

**Does multitasking work for you? The role of multitasking fit in employee job satisfaction  
and turnover intentions**

by

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## Abstract

Person-job (P-J) fit refers to the degree of congruence between an employee and their occupation. P-J fit is important for organizations to understand, because it predicts job satisfaction and turnover intentions, such that better P-J fit is associated with higher levels of job satisfaction and lower levels of turnover intentions. This research presented and examined multitasking fit, a specific conceptualization of P-J fit that compared an employee's preference for multitasking with the extent to which multitasking is required or allowed in their job. A model of multitasking fit was analyzed in competition with a model of P-J fit to determine if multitasking fit better predicted job satisfaction and turnover intentions. Employees in real-world organizations were surveyed about their preference for multitasking, the extent to which their job required multitasking, their job satisfaction, and their turnover intentions. Results indicated that multitasking fit was not a better predictor of job satisfaction and turnover intentions than P-J fit. Furthermore, the present study examined the effects of conscientiousness and neuroticism on P-J fit. Employee conscientiousness was found to positively moderate the indirect effect of P-J fit on turnover intentions, via job satisfaction. This research indicated that organizations should assess prospective employees for their P-J fit and conscientiousness. In turn, this practice may yield higher levels of job satisfaction and lower levels of turnover intentions.

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Does multitasking work for you? The role of multitasking fit in employee job satisfaction and turnover intentions

The modern workplace is characterized by increasing demands on employees, such as greater complexity of task environments (Hunt, 1995; Lindbeck & Snower, 2000), pervasiveness of communication devices in the workplace (Appelbaum, Marchionni, & Fernandez, 2008; Spink, Cole, & Waller, 2008), expanding job roles (Ilgen & Pulakos, 1999), and easy-to-access information (Hunt, 1995; Lindbeck & Snower, 2000). One consequence of these increased demands is that multitasking has become a norm of job performance in many workplaces (Appelbaum, et al., 2008; Colom, Martinez-Molina, Shih, & Santacreu, 2010; Hunt, 1995; Ilgen & Pulakos, 1999; Lindbeck & Snower, 2000; Rubenstein, Meyer, & Evans, 2001; Spink, et al., 2008). Indeed, workplace multitasking is often unavoidable. Office environments are frequently rife with interruptions and distractions, such as conversations with colleagues, incoming emails and telephone calls, or disruptive noises (Mark, Gonzalez, & Harris, 2005). Furthermore, employees may be asked to focus on multiple tasks or may be required to shift between tasks to complete work objectives (Monsell, 2003). As such, it is not always feasible to avoid multitasking in the workplace; therefore, it is imperative for organizations to have a comprehensive understanding of predictors of employee reactions to workplace multitasking and the implications for job satisfaction and turnover intentions of multitasking behaviors in the workplace.

## **Multitasking**

Throughout the literature, multitasking is operationally defined in terms of three characteristics: working on multiple tasks, shifting of attention between tasks, and that working on a set of tasks occurs over a short time span (Delbridge, 2000; Kantrowitz, Grelle, Beaty, & Wolf, 2012; Logie, et al., 2010; Oswald, Hambrick, & Jones, 2017; Sanderson, Bruk-Lee, Viswesvaran, Gutierrez, & Kantrowitz, 2013). Based on these three characteristics of multitasking: performance of multiple tasks, shifting attention between tasks, and a short time span, many work functions may be considered multitasking (Kantrowitz, et al., 2012; Logie, et al., 2010; Oswald, et al. 2017; Otto, et al., 2012; Sanderson, et al., 2013). For instance, an employee may decide to spell-check emails while simultaneously taking part in a conference call. The ubiquity of workplace multitasking is highlighted by the finding that on average, employees switch work tasks every 11 minutes (Mark, Gonzalez, & Harris, 2005). This finding varies slightly by field, for instance, managers are more likely to be interrupted and switch tasks than software developers or financial analysts (Mark, et al., 2005).

The first characteristic of multitasking is that the multitasker must work on multiple tasks, meaning that individuals must engage in at least two *distinct* tasks (Kantrowitz, et al., 2012; Logie, et al., 2010; Oswald, et al., 2007; Otto, Wahl, Lefort, & Frei, 2012; Sanderson, et al., 2013). Tasks are defined in terms of four main features: physical nature, demands, outcomes, and perceptions (Oswald, et al., 2007). When tasks differ on one or more of these four features, the tasks can be considered distinct from one another. Table 1 describes each of the four main features used to define tasks and to establish tasks as different from one another.

The second characteristic of multitasking is that the task performer must shift their attention between tasks. Previous research has defined this characteristic of multitasking in terms

of *dual-tasking* and *task switching* (Butler, Arrington, & Weywadt, 2011; Logan & Gordon, 2001; Logie, et al., 2010; Monsell, 2003; Oswald, et al., 2007; Rekart, 2011; Szameitat, Hamaida, Tulley, Saylik, & Otermans, 2015). When the performance of multiple tasks overlaps temporally (i.e., simultaneous performance of multiple tasks), it is referred to as *dual-tasking* (Logie, et al., 2010; Szameitat, et al., 2015). Conversely, when shifting between tasks, whether frequently or only once, this is referred to as *task switching* (Butler, et al., 2011; Logie, et al., 2010; Szameitat, et al., 2015). Whether the task performer engages in dual-tasking or task switching when working on a set of tasks, both methods involve shifting attention between tasks and thus are characteristic of multitasking behavior (Kantrowitz, et al., 2012; Logie, et al., 2010; Oswald, et al., 2007; Otto, et al., 2012; Rekart, 2011; Sanderson, et al., 2013). Prior research has identified a negative relationship between frequency of task-switching and actual task performance, although individuals tend to overestimate their task performance when switching between tasks (Sanbonmatsu, Strayer, Medeiros-Ward, & Watson, 2013).

The third characteristic of multitasking is that tasks must be performed over a short time span. This characteristic distinguishes multitasking from working on one task at a time by forcing the task performer to shift attention rapidly between tasks (Delbridge, 2000; Kantrowitz, et al., 2012; Oswald, et al., 2007). In contrast, if tasks are worked on over a longer time span, then the task performer can slowly and deliberately shift focus between tasks, rather than rapidly shifting attention back and forth between tasks (Delbridge, 2000). The definition of a “short time span” may be determined by collecting objective information or subjective information from task performers about whether or not the set of tasks was worked on within a short time span. Objective information can include measurements of the time required per task or the number of instances that an individual switches between tasks within the time frame. Subjective

information may include subject matter expert (SME) or incumbent ratings of the pace of shifting between work tasks (Oswald, et al., 2017).

In sum, when employees multitask, they work on more than one task at once, shift their attention between the tasks, and do so rapidly (Delbridge, 2000; Kantrowitz, Grelle, Beaty, & Wolf, 2012; Logie, et al., 2010; Oswald, Hambrick, & Jones, 2017; Sanderson, Bruk-Lee, Viswesvaran, Gutierrez, & Kantrowitz, 2013). Individuals may or may not be attracted to workplace multitasking, just like individuals are attracted or not attracted to other job attributes (Cable & DeRue, 2002; Edwards, 1991; Holland, 1985; Jurgensen, 1978; Kristof, 1996; Milkovich & Newman, 1999; Schneider, 1987). The attraction-selection-attrition (ASA) model provides a useful framework for understanding how the match between personal preferences and job attributes affect an individual's decision to accept a job offer and stay within their job (Schneider, 1987).

### **The attraction-selection-attrition cycle**

Individuals tend to seek and structure their work environments in accordance with their personal preferences (Schneider, 1987). Employees are not randomly assigned to their organizations and jobs, but instead select themselves into and out of real organizations: a process referred to as the attraction-selection-attrition (ASA) cycle (Schneider, 1987). The attraction sector of the model posits that people are differentially attracted to jobs when the job has attributes that match their personal interests, abilities, and other individual characteristics (Schneider, 1987). For instance, when individuals enjoy multitasking, they may be attracted to jobs that require or allow for frequent multitasking. Selection, represented in the second portion of the model, is more likely to occur when there is a match between the needs and abilities of the

person with the demands and characteristics of the job, sometimes referred to as person-job (P-J) fit (Edwards, 1991; Kristof, 1996; Schneider, 1987). The attrition section of the model posits that employees leave a job due to a mismatch between organizational and personal values, goals, abilities, or other characteristics (Edwards, 1991; Kristof, 1996; Schneider, 1987). Last, organizational goals are placed at the center of the model, as each part of the model relates to organizational goals (Schneider, 1987). Organizations may be attracted to applicants who have goals that appear to align with organizational goals; moreover, prospective employees may be attracted to organizational goals that align with their personal preferences, goals, and values (Schneider, 1987). This concept, the degree of congruence between the values and goals of a person and of their organization, has been termed *person-job fit* (P-J fit).

