles discussing temporary and other non-permanent types of workers (e.g., contingent workers, independent contractors, etc.) have proliferated the academic literature, yet little empirical research related to the antecedents and outcomes of these workers' stress experiences exists. Many organizations employ temporary workers with hopes of greater flexibility and saving money, assuming this decision will lead to predominantly positive outcomes. For example, companies expect to incur lower costs because they can avoid investing in temporary workers in terms of training or benefits (De Cuyper et al., 2008). However, this viewpoint fails to take into account the consequences of temporary workers' reactions to their specific work situations. Temporary workers have been described as a disposable workforce where companies hire temporary workers "to accommodate layoffs without having to call them that" with workers "so poorly paid and so stripped of opportunity (no promotions, no raises, no training) that quitting [the job] or being laid off are roughly the same" (Uchitelle, 2006, p. 4).

While it seems obvious that this work relationship will have negative effects on temporary workers, the various types of temporary positions might be linked to diversity in stress-related experiences at work. In order to investigate the possible outcomes for temporary workers who do report stressful work-related experiences, this study went beyond previous studies by examining behaviors that would impact both current employees and their organizations. While employers should care about the temporary worker experience because they value their workers' well-being, organizational leaders might be more motivated to improve and optimize this work experience when temporary workers' well-being is shown to impact the

company's bottom line. In the context of this study, well-being was framed in terms of aspects of temporary work considered as stressors. Based on the extant temporary worker literature, I specifically proposed that economic stressors, interpersonal mistreatment, and organizational constraints might lead to temporary workers performing CWB. Considering CWB as a behavioral outcome in the context of temporary workers is critical, as CWB is estimated to cost organizations billions of dollars annually (Huang et al., 2017), which could clearly offset the money saved by hiring temporary workers.

In line with this perspective, I proposed a model with three broad workplace stressors predicting the behavioral outcome of CWB. Although conceptualized as three stressors, a series of CFAs showed that the six measures used to assess stressors should be treated as the following separate predictor variables: financial well-being, economic hardship, job insecurity, interpersonal conflict, ostracism, and organizational constraints. In order to remain consistent with the theoretical argument made above, I will discuss financial well-being, economic hardship, and job insecurity as economic stressors, and interpersonal conflict and ostracism as interpersonal mistreatment.

All hypotheses in this study were grounded in the conservation of resources theory (Hobfoll, 2002). I first suggested that economic stressors, interpersonal mistreatment, and organizational constraints would predict emotional exhaustion. Many temporary workers are not guaranteed continued employment, oftentimes are not paid sufficiently, lack training opportunities, and may not receive benefits (Probst, 2005). They may be labeled as outsiders and forced to compete with permanent workers at the same organization, motivating mistreatment (Gloor, 2006). Temporary workers can additionally be constrained by their lack of control over their work schedule and the lack of safety education provided by the organization (De Cuyper et

al., 2008). All of these represent temporary workers' resources either being drained or not being replenished after invested, leading to emotional exhaustion. Largely supporting these ideas, tests of the hypotheses showed that economic hardship, job insecurity, interpersonal conflict, and organizational constraints were positively related to emotional exhaustion. Financial well-being was not shown to predict emotional exhaustion, which may be because some temporary workers are financially supported by others such as family members. Additionally, the response scale for financial well-being was not time-restricted contrary to the economic hardship scale that asked participants to consider hardships felt during the last six months. Similarly, the job insecurity scale asked about the risk of workers losing their job in the year to come or the near future.

Considering the temporary workers who perceived high levels of interpersonal mistreatment, T1 ostracism was not shown to be a significant predictor of T2 emotional exhaustion. However, when T2 emotional exhaustion was regressed on only T1 ostracism including the control variables (i.e., age, volition, gender), T1 ostracism was a significant predictor. When T1 interpersonal conflict was added into the model as a predictor, this relationship between T1 ostracism and the mediator was no longer significant. Although the measurement model showed that the ostracism items and interpersonal conflict items loaded onto two separate factors, some of the items in each scale are similar, which could explain why T1 ostracism did not predict above and beyond T1 interpersonal conflict. Further, some of the items in the interpersonal conflict scale overlap with items in the CWB checklist, artificially inflating their relationship.

Second, I suggested that economic stressors, interpersonal mistreatment, and organizational constraints would predict moral disengagement. As cited above, temporary workers may experience stress stemming from perceptions of financial and job insecurity. This

insecurity might act as a threat to those workers' resources, serving as a motive to morally disengage. Further, the negative emotions caused by being stigmatized, marginalized, or ignored as well as frustration related to inadequate organizational support could expend temporary workers' mental resources and provoke moral disengagement (e.g., Fida et al., 2015; Paciello et al., 2013). Supporting these ideas, temporary workers who perceived high job insecurity, economic hardship, and interpersonal conflict were more likely to morally disengage. Interestingly, economic hardship was shown to negatively relate to T2 moral disengagement, yet was not significantly related to T1 moral disengagement or T3 moral disengagement. This sheds light on a potentially complicated relationship between economic hardship, as well as financial well-being, and moral disengagement. Returning to the conservation of resources theory, it is possible that these stressors deplete temporary workers' resources, specifically energy and mental functioning. Moral disengagement involves ignoring or obscuring norms, values, or models (Detert et al., 2008), which might require substantial cognitive resources, implying that temporary workers whose energy was focused on cutting back on social activities, delaying purchases, or finding other ways to save money could lack the resources to morally disengage.

Similarly, T1 organizational constraints was not found to significantly predict T2 moral disengagement. Going back to the conservation of resources theory, temporary workers were expected to react to situations that threatened their resources or prevented them from acquiring resources. In this case, organizational constraints likely prevented temporary workers from replenishing or gaining resources. However, a majority of the constraints measured in this study were imposed by the organization. In contrast, moral disengagement is a reaction meant to preserve resources drained because of specific people. Temporary workers may develop negative

feelings toward the organization because of organizational constraints, but this would unlikely be accounted for using the chosen measure of moral disengagement.

After testing the relationships between the Time 1 workplace stressors and mediating variables measured at Time 2, I confirmed the positive links between emotional exhaustion and moral disengagement measured at Time 2 with CWB measured at Time 3. Emotional exhaustion was measured by asking how often temporary feel this way at work, ranging from never to every day, while the items for moral disengagement measured workers' general tendencies. Similar to the emotional exhaustion and organizational constraints measures, the CWB response options ranged from performing specific deviant behaviors never to every day.

As assumed, the relationships between both T2 emotional exhaustion and T2 moral disengagement with T3 CWB were positive and significant. I subsequently tested the mediating effects proposed by the overall model. The workplace stressors were suggested to drain or threaten temporary workers' valued resources, evoking either a cognitive defense or an emotional response that would energize performance of CWB. Regarding the emotional response pathway, emotional exhaustion, results supported mediation for economic hardship, interpersonal conflict, and organizational constraints. In terms of the cognitive reaction to workplace stressors, meaning temporary workers who engaged in moral disengagement, results supported mediating effects for job insecurity and interpersonal conflict on T3 CWB.

When examining the indirect effects of the workplace stressors on T3 CWB through either T2 emotional exhaustion or T2 moral disengagement, it was not surprising that no effects were found for financial well-being or ostracism. Time 1 financial well-being and ostracism were not found to be significant predictors of either T2 mediator when all predictor variables were included in the regression models. Similarly, T1 job insecurity did not predict T2 emotional

exhaustion and T1 organizational constraints did not predict T2 moral disengagement. Although T1 job insecurity predicted T2 emotional exhaustion in the model of only economic stressors, it did not predict above and beyond the other stressors when T2 emotional exhaustion was regressed on all study and control variables.

In contrast, temporary workers who perceived higher levels of job insecurity at Time 1 were more likely to show higher levels of moral disengagement at Time 2. It appears that job insecurity may be more relevant to the cognitive pathway than to the affective or emotional pathway predicting CWB. This makes sense, seeing as the scale used to measure job insecurity captured cognitive job insecurity, but not affective job insecurity. Cognitive job insecurity reflects the awareness that one might lose his or her job, compared to affective job insecurity which focuses on the emotional reaction to potential job loss (Huang et al., 2012).