### **Person-job fit**

P-J fit refers to an individual's compatibility with his or her job that occurs when the employee possesses the abilities required by the job, or when the employee's values and preferences are congruent with the attributes of the job (Edwards, 1991; Kristof, 1996; Lauver & Kristof-Brown, 2001). The main implication of P-J fit is that characteristics of the employee and characteristics of their job jointly determine individual and organizational outcomes (Edwards, 1991). P-J fit perceptions are subjective judgements about the degree to which an employee's skills match the demands of a job and the employee's needs match the supplies of the job (Cable & Judge, 1996; Kristof-Brown, 2000). For instance, P-J fit will be good when employee abilities match job demands (i.e., employee abilities are not far above or far below the demands of the job), or when the needs of the employee are met by qualities of the job. In contrast, P-J fit will be poor when the demands of the job do not match the abilities of the employee or when the needs

of the employee are not met by the qualities of the job. Outcomes of good P-J fit include better job performance, higher levels of job satisfaction, and lower levels of turnover intentions, while poor P-J fit is negatively related to job performance and job satisfaction, and positively related to turnover intentions (Cable & DeRue, 2002; Cable & Judge, 1996; Dawis & Loftquist, 1984; Desmond & Weiss, 1973; Drexler & Lindell, 1981; Edwards, 1991; French, et al., 1982; Kristof-Brown, Zimmerman, & Johnson, 2005; Locke, 1976). As such, P-J fit encompasses characteristics of the employee, including their needs and abilities, as well as characteristics of the job, including supplies and demands (Edwards, 1991).

P-J fit matters to organizations because it predicts better job performance, higher levels of job satisfaction, and lower levels of turnover intentions (Cable & DeRue, 2002; Cable & Judge, 1996; Dawis & Loftquist, 1984; Edwards, 1991; Kristof-Brown, Zimmerman, & Johnson, 2005; Locke, 1976). Organizations need employees who can perform well in their jobs to increase total organizational productivity and the likelihood of organizational survival within a market of fluctuating demand (Motowidlo, 2003). Furthermore, higher levels of job satisfaction are associated with greater prevalence of employee behaviors that improve the functioning of the organization (i.e., organizational citizenship behaviors) and less frequent employee behaviors that harm the organization (i.e., counterproductive workplace behaviors; Dalal, 2005). Employee retention is critical to organizational survival, as the costs of recruiting, selecting, and training new employees generally costs 90-200% of the annual salary for the position being filled (Allen, et al., 2010). To avoid costly turnover, organizations should attempt to increase P-J fit, as P-J fit shares a negative relationship with turnover intentions, which are the strongest positive predictor of employee turnover (Allen, et al., 2010; Kristof-Brown, et al., 2005).

P-J fit may be conceptualized in terms of the degree of match between the *demands* of the job and an employee's *abilities* (i.e., *demands-abilities fit*) or may be conceptualized as the degree of congruence between what an employee *needs*, and what their current job *supplies* (i.e., *needs-supplies fit*; Cable & DeRue, 2002; Edwards, 1991; Kristof, 1996). The congruence between employee abilities and job demands predicts outcomes such as job performance, while the match between employee needs and job supplies predicts outcomes such as job satisfaction and turnover intentions (Edwards, 1991). The needs-supplies conceptualization is relevant to the present research because the effects of fit on job satisfaction and turnover intentions, rather than job performance, are examined.

#### *Needs-supplies fit*

The needs-supplies conceptualization of P-J fit compares needs of the employee to what their current job supplies to meet those needs (Cable & DeRue, 2002; Edwards, 1991; Kristof, 1996). Employee needs include goals, values, interests, and preferences (Cable & DeRue, 2002; Campbell & Hansen, 1981; Chatman, 1989; Edwards, 1991; Lee, Locke, & Latham, 1989; Locke, 1976; Pryor, 1987). Examples of employee needs include childcare, above-market pay levels, promotion opportunities, recognition, positive work environments, and challenging or interesting work (Cable & DeRue, 2002; Jurgensen, 1978; Milkovich & Newman, 1999; Powell, 1984). In response to employee needs, job supplies include occupational characteristics, organizational attributes, and job attributes (Cable & DeRue, 2002; Holland, 1985; Jurgensen, 1978; Milkovich & Newman, 1999; Powell, 1984). Examples of job supplies include pay, role clarity, interesting and challenging work, and autonomy (Alutto & Belasco, 1972; Cable & DeRue, 2002; Edwards, 1991; Jurgensen, 1978; Lyons, 1971; Powell, 1984).

When employee needs are met by attributes of their job (i.e., good needs-supplies fit), job satisfaction tends to be higher and turnover intentions tend to be lower (Cable & DeRue, 2002; Cable & Judge, 1996; Dawis & Loftquist, 1984; Desmond & Weiss, 1973; Drexler & Lindell, 1981; Edwards, 1991; French, et al., 1982; Kristof-Brown, Zimmerman, & Johnson, 2005; Locke, 1976). Although needs-supplies fit provides a general, traditional method for conceptualizing P-J fit, incremental validity in predicting job satisfaction and turnover intentions may be gained by examining more specific employee needs. Therefore, two conceptualizations of P-J fit were examined: needs-supplies fit was used as a general conceptualization of P-J fit, followed by a multitasking-specific conceptualization of P-J fit, termed multitasking fit. Hypotheses corresponding to each model were proposed in turn. The general model conceptualizes P-J fit as needs-supplies fit and is presented in Figure 1. This model (Figure 1) illustrates the hypothesized relationships between needs-supplies fit, job satisfaction, and turnover intentions.

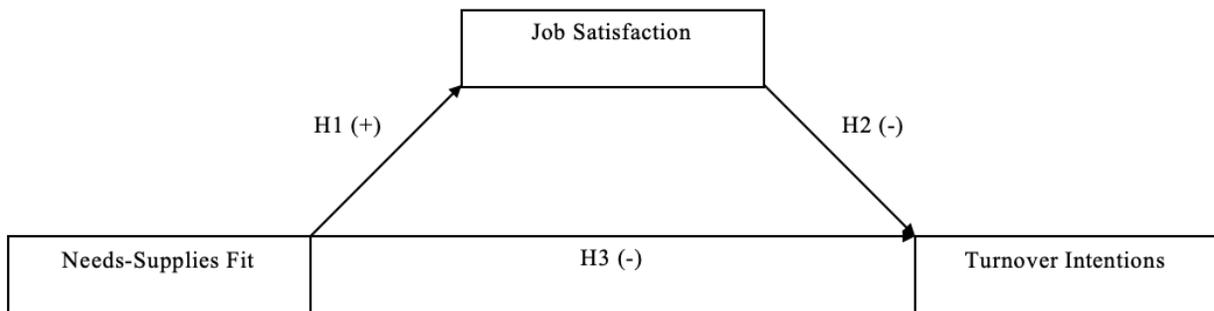


Figure 1. A mediation model of the proposed relationships between needs-supplies fit, job satisfaction, and turnover intentions.