In addition to testing the hypotheses, I conducted supplemental analyses to further examine the data. Initially, I compared results of the hypothesized model against a larger sample of temporary worker data collected at Time 1. Tests of the proposed model using only T1 cross-sectional data showed indirect effects of economic hardship, interpersonal conflict, organizational constraints, and job insecurity through emotional exhaustion on CWB. For the moral disengagement pathway, only significant indirect effects were found for interpersonal conflict on CWB. This differed from results of the model with lagged variables which showed indirect effects of job insecurity through moral disengagement, but not emotional exhaustion. Analyses of the cross-sectional data also showed direct effects of ostracism, interpersonal conflict, and organizational constraints on CWB. These discrepancies highlight the importance of moving beyond cross-sectional methods in order to adequately test more complex statistical models.

Thinking more generally about the results from testing the hypotheses, I found significant variance among temporary workers in their experiences of workplace stressors. I further explored this variance in the remaining supplemental analyses. First, previous researchers have suggested differences among temporary workers may stem from whether a worker wanted a temporary position (i.e., voluntary temporary worker) or the worker could not find a permanent job (i.e., involuntary temporary workers). Supporting this proposition, I found that voluntary temporary workers did not have the same workplace stressor experience as involuntary temporary workers. Their emotional and cognitive reactions did not predict CWB, nor were any of the workplace stressors distal predictors of CWB. In contrast, results from involuntary temporary workers showed links between T2 emotional exhaustion and T2 moral disengagement with T3 CWB, along with economic hardship, interpersonal conflict, and organizational constraints working through the proposed mediators to predict CWB. Additional analyses revealed that involuntary temporary workers reported significantly higher levels of issues of financial well-being, economic hardship, job insecurity, ostracism, organizational constraints, and T2 emotional exhaustion. This implies that involuntary workers are more likely to experience economic hardship and organizational constraints, which were shown to work through emotional exhaustion to predict CWB.

Another source of variation among temporary workers could be the underlying intentions of their behaviors, specifically the target of their CWB. Results showed that T2 emotional exhaustion and T2 moral disengagement were significant predictors of T3 CWB-O, but only T2 emotional exhaustion predicted T3 CWB-I. This suggests that temporary workers who feel emotionally exhausted are equally likely to harm their organization and individuals within their organization. When considering the cognitive pathway to CWB, temporary workers who morally

disengaged were more likely to perform CWBs targeting their organization, but not specific individuals. However, the nonsignificant link between T2 moral disengagement and T3 CWB-I may be because of the variance in CWB-I accounted for by interpersonal conflict due to overlapping items.

Considering the true test of the proposed model, results showed that economic hardship, interpersonal conflict, and organizational constraints were related to CWB-O and CWB-I through the emotional exhaustion pathway. Only job insecurity predicted T3 CWB-O through T2 moral disengagement, implying that temporary workers fault the organization, not their coworkers or supervisors, for their lack of job security. Similarly, only interpersonal conflict predicted T3 CWB-I through T2 moral disengagement, likely because temporary workers wish to retaliate against the individual involved in this conflict, not the entire organization.

I also considered educational background as a source of variability among temporary workers. A worker's education, as measured by the type degree earned, is likely to have a major impact on the type of temporary position that a worker pursues. Results showed a consistent, positive link between T2 moral disengagement and T3 CWB across educational backgrounds, but the emotional exhaustion path was only predictive of T3 CWB for temporary workers with an associate's degree. Results also showed that temporary workers without a college degree were more likely to report economic hardship, again reflecting influential variance among temporary workers.

Lastly, I considered the length for which the temporary position was specified to last as a reason for different stress-related perceptions among temporary workers. The links between T2 emotional exhaustion and T2 moral disengagement with T3 CWB were only significant for temporary workers in positions lasting 6 months or less. The lack of support for the proposed

model for temporary workers in positions ranging from seven months to a year and positions lasting over a year may be partially due to the smaller sample sizes of these two groups. These differences could also stem from temporary workers in positions lasting longer periods of time experiencing lower levels of workplace stressors, such as less job insecurity. Essentially, the unique stress experiences of temporary workers, in this case workers in positions lasting the shortest length of time, may provoke emotional and cognitive reactions, thereby results reflecting the proposed model with a significant link between reactions and CWB. For the remaining temporary workers with a presumably different workplace stressor experience, the results did not reflect the proposed model.