Employees differ in their preferences and in their prioritization of needs, which means that the attributes of a given job may not satisfy every employee (Cable & DeRue, 2002; Edwards, 1991; Milkovich & Newman, 1999). In Figure 1, needs-supplies fit was examined in

relation to job satisfaction and turnover (Cable & DeRue, 2002; Edwards, 1991). Job satisfaction was operationally defined as an employee's perception of how well their needs are met by their present job (Dawis & Lofquist, 1984). The needs-supplies conceptualization of P-J fit generally shares a positive relationship with job satisfaction, as congruency between the needs of the employee and the supplies of the job largely determine job satisfaction (Locke, 1976). We expected to provide further evidence to bolster the extant findings and predict that:

**Hypothesis 1:** There will be a positive relationship between needs-supplies fit and job satisfaction

#### *Employee turnover intentions*

To extend this framework into bottom-line implications for real-world organizations, these conceptual models investigated the influence of P-J fit and job satisfaction on employee turnover intentions. Employee turnover is important for organizations to understand because of the large cost of losing employees. Tangible costs of employee turnover include the costs of recruitment and selection for the vacant position and training new employees, while intangible costs of employee turnover include loss of knowledge and shifting work team membership (Allen, et al., 2010). To avoid accruing costs concomitant with employee turnover, organizations need to understand how to prevent it.

Previous research has demonstrated a negative relationship between job satisfaction and employee turnover, such that employees with higher levels of job satisfaction are less likely to turnover (Allen, et al., 2010; Cotton & Tuttle, 1986; Locke, 1976; Mobley, 1977; Porter & Steers, 1973; Shore & Martin, 1989). Although this relationship has been consistently demonstrated in the extant literature, the correlation between job satisfaction and turnover

behavior is generally moderate, around  $-.40$  (Locke, 1976). Research on the job satisfaction-turnover relationship has established turnover intentions as a consistently strong predictor of actual employee turnover behaviors (Cotton & Tuttle, 1986; Mobley, 1977; Porter & Steers, 1973; Steel & Ovalle, 1984).

Turnover intentions represent an employee's behavioral intention to quit their present job (Steel & Ovalle, 1984). The turnover decision process includes turnover intentions as an intermediate step between experienced job dissatisfaction and actual turnover (Mobley, 1977; Porter & Steers, 1973). This means that job satisfaction predicts employee turnover indirectly, via turnover intentions; moreover, job satisfaction directly predicts turnover intentions (Mobley, 1977; Porter & Steers, 1973). It is important to note that turnover intentions may arise from several antecedents, such as a need to relocate, family or health reasons, or others (Allen, et al., 2010; Cotton & Tuttle, 1986). The present research focused on job satisfaction as a predictor of turnover intentions. Existing research has ubiquitously identified a negative relationship between job satisfaction and turnover intentions, such that employees who are satisfied with their jobs are less likely to intend to leave their jobs (Allen, et al., 2010; Cotton & Tuttle, 1986; Mobley, 1977; Porter & Steers, 1973; Steel & Ovalle, 1984). We expected to replicate the negative relationship between job satisfaction and turnover intentions found in previous research.

**Hypothesis 2:** There will be a negative relationship between job satisfaction and turnover intentions

Thus far, the present framework posited that P-J fit predicts job satisfaction, which in turn predicts turnover intentions. The comprehensive model postulated that P-J fit would both directly predict turnover intentions and an indirectly predict turnover intentions via job satisfaction,

which was predicted to act as the mediating variable (i.e., partial mediation). Previous research has found that needs-supplies fit shares a negative relationship with turnover intentions, such that individuals with good need-supplies fit are less likely to intend to leave their jobs (Kristof-Brown, et al., 2005). This is likely because voluntary turnover decisions are largely influenced by perceptions of a job's rewards, such as adequate pay or flexible work schedules, which satisfy the needs of employees (Cotton & Tuttle, 1986; Lee & Mowday, 1987). In summary, employees who find that their job meets their needs (i.e., good needs-supplies fit) are less likely to report that they intend to turnover than employees whose needs are unmet by characteristics of their present job (Cotton & Tuttle, 1986; Kristof-Brown, et al., 2005; Lee & Mowday, 1987). The consensus across several previous studies provided ample theoretical and empirical support for a negative relationship between needs-supplies fit and turnover intentions (Cable & DeRue, 2002; Edwards, 1991; Kristof, 1996; Kristof-Brown, 2005).

**Hypothesis 3:** There will be a negative relationship between needs-supplies fit and turnover intentions

As modern workplaces, expanding job roles, and workplace technologies frequently require employees to multitask, it is important to understand how the needs, preferences, and abilities of employees fit with these new job characteristics and demands (Appelbaum, et al., 2008; Colom, Martinez-Molina, Shih, & Santacreu, 2010; Hunt, 1995; Ilgen & Pulakos, 1999; Lindback & Snower, 2000; Rubenstein, Meyer, & Evans, 2001; Spink, et al., 2008). A multitasking-specific conceptualization of P-J fit, called *multitasking fit*, may provide incremental validity beyond general needs-supplies fit in predicting job satisfaction and turnover intentions when jobs require or allow frequent multitasking. Furthermore, similar to needs-

supplies fit, the degree to which employees fit with jobs requiring or allowing for frequent multitasking (i.e., multitasking fit) may have implications for job satisfaction and turnover intentions. To investigate this theory, prior research investigating workplace multitasking will be reviewed, followed by the introduction of the concept of multitasking fit.

### **Workplace multitasking**

As workplace multitasking has increased in prevalence, a plethora of research has investigated the implications for performance across domains, including cognitive science (Logie, Law, Trawley, & Nissan, 2010; Shallice & Burgess, 1991), human factors (Loukopoulos, Dismukes, & Barshi, 2009), and industrial-organizational psychology (Oswald, Hambrick, & Jones, 2007). Much of the extant literature examines the effects of multitasking on general performance; however, many of the findings from these studies may generalize to workplace settings. Several of the main findings from the literature investigating effects of multitasking were discussed in turn. Next, these findings were discussed in terms of implications for multitasking in the workplace.

A central finding of the multitasking literature is that multitasking generally impairs performance (Ackerman, 1987; Hasher & Zacks, 1977; König, Oberacher, & Kleinman, 2010; Pashler, 2000; Robinson & Smallman, 2006; Spink, et al., 2008). This finding typically generalizes to the workplace, as the relationship between multitasking and job performance is generally negative (Benner, 1982; Ericsson & Lehmann, 1996; Oswald, et al., 2007; Paridon & Kaufman, 2010; Sanbonmatsu, et al., 2013). However, the relationship may be positive when employees are expert task performers (Benner, 1982; Ericsson & Lehmann, 1996) or when the

set of job tasks is amenable to multitasking (Paridon & Kaufman, 2010). While multitasking ability may predict job performance to the extent that the job requires multitasking, organizations should consider other potential effects of workplace multitasking, such as job satisfaction. It is important to examine how workplace multitasking affects job satisfaction because employees with higher levels of job satisfaction are less likely to demonstrate voluntary turnover intentions (Allen, et al., 2010; Cotton & Tuttle, 1986; Locke, 1976; Mobley, 1977; Porter & Steers, 1973; Shore & Martin, 1989). Avoiding high levels of turnover is vital for organizations to avoid the high costs of recruiting and training replacement employees (Allen, Bryant, & Vardaman, 2010; Kristof-Brown, et al., 2005).

Prior research has demonstrated that multitasking sometimes enhances other work-related outcomes, including job satisfaction (e.g., Appelbaum, et al., 2008; Kapadia, 2016; Lindbeck & Snower, 2000; Whitfield, 2000). The relationship between workplace multitasking and job satisfaction is important because higher levels of job satisfaction are related to decreased turnover intentions (Allen, et al., 2010; Cotton & Tuttle, 1986; Locke, 1976; Mobley, 1977; Porter & Steers, 1973; Shore & Martin, 1989). Therefore, predicting how multitasking will affect job satisfaction is a promising strategy for selecting and retaining employees for jobs requiring multitasking (Schneider, 1987; Shore & Martin, 1989). However, the relationship between workplace multitasking and job satisfaction depends, in part, upon an employee's preference for multitasking (Agypt & Rubin, 2011; Colom, et al., 2010; Delbridge, 2000; Kantrowitz, Grelle, Beaty, & Wolf, 2012; Kirchberg & Roe, 2015; Mark, Gonzalez, & Harris, 2005; Paridon & Kaufmann, 2010; Wasson, 2004; Woods, 2014).

Specifically, some employees may express a greater need or desire to multitask in the workplace, while other employees may prefer to avoid workplace multitasking. A person's

preference for multitasking may or may not correspond to the demands or opportunities for multitasking in their jobs. For instance, the same multitasking situation may yield different reactions across employees - while some employees may enjoy multitasking and prefer to complete work tasks via multitasking, other employees may experience multitasking as overwhelming or stressful (Cable & DeRue, 2002; Edwards, 1991; Holland, 1985; Jurgensen, 1978; Kristof, 1996; Milkovich & Newman, 1999). As such, workplace multitasking can enhance job satisfaction for employees who enjoy multitasking, but can decrease job satisfaction for employees who do not enjoy multitasking (Agypt & Rubin, 2011; Kantrowitz, Grelle, Beaty, & Wolf, 2012; Kirchberg & Roe, 2015; Paridon & Kaufmann, 2010; Wasson, 2004; Woods, 2014). The concept of individuals' varying preferences to multitask is sometimes referred to as polychronicity.

### *Polychronicity*

Polychronicity has been defined as the extent to which individuals prefer to be engaged in two or more tasks or activities at the same time and believe that this preference is the best way to do things (Bluedorn, Kaufman, & Lane, 1992; Conte & Gintoft, 2005; Hall, 1959, 1983; Kantrowitz, et al., 2012; Kaufman, Lane, & Lindquist, 1991; Poposki & Oswald, 2010; Sanderson, Bruk-Lee, Viswesvaran, Gutierrez, & Kantrowitz, 2013; Schell & Conte, 2007; Zhang, Goonetilleke, Plocher, & Liang, 2005). Conversely, monochronicity is the preference for working on tasks one at a time, in a sequential manner (Hall, 1959; König & Waller, 2010; Lee, Tan, & Hameed, 2019; Zhang, et al., 2005). It is important to note that polychronicity and monochronicity are not dichotomous categories, but lie at opposing ends of a continuum (Lee, et al., 2019).

To align their work environments with their preferences, individuals higher in polychronicity may seek environments that require frequent multitasking (Schneider, 1987). This theory is supported by empirical evidence, as polychronicity predicts likelihood of engaging in multitasking behaviors, such that individuals who report higher levels of polychronicity tend to engage in multitasking behaviors more frequently than individuals who report lower levels of polychronicity (Kaufman, et al., 1991; Slocombe & Bluedorn, 1999; Zhang, et al., 2005). Though the relationship between polychronicity and frequency of engagement in multitasking behaviors is clear, research has yielded conflicting results regarding the relationship between polychronicity and multitasking performance. Some evidence demonstrates a positive relationship between polychronicity and multitasking performance, both self-reported and objectively assessed (Kantrowitz, et al., 2012; Kirchberg & Roe, 2015; Zhang, et al., 2005). Conversely, other results indicate a negative relationship between polychronicity and objective measures of multitasking performance (Conte & Jacobs, 2003). For instance, polychronicity shares a positive relationship with measures of absence and lateness, which, in turn, yields a negative impact on aspects of supervisor-rated job performance, such as dependability and attentiveness on the job (Conte & Jacobs, 2003).

A multitasking-specific framework of P-J fit considers employee's fit with demands and opportunities for workplace multitasking by utilizing multitasking fit in lieu of needs-supplies fit. This model was presented in Figure 2, which demonstrated the proposed relationships between multitasking fit, job satisfaction, and turnover intentions.

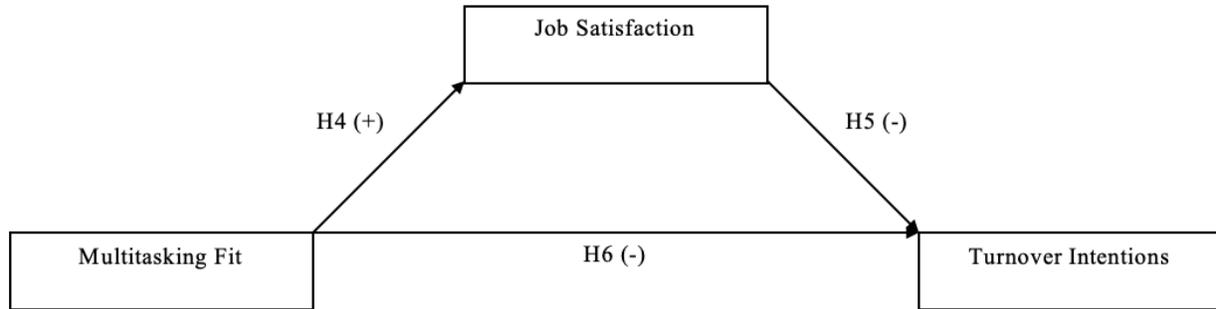


Figure 2. A mediation model of the proposed relationships between multitasking fit, job satisfaction, and turnover intentions.

It is possible that job type serves as a moderator of the relationship between polychronicity and job performance, such that the relationship may be positive for those jobs requiring multitasking, but may be negative for those jobs in which tasks are best completed in a linear fashion. Furthermore, jobs in which employees demonstrate elevated levels of multitasking ability may be characterized by sets of automatized tasks rather than sets of non-automatized tasks. This theory is supported by the finding that task automatization is a large determinant of whether multitasking is possible (Paridon & Kaufmann, 2010). Primary determinants of how quickly tasks become automatized are general mental ability (GMA) and working memory capacity (WMC; Colom, et al., 2010; Engle & Kane, 2004; König, et al., 2005; Logie, et al., 2010; Oswald, et al., 2007).

Good fit between the abilities of an employee and the demands of the job generally shares a positive relationship with job performance (Edwards, 1991). Polychronicity reflects a preference rather than an ability; therefore, there is little reason to expect that it directly relates to job performance. In support of this theory, most previous research investigating the relationship between polychronicity and multitasking performance yielded non-significant findings (Delbridge, 2000; Ishizaka, Marshall, & Conte, 2001; König, Bühner, & Mürling, 2005; König,

et al., 2010; Poposki, et al., 2009). One related exception is the finding that multitasking frequency relates negatively to actual multitasking ability, although this study did not examine polychronicity (Sanbonmatsu, et al., 2013).

Although polychronicity is unlikely to directly predict job performance, there is some support for the utility of polychronicity as a predictor of job satisfaction and turnover intentions (Delbridge, 2000; Ishizaka, Marshall, & Conte, 2001; König, Bühner, & Mürling, 2005; König, et al., 2010; Poposki, et al., 2009; Robinson & Smallman, 2006; Spink, et al., 2008). In accordance with the ASA model, to align their preferences with their work environments, employees with higher levels of polychronicity will be attracted to jobs that supply opportunities to engage in multitasking behaviors (Kaufman, et al., 1991; Schneider, 1987; Slocombe & Bluedorn, 1999; Zhang, et al., 2005). Through the lens of the needs-supplies conceptualization of P-J fit, individuals higher in polychronicity have a *need* to engage in multitasking that may or may not be *supplied* by their job. The needs-supplies conceptualization of P-J fit is predictive of job satisfaction and turnover intentions, such that individuals with higher levels of needs-supplies P-J fit typically exhibit higher levels of job satisfaction and lower levels of turnover intentions (Cable & DeRue, 2002; Edwards, 1991; Kristof, 1996).

There is some evidence that multitasking may be beneficial to employees with higher levels of polychronicity; however, the same level of multitasking may overwhelm and stress employees who have lower levels of polychronicity, underscoring the importance of the role of fit in determining the predictive validity of polychronicity for job satisfaction (König, et al., 2010; Oswald, et al., 2007; Robinson & Smallman, 2006; Spink, et al., 2008). Employees with higher levels of polychronicity may express a need to engage in multitasking, which may or may not be satisfied by characteristics of the job; however, employees lower in polychronicity may

express a need to complete tasks sequentially and a job characterized by frequent multitasking would be in conflict with their needs (Cable & DeRue, 2002; Edwards, 1991; Holland, 1985; Jurgensen, 1978; Kristof, 1996; Milkovich & Newman, 1999).