LIMITATIONS AND FUTURE RESEARCH

While this study brings attention to important, previously not considered behavioral outcomes related to temporary work, there are a few limitations that must be noted. First, the use of only self-report measures raises concerns over common method variance influencing relationships among the variables included in the surveys. However, confirmatory factor analyses showed that workplace stressors did not all load onto a single latent factor, but instead fell into six dimensions, each in line with the scale utilized. These multiple dimensions in addition to some relationships among study variables being stronger than others (e.g., T1 economic stressors and T1 moral disengagement had a near-zero relationship, r=.02, p=.64) suggests that common method variance did not completely explain the results found (Podsakoff et al., 2003). To try and alleviate these concerns, the use of an objective measure of behavior or reports from a supervisor could be used in future research.

A second limitation is the sample collected. As shown in the taxonomy organizing workers into a hierarchy of temporary verses permanent workers, there are many different types of temporary workers. This study was not inclusive of all types of temporary workers and thereby the results should not be generalized to all temporary workers. However, the sample included temporary workers hired through a staffing agency, contract workers at a university, and a variety of temporary workers participating in studies through MTurk. These workers reported holding temporary positions such as temporary instructors, designers, secretaries, family program assistants, human resource specialists, and engineering technicians. Further research is needed to compare different types of temporary positions. The diverse range in temporary positions combined with the large sample size provide a good representation of temporary

workers in general, but valuable information could be gathered by considering each type of temporary worker independently. For example, the stressors experienced by an independent contractor may differ from the most salient workplace stressors of a temporary help agency worker or seasonal worker.

While this study only compared among temporary workers, I am not suggesting that temporary workers are inherently different from permanent workers. Instead, this research moves the temporary worker literature forward by considering behavioral outcomes resulting from various temporary work experiences. The results show that temporary workers vary in their perceptions of workplace stressors and their reactions to those stressors, which can then influence counterproductive behaviors. Future researchers could explore whether the effects found in this study for temporary workers are similarly reflected in permanent workers.

It would also be fruitful for future researchers to consider work-family issues as another stressor for temporary workers. Rarely do tasks, relationships, and expectations at work only impact an employee without also having consequences on the employee's family. For example, the stress from work and the unpredictability of a work routine have been linked to work-family conflict (Fox & Dwyer, 1999; Grzywacz & Marks, 2000). Work-family conflict may predict variance in temporary worker reactions and behavioral outcomes above and beyond the stressors discussed in this study. Work-family conflict was not included in this study for the sake of parsimony and because it was not a reoccurring theme in the current temporary worker literature. Additionally, future research could go beyond the broad measure of emotional exhaustion and consider links between stressors and specific emotions, such as frustration stemming from interpersonal conflict to predict CWB.

A third limitation is that the data were collected in one month, meaning each survey was sent out approximately one week apart. This short time span potentially resulted in an underestimation of the number of CWBs performed and limited potential experiences of interpersonal mistreatment and organizational constraints. Temporary workers would have extended contact with other employees along with more opportunities to perform CWB over longer periods of time. The three-week time span was chosen to accommodate the varying lengths of temporary contracts, and results of a survey item asking temporary workers how long their current position was specified to last confirmed the need for such a quick data collection period. Around 5% of the temporary workers surveyed were in positions lasting a month or less and 38% held temporary positions specified to end after 6 months. Examining the influence of time on temporary workers' stress experience would also be an interesting avenue for future research. Clearly temporary workers' experiences are complex, but this study found that, in general, the effects of workplace stressors on behaviors through emotional and cognitive reactions can be damaging not only on an individual level, but also on a group or organizational level, making this a pertinent area for research.

CONCLUSIONS

In summary, temporary workers who experience high levels of workplace stressors, react emotionally and cognitively, showing higher levels of emotional exhaustion and moral disengagement. The current study linked these reactions to an increased likelihood of performing behaviors that are harmful to the temporary worker's organization and/or others within the organization. In line with theories on stress appraisal and emotional reactions to stress (e.g., Rodell & Judge, 2009; Spector & Fox, 2002), stressors experienced at work rarely lead directly to CWB. Instead, the economic stressors, interpersonal mistreatment, and organizational constraints measured in this study were related to an emotional reaction and a cognitive appraisal by temporary workers, which sequentially were predictive of CWB.