### **Multitasking fit**

P-J fit can be conceptualized specifically, in terms of workplace multitasking demands. This conceptualization of P-J fit considers the compatibility between an employee's need/desire to multitask (i.e., polychronicity) and the demands or opportunities to multitask provided by the job. This conceptualization of needs-supplies fit was referred to as *multitasking fit*. In other words, for an employee to have good multitasking fit, their level of polychronicity should correspond to the frequency of demands or opportunities to multitask in the workplace. For example, an employee with high levels of polychronicity would occupy a job that frequently demands multitasking or that provides ample opportunities to multitask at work. In contrast, an employee would have poor multitasking fit when there is a mismatch between their level of polychronicity and the frequency of job demands or opportunities for workplace multitasking. For instance, an employee with high levels of polychronicity might occupy a job that never demands multitasking or that infrequently provides opportunities to multitask at work. As workplace multitasking increases in prevalence, multitasking fit can provide additional predictive validity beyond general needs-supplies fit for employee outcomes such as job satisfaction and turnover intentions.

From a multitasking fit perspective, an employee would have good fit when their polychronicity is congruent with the level of demands or opportunities to multitask at work. In turn, good multitasking fit should relate positively to job satisfaction, such that higher levels of

multitasking fit correspond to higher levels of job satisfaction and vice versa. This relationship was expected because multitasking fit is a multitasking-specific conceptualization of P-J fit. There is a positive relationship between P-J fit and job satisfaction (Cable & DeRue, 2002; Cable & Judge, 1996; Dawis & Loftquist, 1984; Desmond & Weiss, 1973; Drexler & Lindell, 1981; Edwards, 1991; French, et al., 1982; Kristof-Brown, Zimmerman, & Johnson, 2005; Locke, 1976). Therefore, we expected for the positive relationship between P-J fit and job satisfaction to generalize to multitasking fit:

**Hypothesis 4:** There will be a positive relationship between multitasking fit and job satisfaction

Prior research has established that job satisfaction and turnover intentions share a negative relationship, such that employees who reported that they were more satisfied with their jobs reported that they were less likely to intend to leave their jobs (Allen, et al., 2010; Cotton & Tuttle, 1986; Mobley, 1977; Porter & Steers, 1973; Steel & Ovalle, 1984). We expected to replicate the negative relationship between job satisfaction and turnover intentions found in previous research.

**Hypothesis 5:** There will be a negative relationship between job satisfaction and turnover intentions

Generally, P-J fit has shared a negative relationship with turnover intentions, such that employees with good P-J fit are less likely to intend to leave their present job (Cable & DeRue, 2002; Edwards, 1991; Kristof, 1996; Kristof-Brown, 2005). As multitasking fit constitutes a multitasking-specific conceptualization of P-J fit, we expected for this result to generalize to the

relationship between multitasking fit and turnover intentions. Therefore, we expected that the match between an employee's level of polychronicity and the frequency of the opportunity or requirement to multitask at work would relate negatively to turnover intentions. That is, when an employee has good multitasking fit, they should demonstrate lower levels of turnover intentions, while poor multitasking fit would yield higher levels of turnover intentions.

**Hypothesis 6:** There will be a negative relationship between multitasking fit and turnover intentions

As workplace multitasking increases in prevalence, the relative importance of multitasking fit may likewise increase. Multitasking fit considers the compatibility between an employee's level of polychronicity and the demands or opportunities to multitask provided by their job, while needs-supplies fit considers how employees fit with their jobs in a more general sense. In accord with the proliferation of workplace multitasking, we expected multitasking fit to provide additional predictive validity beyond general needs-supplies fit for employee outcomes such as job satisfaction and turnover intentions.

**Hypothesis 7:** Multitasking fit will provide greater incremental validity for predicting job satisfaction and turnover intentions, in comparison to needs-supplies fit

Aside from needs-supplies fit and multitasking fit, it is important to investigate other individual-level factors that contribute to job satisfaction and turnover intentions in the context of workplace multitasking demands. Identifying additional individual-level characteristics predictive of job satisfaction and turnover intentions can help organizations when selecting new personnel to maximize employee retention, yielding a cost-savings (Allen, et al., 2010).

## **Personality**

Another individual-level predictor of job satisfaction and turnover intentions is an employee's set of personality characteristics (Ackerman, 1987; Ackerman, et al., 1995; Hunter, 1980; Schmidt & Hunter, 1987). Personality may be classified into five broad dimensions: openness, conscientiousness, extraversion, agreeableness, and neuroticism (e.g., Goldberg, 1990; John & Srivastava, 1999). Openness is generally characterized by labels including imaginativeness, intellectualism, and independent-mindedness. Conscientiousness can be described with terms such as responsibility, dependability, and orderliness. Extraversion is sometimes referred to as surgency and is designated by assertiveness, energy, and talkativeness. Agreeableness can be described with characteristics including cooperativeness, trustworthiness, and good-naturedness. Finally, neuroticism is frequently defined in terms of its antonym, emotional stability, with characteristics such as calmness, emotional regularity, and not easily upset.

Depending upon the type of job, specific facets of personality can provide varying levels of predictive validity for job satisfaction and, in turn, turnover intentions (Ackerman, et al., 1995). The extant literature provides ample theoretical and some empirical support for the personality traits of conscientiousness and neuroticism as predictors of preference for multitasking and outcomes tangential to workplace multitasking behaviors, such as job satisfaction and turnover intentions (Ackerman, et al., 1995; Hunter, 1980; Oswald, et al., 2007; Poposki, et al., 2009; Schmidt & Hunter, 1998). Personality traits of extraversion, agreeableness, and openness have not received similar support in relation to workplace multitasking; therefore, the focus of the present research was on investigating conscientiousness and neuroticism in relation to workplace multitasking.

*Conscientiousness.* The personality trait of conscientiousness has been described in terms of self-discipline, consistency, and foresight (Goldberg, 1990; John & Srivastava, 1999). Individuals low in conscientiousness may exhibit opposing characteristics such as negligence, inconsistency, or rebelliousness (Goldberg, 1990; John & Srivastava, 1999). In the workplace, conscientiousness has demonstrated positive relationships to job performance across a wide array of occupations and performance evaluation criteria (Ackerman, et al., 1995; Schmidt & Hunter, 1998). Furthermore, meta-analytic data has established that conscientiousness tests provide an 18% increase in predictive validity of overall job performance, beyond what is provided by tests of general mental ability (Hunter, 1980; Schmidt & Hunter, 1998).

As hypothesized in Figure 1, needs-supplies fit likely shares a positive relationship with job satisfaction (Cable & DeRue, 2002; Dawis & Lofquist, 1984; Edwards, 1991; Kristof, 1996; Locke, 1976). Furthermore, job satisfaction and turnover intentions generally share a negative relationship (Cotton & Tuttle, 1986; Lee & Mowday, 1987). Figure 2 also modeled a negative relationship between needs-supplies fit and turnover intentions (Cable & DeRue, 2002; Edwards, 1991; Kristof, 1996; Kristof-Brown, et al., 2005). To extend the model hypothesized in Figure 2, conscientiousness was expected to affect the relationship between needs-supplies fit and job satisfaction.

Meta-analytic results indicate a positive relationship between conscientiousness and job satisfaction (Judge, Heller, & Mount, 2002). This may be, in part, because more conscientious individuals are likely to achieve better performance outcomes at work, which may drive better job satisfaction via intrinsic and extrinsic rewards associated with good job performance (Ackerman, et al., 1995; Judge, et al., 2002; Schmidt & Hunter, 1998). Consistent with the hypothesized relationship, research has provided theoretical and empirical support for a positive

relationship between needs-supplies fit and job satisfaction (Cable & DeRue, 2002; Edwards, 1991; Kristof, 1996; Kristof-Brown, 2005). As conscientious employees tend to demonstrate better job performance than less conscientious employees, a psychological or social contract such as *quid pro quo* (i.e., this for that) may make needs-supplies fit especially important for job satisfaction among conscientious employees (Ackerman, et al., 1995; Judge, et al., 2002; Orvis, Dudley, & Cortina, 2008; Salgado, 2002; Schmidt & Hunter, 1998; Singh, Singh, & Singh, 2014). That is, if a conscientious employee takes care to exhibit characteristic behaviors such as orderliness and reliability in the workplace, that employee will likely expect their employer to reciprocate those benevolent behaviors by meeting their needs. Therefore, it was expected that as employee conscientiousness increased, the positive relationship between needs-supplies fit and job satisfaction would strengthen. In response to this set of findings, we hypothesized that:

**Hypothesis 8a:** Conscientiousness will moderate the relationship between needs-supplies fit and job satisfaction, such that the relationship will be more positive for employees higher in conscientiousness

Considering the ASA cycle, individuals who are attracted to multitasking (i.e., are high in polychronicity) would tend to seek out jobs where multitasking is required and stay in these positions, as individuals often seek out and structure their environments in keeping with their personal preferences (Poposki & Oswald, 2010; Oswald, et al., 2007; Schneider, 1987). The task demands of multitasking are characterized by rapid and reflexive responding, so individuals with higher levels of conscientiousness may perceive multitasking demands as stressful and overwhelming (Oswald, et al., 2007). Therefore, conscientious individuals may prefer to structure their work environments such that work tasks can be completed in a sequential manner,

rather than via multitasking. This theory is bolstered by empirical evidence of a negative relationship between conscientiousness and multitasking performance (Hunter, 1980; Oswald, et al., 2007; Schmidt & Hunter, 1998). This negative relationship may occur because more conscientious people tend to exercise greater care and deliberation in task performance; however, this tendency is in conflict with the quick, automatic responding frequently required to effectively multitask (Goldberg, 1990; John & Srivastava, 1999; Oswald, et al., 2007). As such, the relationship between multitasking fit and job satisfaction may be moderated by an employee's level of conscientiousness.

In accord with this finding, there may be a mismatch between the needs of conscientious employees (e.g., an appropriate level of challenge) and the characteristics of their jobs, depending on how frequently their job requires multitasking. Given the deliberative tendencies of conscientious individuals, the task demands of multitasking (e.g., rapid, reflexive responding) may be undesirable; therefore, multitasking fit may be poor for conscientious individuals occupying jobs characterized by frequent multitasking demands (Cable & DeRue, 2002; Edwards, 1991; Oswald, et al., 2007). As such, good multitasking fit may be especially important for conscientious employees to experience job satisfaction. By the same token, when multitasking fit is good, conscientious employees would likely exhibit good job performance that drives increased job satisfaction (Ackerman, et al., 1995; Judge, et al., 2002; Schmidt & Hunter, 1998).

**Hypothesis 8b:** Conscientiousness will moderate the relationship between multitasking fit and job satisfaction, such that the relationship will be more positive for employees higher in conscientiousness

Empirical evidence has established a negative relationship between conscientiousness and turnover intentions; however, this relationship is generally contingent upon interpersonal issues or a breach of psychological contract (Orvis, Dudley, & Cortina, 2008; Salgado, 2002; Singh, Singh, & Singh, 2014). The interpersonal dimension that underpins the relationship between conscientiousness and turnover intentions is incompatible with characteristics of the job that distinguish the needs-supplies conceptualization of P-J fit. As such, it is unlikely that conscientiousness and turnover intentions would share a direct relationship within the framework of need-supplies fit. However, conscientiousness may affect turnover intentions indirectly via a relationship to job satisfaction, as indicated by the hypotheses.

*Neuroticism.* Neuroticism is a broad personality dimension that refers to an individual's level of emotional stability, such that individuals higher in neuroticism display lower levels of emotional stability, while individuals lower in neuroticism tend to exhibit higher levels of emotional stability (Goldstein, 1990; John & Srivastava, 1999). In the workplace, neuroticism has demonstrated a negative relationship to job performance across a spectrum of jobs and performance evaluation criteria (Ackerman, et al., 1995; Schmidt & Hunter, 1998). To extend the basic needs-supplies fit mediation model presented in Figure 1, neuroticism was expected to moderate the relationship between needs-supplies fit and job satisfaction.

Meta-analytic results have established a negative relationship between neuroticism and job satisfaction (Judge, et al., 2002). Neuroticism negatively relates to job satisfaction in two main ways: it may be driven by job performance or interpersonal factors (Ackerman, et al., 1995; Judge, et al., 2002; König, et al., 2005; Oswald, et al., 2007; Poposki, et al., 2009; Schmidt & Hunter, 1998). First, an employee's level of neuroticism influences how well they are able to

regulate their anxiety under typical workplace constraints, such as time pressure (Oswald, et al., 2007; Poposki, et al., 2009). For instance, research has demonstrated that individuals high in neuroticism tend to perform relatively poorly in highly stimulating situations, in contrast to the better performance demonstrated by individuals low in neuroticism in the same highly stimulating situations (König, et al., 2005). Poorer job performance is generally linked to lower levels of job satisfaction, as the intrinsic and extrinsic rewards concomitant with good job performance will not be awarded to poor performers (Ackerman, et al., 1995; Judge, et al., 2002; Schmidt & Hunter, 1998). Aside from performance-based drivers of lower job satisfaction among employees higher in neuroticism, elevated levels of neuroticism may affect job performance via interpersonal conflict. Individuals higher in neuroticism tend to have more negative affect, which may yield interpersonal conflict if workplace colleagues perceive this negative affect as abrasiveness or coarseness (Goldberg, 1990).

Although the relationship between needs-supplies fit and job satisfaction is generally positive, neuroticism was expected to attenuate this relationship because of its negative relationship to job satisfaction via lower job performance and interpersonal factors (Ackerman, et al., 1995; Judge, et al., 2002; König, et al., 2005; Locke, 1976; Oswald, et al., 2007; Poposki, et al., 2009; Schmidt & Hunter, 1998).

**Hypothesis 9a:** Neuroticism will moderate the relationship between needs-supplies fit and job satisfaction, such that the relationship will be less positive for employees higher in neuroticism

Given the low levels of anxiety regulation capability and emotional stability characteristic of individuals high in neuroticism, the task demands of multitasking (e.g., rapid,

reflexive responding) may be undesirable (Goldstein, 1990; John & Srivastava, 1999; Oswald, et al., 2007). Therefore, multitasking fit may be poor for employees high in neuroticism who work in jobs that impose frequent multitasking demands (Cable & DeRue, 2002; Edwards, 1991; Oswald, et al., 2007). In jobs characterized by tight deadlines or other conditions that necessitate multitasking, anxiety regulation is an important ability for employees to have for good job performance, which in turn may affect job satisfaction (Judge, et al., 2002). To extend the multitasking fit mediation model presented in Figure 2, neuroticism was expected to affect the relationship between multitasking fit and job satisfaction.

Job performance may suffer for employees who are unable to effectively regulate their anxiety (i.e., employees high in neuroticism). As a person's level of neuroticism refers to their ability regulate anxiety, the task demands of multitasking may be overstimulating and, thus, undesirable by employees who are high in neuroticism (Poposki, et al., 2009). This theory has garnered some support, with empirical data that demonstrated a negative relationship between neuroticism and multitasking performance (Oswald, et al., 2007; Poposki, et al., 2009). Consistent with the performance-satisfaction relationship, when job performance suffers, the intrinsic and extrinsic rewards associated with good job performance are not present, which may negatively impact job satisfaction (Judge, et al., 2002). Given these findings, multitasking fit was expected to be especially important for employees high in neuroticism.

When examining the utility of multitasking as a viable method for completing workplace tasks, it is important to remember that multitasking may be perceived as exciting and engaging for some people, but as overwhelming and stressful for others (Oswald, et al., 2007). For employees who are low in neuroticism, a job that supplies ample opportunities for multitasking may fulfill their need for stimulating work (Cable & DeRue, 2002; Dawis & Loftquist, 1984;

Edwards, 1991; Kristoff, 1996; Poposki, et al., 2009; Oswald, et al., 2007). On the other hand, for employees high in neuroticism, a job that requires frequent multitasking may conflict with their needs (Cable & DeRue, 2002; Dawis & Loftquist, 1984; Edwards, 1991; Kristoff, 1996; Poposki, et al., 2009; Oswald, et al., 2007). Therefore, multitasking fit was expected to be poor for employees high in neuroticism working in jobs characterized by frequent multitasking demands (Cable & DeRue, 2002; Edwards, 1991; Goldstein, 1980; John & Srivastava, 1999; Oswald, et al., 2007; Poposki, et al., 2009). As people generally seek and structure their environments to match their personal preferences, individuals high in neuroticism may attempt to avoid multitasking (Oswald, et al., 2007; Schneider, 1987). When avoidance of workplace multitasking is not possible, job satisfaction may suffer.

**Hypothesis 9b:** Neuroticism will moderate the relationship between multitasking fit and job satisfaction, such that the relationship will be less positive for employees higher in neuroticism

## Method

### *Participants*

To test the hypotheses, employees from real-world organizations were surveyed about their fit and satisfaction with their job, turnover intentions, multitasking preference and behaviors, and personality characteristics. Participants were recruited and selected through Amazon's Mechanical Turk (MTurk; [www.mturk.com](http://www.mturk.com)). Participants were directed from MTurk to a survey hosted by Qualtrics. To meet study requirements, participants must have been 19 years of age or older at the time of the study, living in the United States, and worked at least 30 hours per week.

Initially, 260 participants completed the study. Thirty-seven participants were excluded from the study: 27 participants were excluded for response times shorter than three minutes, 8 were excluded due to careless responding, and 2 were excluded for both reasons. The remaining 223 research participants were contacted to participate in next part of the study, and 196 responded, for a response rate of 87.89%. Of these participants, 9 were excluded from the study: 8 were excluded for response times shorter than two minutes and 1 was excluded due to careless responding. Our final sample consisted of 187 participants. Seventy-eight percent of research participants were female, and research participants ranged in age from 19-78 years old ( $M = 39.16$ ,  $SD = 11.53$ ). In 2018, the median age of employees in the United States labor force was 41.9 years (U.S. Department of Labor, Bureau of Labor Statistics, 2018). Women comprise 47% of the United States labor force (U.S. Department of Labor, Bureau of Labor Statistics, 2019). As such, the present sample closely resembles the age of the U.S. labor force, but contains a larger proportion of females. The racial composition of study participants is presented in Table 2.

Participants provided informed consent after reading an information sheet and selecting that they agree to participate in the study. Study participants earned \$3 for participation in both the first and second sessions. For the first session, participants were compensated \$1.00 for their time (approximately 20 minutes). For the second session, participants were compensated \$2.00 for their time (approximately 20 minutes). At the end of each session, participants were given a unique code to enter on the MTurk website to receive payment for participation.

### *Design*

The study was administered in two sessions, one week apart. Time 1 included measures of multitasking preference, a Big Five personality inventory, and demographic questions. Time 2

included measure of multitasking behaviors at work, person-job fit, a job satisfaction, and turnover intentions.

### *Materials*

*Person-job fit.* P-J fit was assessed using Cable & DeRue's (2002) person-job fit index that specifically pertained to needs-supplies fit (Kristof, 1996; Edwards, 1991). Needs-supplies items included statements such as "there is a good fit between what my job offers and what I am looking for in a job". Items used to assess P-J fit were rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with higher scores indicating better P-J fit ( $\alpha = .938$ ).

*Job satisfaction.* Weiss' (1967) Minnesota Satisfaction Questionnaire – short form (MSQ-S) was used to job satisfaction. The MSQ-S is a 20-item measure that assesses the level of satisfaction with the individual's current position and included statements such as "on my present job, this is how I feel about being able to keep busy all the time". Items were rated on a 5-point Likert scale (1 = very dissatisfied to 5 = very satisfied), with higher scores indicating greater job satisfaction ( $\alpha = .935$ ).

*Turnover intentions.* Yücel's (2012) Turnover Intention Questionnaire (TIQ) was used to assess individual's intentions to leave their current job (i.e., an employee's turnover intentions). The TIQ used 3-items such as "I intend to leave my organization". Items in the TIQ were rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with higher scores indicating a greater intention to turnover ( $\alpha = .869$ ).

*Polychronicity.* Poposki and Oswald's (2010) Multitasking Preference Inventory (MPI) was used to assess participants' polychronicity. The MPI is a 14-item measure attitudes toward multitasking such as "I would rather switch back and forth between several projects than

concentrate my efforts on just one” and reverse-scored items, such as “I do not like having to shift my attention between multiple tasks.”. The MPI was rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with higher scores indicating a stronger preference for multitasking ( $\alpha = .941$ ).

*Workplace multitasking.* We adapted Poposki and Oswald’s (2010) Multitasking Preference Inventory (MPI) to examine the extent to which individuals engage in multitasking on a daily basis in their current jobs. We called this adaption the Multitasking Behavior Inventory (MBI). The MBI was a 14-item measure and included a collection of statements regarding attitudes toward multitasking such as “I switch back and forth between several projects rather than concentrate my efforts on just one” and reverse-scored items, such as “I finish one task completely before focusing on anything else.” MBI items were rated on a 5-point Likert scale (1 = never to 5 = always), with higher scores indicating more multitasking behaviors at work ( $\alpha = .895$ ).

*Multitasking fit.* To determine an individual’s level of multitasking fit, their score on the MPI (Poposki & Oswald, 2010) was compared to their score on the MBI. First, a total score was calculated for the MPI and for the MBI. Then, each participant’s MBI score was subtracted from their MPI score (MPI-MBI). The smaller the difference in scores between the two inventories, the greater the multitasking fit. For instance, if an individual scored the same on the MPI as the MBI, the difference between MPI and MBI scores was zero ( $\alpha = .73$ ).

*Personality.* John and Srivastava’s (1999) Big Five Inventory (BFI) was used to assess participant personality. The BFI is a 44-item measure that measures personality traits of openness (10 items,  $\alpha = .842$ ), conscientiousness (9 items,  $\alpha = .851$ ), extraversion (8 items,  $\alpha = .898$ ), agreeableness (9 items,  $\alpha = .832$ ), and neuroticism (8 items,  $\alpha = .902$ ). Items included a

collection of statements such as “I see myself as someone who is talkative” and reverse-scored items, such as “I see myself as someone who tends to be quiet”.

*Demographics.* Participants were asked to report their gender, age, race, ethnicity, number of hours worked per week, and whether they worked in an office or remotely at the time of the study. Due to the COVID-19 pandemic, research participants were also asked to indicate whether they normally work remotely or if their remote work was due to the pandemic. This data was collected from April 27, 2020 until May 12, 2020. During this time period, massive layoffs took place, stay-at-home orders were issued, and many employees were instructed to work from their homes to slow the spread of the virus (U.S. Department of Labor, Bureau of Labor Statistics, 2020).

*Instructed response items.* It is important to ensure that data is not subject to careless responding (Meade & Craig, 2012). One way to identify careless responding behavior is through the use of instructed response items which consist of a directive to select a certain response option (e.g., “select option A for this item;” Meade & Craig, 2012). Instructed response items that are answered incorrectly may indicate the survey respondent did not read or attend to the statement and provided a justification for omitting their responses from analysis to avoid distortion of the data due to careless responding. In accordance with the recommendations of Meade & Craig (2012), the present research utilized one instructed response item per 50 survey items, for a total of two instructed response items.

## **Results**

Demographic information, descriptive statistics, reliabilities, and correlations among study measures are provided in Table 3. Mediation models with labeled path coefficients for the

needs-supplies fit mediation model and the multitasking fit mediation model are provided in Figure 3 and Figure 4, respectively.

### **Needs-supplies fit**

**Job satisfaction.** Hypothesis 1 predicted that needs-supplies fit would have a positive relationship with reported job satisfaction. To test Hypothesis 1, we regressed reported job satisfaction onto needs-supplies fit. The results indicated that needs-supplies fit positively predicted job satisfaction ( $B = .53$ ,  $t(185) = 19.29$ ,  $p < .001$ ). Furthermore, needs-supplies fit explained a significant proportion of the variance in reported job satisfaction,  $R^2 = .67$ ,  $F(1, 185) = 372.09$ ,  $p < .001$ . Therefore, Hypothesis 1 was supported: needs-supplies fit was positively related to job satisfaction.

**Turnover intentions.** We regressed employee turnover intentions onto job satisfaction to test Hypothesis 2, that job satisfaction would relate negatively to turnover intentions. Job satisfaction negatively predicted turnover intentions ( $B = -.98$ ,  $t(185) = -9.51$ ,  $p < .001$ ). Job satisfaction explained a significant proportion of the variance in turnover intentions,  $R^2 = .33$ ,  $F(1, 185) = 90.42$ ,  $p < .001$ . Thus, Hypothesis 2 was supported; reported job satisfaction related negatively to turnover intentions.