As addressed earlier, this study was not meant to compare temporary to permanent workers. Instead, the purpose of this research was to move beyond temporary workers' feelings surrounding workplace stressors and consider broader implications related to behavioral outcomes. I examined stressors shown by previous empirical findings as particularly salient to temporary workers, grouping these stressors into overarching categories of economic stressors, interpersonal mistreatment, and organizational constraints. Specifying these most relevant stressors allowed for the empirical examination of their influence on temporary workers' emotions, cognitions, and behaviors.

This study included a large and diverse sample of temporary workers, including those employed through a staffing agency, working at a large university, and those holding temporary positions in addition to making money through MTurk. In order to test for mediation, data were collected in three waves and analyses included predictor variables measured at Time 1,

mediating variables measured at Time 2, and the outcome variable measured at Time 3. Although conceptualized as three encompassing workplace stressors, the best fitting measurement models showed that the stressors should be analyzed as six distinct variables including financial well-being, economic hardship, job insecurity, interpersonal conflict, ostracism, and organizational constraints.

The data provided support for pieces of the proposed model. Economic hardship, interpersonal conflict, and organizational constraints predicted T2 emotional exhaustion, while economic hardship and interpersonal conflict predicted T2 moral disengagement. These stressors likely drained temporary workers' resources, which was related to an increased drive to morally disengage and to experienced feelings of emotional exhaustion. Additionally, both T2 emotional exhaustion and T2 moral disengagement were found to be significant predictors of T3 CWB. This shows that counterproductive behaviors likely stem from feelings of being burnt out or emotionally drained. A greater likelihood of performing CWB may also stem from temporary workers rationalizing CWB by morally disengaging. However, when considering the hypothesized mediation model, only certain workplace stressors worked through T2 emotional exhaustion and T2 moral disengagement to predict T3 CWB.

Tests of mediation showed that economic hardship, interpersonal conflict, and organizational constraints worked through the emotional exhaustion pathway to predict CWB. Temporary workers who are experiencing economic hardship are unable to replenish their invested resources, oftentimes monetary resources. Those who reported not being able to make personal and household purchases, changing their shopping and eating habits, and reducing spending in other ways were more likely to experience emotional exhaustion which then increased the chances they would perform CWBs. Many temporary workers also reported

experiencing conflict with others at work. Their resources were depleted by engaging in arguments or from coworkers acting offensively, increasing their feelings of emotional exhaustion, which then increased incidents of CWBs. Finally, the temporary workers who perceived a lack of resources necessary to perform their work due to organizational constraints were more likely to feel emotionally exhausted, which then increased their likelihood of engaging in CWB.

Tests of mediation further showed that job insecurity and interpersonal conflict predicted CWB through the proposed moral disengagement pathway. Job security is a valuable resource for temporary workers, and those who feel insecure were shown to be more likely to morally disengage, which was then linked to CWB. In addition to a greater likelihood of feeling emotionally exhausted, temporary workers who experienced high levels of interpersonal conflict were more likely to morally disengage and then perform CWB.

In conclusion, I found that workplace stressors perceived by temporary workers were indirectly linked to CWB through feelings of emotional exhaustion or by rationalizing and disconnecting from future unethical behaviors using moral disengagement. Perceived economic hardship, organizational constraints, and interpersonal conflict were related to CWB via the emotional reaction path, while job insecurity and interpersonal conflict were related to CWB via a cognitive reaction pathway. Looking only at this stressor to reaction to behavior process in temporary workers revealed significant variability among temporary workers in their workplace experiences. Taking all findings into account, workplace stressors should be considered as distal predictors of CWB, while temporary workers' levels of emotional exhaustion and tendency to morally disengage can be used as more proximal predictors of CWB. Further, although temporary workers are constantly researched and discussed as one homogenous group, their

experiences are dependent on factors such as the involuntary nature of the position, their educational background, and the specified length of their position, all of which can lead to more accurate predictions of behaviors at work that are detrimental to the organization.

APPENDIX A: MEASURES

Economic Stressors

Economic Hardship Questionnaire

During the last 6 months, how often did you… (1=never, 5=very often)

1. Cut back on social activities and entertainment expenses
2. Postpone major household purchases
3. Postpone clothing purchases
4. Change transportation patterns to save money
5. Change food shopping or eating habits to save money
6. Reduce household utility use

Financial Well-Being Scale

Rate from 1-5 (1=Strongly disagree, 5=Strongly agree)

1. I am uncomfortable with the amount of debt I am in
2. I worry about repaying my loans
3. I worry about repaying my credit cards
4. I think a lot about the debt I am in

Job Insecurity Scale

1. I am worried about having to leave my job before I would like to
2. There is a risk that I will have to leave my present job in the year to come
3. I feel uneasy about losing my job in the near future

Interpersonal Mistreatment

Interpersonal Conflict at Work Scale, ICAWS

Please rate how often the following questions apply at your current temporary work assignment.

	Never	Rarely	Sometimes	Quite Often	Very Often
1. How often do you get into arguments with others at work?					
2. How often do other people yell at you at work?					
3. How often are people rude to you at work?					
4. How often do other people do nasty things to you at work?					

Ostracism Items (Ferris et al., 2008)

Thinking about your current temporary work assignment, how often have...

Never (1) Sometimes (2) Fairly Often (3) Often (4) Always (5)

1. Others ignored you at work.
2. Others left the area when you entered.
3. Your greetings have gone unanswered at work.
4. You involuntarily sat alone in a crowded lunchroom at work.
5. Others avoided you at work.
6. You noticed others would not look at you at work.
7. Others at work shut you out of the conversation.
8. Others refused to talk to you at work.
9. Others at work treated you as if you weren't there.
10. Others at work did not invite you or ask you if you wanted anything when they went out for a coffee break.

Organizational Constraints

Organizational Constraints Scale, OCS

How often do you find it difficult or impossible to do your job because of ... ?	Less than once per month or never	Once or twice per month	Once or twice per week	Once or twice per day	Several times per day
1. Poor equipment or supplies.					
2. Organizational rules and procedures.					
3. Other employees.					
4. Your supervisor.					
5. Lack of equipment or supplies.					
6. Inadequate training.					
7. Interruptions by other people.					
8. Lack of necessary information about what to do or how to do it.					
9. Conflicting job demands.					
10. Inadequate help from others.					
11. Incorrect instructions.					

Job-Related Emotional Exhaustion

How often have you felt this way while you were at work?	Never felt this way while at work						Feel this way every day
1. I feel emotionally drained by my work							
2. I feel used up at the end of a work day							
3. I dread getting up in the morning and having to face another day on the job							
4. I feel burned out from my work							
5. I feel frustrated by my job							
6. I feel I'm working too hard on my job							

Propensity to Morally Disengage Scale

Rate how strongly you agree or disagree. (5-point scale from strongly disagree to strongly agree)

1. It is okay to spread rumors to defend those you care about.
2. Taking something without the owner's permission is okay as long as you're just borrowing it.
3. Considering the ways people grossly misrepresent themselves, it's hardly a sin to inflate your own credentials a bit.
4. People shouldn't be held accountable for doing questionable things when they were just doing what an authority figure told them to do.
5. People can't be blamed for doing things that are technically wrong when all their friends are doing it too.
6. Taking personal credit for ideas that were not your own is no big deal.
7. Some people have to be treated roughly because they lack feelings that can be hurt.
8. People who get mistreated have usually done something to bring it on themselves.

Counterproductive Work Behavior Checklist (CWB-C) (32-item)

How often have you done each of the following things on your present job?	Never	Once or Twice	Once or Twice per month	Once or twice per week	
1. Purposely wasted your employer's materials/supplies	1	2	3	4	5
2. Purposely did your work incorrectly	1	2	3	4	5
3. Came to work late without permission	1	2	3	4	5
4. Stayed home from work and said you were sick when you weren't	1	2	3	4	5
5. Purposely damaged a piece of equipment or property	1	2	3	4	5
6. Purposely dirtied or littered your place of work	1	2	3	4	5
7. Stolen something belonging to your employer	1	2	3	4	5
8. Started or continued a damaging or harmful rumor at work	1	2	3	4	5
9. Been nasty or rude to a client or customer	1	2	3	4	5
10. Purposely worked slowly when things needed to get done	1	2	3	4	5
11. Taken a longer break than you were allowed to take	1	2	3	4	5
12. Purposely failed to follow instructions	1	2	3	4	5
13. Left work earlier than you were allowed to	1	2	3	4	5
14. Insulted someone about their job performance	1	2	3	4	5
15. Made fun of someone's personal life	1	2	3	4	5
16. Took supplies or tools home without permission	1	2	3	4	5
17. Put in to be paid for more hours than you worked	1	2	3	4	5
18. Took money from your employer without permission	1	2	3	4	5
19. Ignored someone at work	1	2	3	4	5
20. Blamed someone at work for error you made	1	2	3	4	5
21. Started an argument with someone at work	1	2	3	4	5
22. Stole something belonging to someone at work	1	2	3	4	5
23. Verbally abused someone at work	1	2	3	4	5
24. Made an obscene gesture (the finger) to someone at work	1	2	3	4	5
25. Threatened someone at work with violence	1	2	3	4	5
26. Threatened someone at work, but not physically	1	2	3	4	5
27. Said something obscene to someone at work to make them feel bad	1	2	3	4	5
28. Did something to make someone at work look bad	1	2	3	4	5
29. Played a mean prank to embarrass someone at work	1	2	3	4	5
30. Looked at someone at work's private mail/property without permission	1	2	3	4	5
31. Hit or pushed someone at work	1	2	3	4	5
32. Insulted or made fun of someone at work	1	2	3	4	5

APPENDIX B: SURVEY

Demographics

What is your gender?

- O Male (1)
- O Female (2)
- O Other (3)

What is your age?

What is your ethnicity?

- O White (1)
- O Hispanic or Latino (2)
- O Black or African American (3)
- O Native American or American Indian (4)
- O Asian or Pacific Islander (5)
- O Other (6)

What is your highest degree level of education?

▼ No schooling completed (1) ... Doctorate degree (10)

Thinking about your current position, would you agree or disagree that...

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
My job is very complex (1)	O	O	O	O	O
My job requires a lot of skill (2)	O	O	O	O	O
My job is such that it takes a long time to learn the skills required to do the job well (3)	O	O	O	O	O

This link will take to you O*NET. Click on the link then type in your job title under "Occupation Quick Search" and then copy and paste the code into the box below. https://www.onetonline.org/find/

_____

Temporary workers (also known as staffing employees) are employed for a particular length of time and often have short-term contracts. How long have you been a temporary worker?

▼ Less than 1 year (1) ... 10+ years (10)

How long was your current position specified to last?

▼ less than 1 month (1) ... Unspecified (15)

Why are you holding a temporary job?

O I did not want a permanent job (1)

O I was not able to find a permanent job (2)

Do you want to become a permanent worker at the company you are currently working for?

O Yes (1)

O No (2)

What is your total household income?

▼ Less than $10,000 (1) ... More than $150,000 (12)

How many children under the age of 25 that live with you 3+ days a week are you financially supporting?

▼ 0 (1) ... 10+ (11)

How many children **under the age of 5** that live with you 3+ days a week are you financially supporting?

▼ 0 (1) ... 10+ (11)

How many adult relatives are you financially supporting? (for example, assisted living)

▼ 0 (1) ... 10+ (11)

APPENDIX C: IRB APPROVAL DOCUMENT

UNIVERSITY OF CENTRAL FLORIDA

Institutional Review Board
FWA00000351
IRB00001138Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

APPROVAL

April 19, 2019

Dear Jamie Striler:

On 4/19/2019, the IRB reviewed the following submission:

Type of Review:	Modification
Title:	Temporary Work Perceptions
Investigator:	Jamie Striler
IRB ID:	MOD00000188
Funding:	None
Grant ID:	None
IND, IDE, or HDE:	None
Documents Reviewed:	• MTurk Consent, Category: Consent Form; • MTurk Survey, Category: Survey / Questionnaire; • Updated Flyers, Category: Recruitment Materials; • Protocol (3).docx, Category: IRB Protocol;

The IRB approved the protocol from 4/19/2019 to 12/17/2019.

In conducting this protocol, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Gillian Morien
Designated Reviewer

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