**Mediation analysis.** Hypothesis 3 proposed that needs-supplies fit would have an indirect effect on employee turnover intentions, via job satisfaction (Figure 1). To test the mediation model, the PROCESS macro for SPSS was used (Hayes, 2017) with Preacher and Hayes' (2004) bootstrapping method. This non-parametric test was used because it does not require the assumption that the sample is normally distributed (Preacher & Hayes, 2004). 5,000 bootstrap samples were used to construct 95% confidence intervals for the indirect effect. The

predictor in this model was needs-supplies fit, the mediator was job satisfaction, and the dependent variable was turnover intentions. The results of the mediation analysis are shown in Table 4. The mediation analysis demonstrated that needs-supplies fit indirectly affected turnover intentions through its effect on job satisfaction ( $ab = -.38$ ). Needs-supplies fit was positively related to job satisfaction ( $a = .53$ ), while job satisfaction was negatively related to turnover intentions ( $b = -.79$ ). The 95% bootstrap confidence interval for the indirect effect based on 5,000 bootstrap samples was below zero  $[-.55, -.20]$ , supporting the indirect effect of needs-supplies fit on turnover intentions through job satisfaction. The direct effect of needs-supplies fit on turnover intentions was eliminated when controlling for the level of job satisfaction ( $c' = -.15$ ,  $p = .20$ ). Therefore, Hypothesis 3 was supported; needs-supplies fit indirectly predicted turnover intentions through its effect on job satisfaction.

### **Multitasking fit**

**Job satisfaction.** We regressed multitasking fit onto job satisfaction to test Hypothesis 4, that multitasking fit would have a positive relationship with job satisfaction. The results indicated that multitasking fit did not predict reported job satisfaction ( $B = .00$ ,  $t(185) = .17$ ,  $p = .86$ ). Furthermore, multitasking fit did not explain a significant proportion of the variance in reported job satisfaction,  $R^2 = .00$ ,  $F(1, 185) = .03$ ,  $p = .86$ . Thus, Hypothesis 4 was not supported; multitasking fit did not relate to reported job satisfaction.

**Turnover intentions.** Hypothesis 5 proposed that reported job satisfaction would relate negatively to turnover intentions. To test Hypothesis 5, we regressed employee turnover intentions onto job satisfaction. Job satisfaction negatively predicted turnover intentions ( $B = -.98$ ,  $t(185) = -9.51$ ,  $p < .001$ ). Moreover, job satisfaction explained a significant proportion of the

variance in turnover intentions,  $R^2 = .33$ ,  $F(1, 185) = 90.42$ ,  $p < .001$ . Therefore, Hypothesis 5 was supported; reported job satisfaction related negatively to turnover intentions.

**Mediation analysis.** Hypothesis 6 predicted that multitasking fit would have an indirect effect on employee turnover intentions, via job satisfaction (Figure 2). The PROCESS macro for SPSS (Hayes, 2017) with Preacher and Hayes' (2004) bootstrapping method was used to test Hypothesis 6. 5,000 bootstrap samples were used to construct 95% confidence intervals for the indirect effect. The predictor in this model was multitasking fit, the mediator was job satisfaction, and the dependent variable was turnover intentions. The results of the mediation analysis are shown in Table 5. The mediation analysis demonstrated that multitasking fit did not indirectly affect turnover intentions through its effect on job satisfaction ( $ab = -.01$ ).

Multitasking fit was not related to job satisfaction ( $a = .00$ ), while job satisfaction was negatively related to turnover intentions ( $b = -.98$ ). The 95% bootstrap confidence interval for the indirect effect based on 5,000 bootstrap samples contained zero  $[-.10, .08]$ , failing to provide support for the indirect effect of multitasking fit on turnover intentions through job satisfaction. The direct effect of multitasking fit on turnover intentions was not reduced when controlling for the level of job satisfaction ( $c' = -.01$ ,  $p = .54$ ). Therefore, Hypothesis 6 was not supported; multitasking fit did not indirectly predict turnover intentions through its effect on job satisfaction.

### **Incremental validity of multitasking fit**

Hypothesis 7 predicted that multitasking fit would provide greater incremental validity for predicting job satisfaction and turnover intentions, in comparison to needs-supplies fit. To test this claim, the PROCESS macro for SPSS was used (Hayes, 2017). PROCESS was utilized to generate bootstrapped estimates of the strength of the paths in both the needs-supplies fit

mediation model and the multitasking fit mediation model. 5,000 bootstrap samples were used to construct 95% confidence intervals for estimates of the indirect effects. Next, the path estimates in each model were examined for significance.

In the needs-supplies fit mediation model (Figure 1), needs-supplies fit was the independent variable, job satisfaction was the mediating variable, and turnover intentions was the dependent variable. Results of the mediation analysis are presented in Table 4. The mediation analysis demonstrated that needs-supplies fit indirectly predicted employee turnover intentions via job satisfaction ( $ab = -.38$ ). Better needs-supplies fit was associated with higher reported levels of job satisfaction ( $a = .53$ ), while higher levels of job satisfaction were associated with lower levels of reported employee turnover intentions ( $b = -.79$ ). The 95% confidence interval for the indirect effect based on 5,000 bootstrap samples was below zero  $[-.55, -.20]$ . The direct effect of needs-supplies fit on employee turnover intentions was reduced when controlling for the level of reported job satisfaction ( $c' = -.15, p = .20$ ). These results provide support for the indirect effect of needs-supplies fit on employee turnover intentions, through its effect on reported job satisfaction.

In the multitasking fit mediation model (Figure 2), multitasking fit was the independent variable, job satisfaction was the mediating variable, and turnover intentions was the dependent variable. Results of the mediation analysis are presented in Table 5. The mediation analysis indicated that multitasking fit did not indirectly predict employee turnover intentions through job satisfaction ( $ab = -.01$ ). Better multitasking fit was not associated with higher levels of reported job satisfaction ( $a = .00$ ), although higher levels of job satisfaction were related to lower levels of employee turnover intentions ( $b = -.98$ ). The 95% confidence interval for the indirect effect, based on 5,000 bootstrap samples included zero  $[-.10, .08]$ . The direct effect of multitasking fit

on employee turnover intentions was not reduced when controlling for the level of job satisfaction ( $c' = -.01, p = .54$ ). The results of the mediation analysis do not provide evidence for the indirect effect of multitasking fit on employee turnover intentions through reported job satisfaction.

The results of the mediation analysis on the needs-supplies fit model (Figure 1) indicated that needs-supplies fit predicted job satisfaction and indirectly predicted employee turnover intentions via job satisfaction, supporting the claim of mediation. Conversely, the results of the mediation analysis on the multitasking fit model (Figure 2) demonstrated that multitasking fit predicted neither job satisfaction, nor employee turnover intentions, either directly or indirectly. Therefore, Hypothesis 7 was not supported; multitasking fit did not constitute a better predictor of job satisfaction or employee turnover intentions, compared to needs-supplies fit.

### **Moderated Mediation**

**Conscientiousness.** Based on the tendency of more conscientious employees to report higher levels of job satisfaction, the indirect effect of needs-supplies fit on turnover intentions via job satisfaction was expected to be stronger among more conscientious employees (i.e., moderated mediation, Hypothesis 8a). Moderated mediation, also called conditional indirect effects, occurs when the product of two paths depends upon the value of one or more moderators (Preacher, et al., 2009). To test Hypothesis 8a, a moderated mediation analysis with 5,000 bootstrapped samples was conducted using the PROCESS macro for SPSS (Hayes, 2017). Based on the results of the moderated mediation analysis, there was a significant interaction between needs-supplies fit and employee conscientiousness ( $xw = -.08$ ). The 95% bootstrapped confidence interval associated with the interaction was below zero  $[-.16, -.01]$ . Furthermore, the

moderated mediation index indicated that the indirect effect of needs-supplies fit on turnover intentions via job satisfaction was moderated by employee conscientiousness ( $index = .07$ ,  $bootSE = .03$ ). The 95% bootstrapped confidence interval associated with the interaction was above zero [.01, .14], which provided support for Hypothesis 8a.

In accordance with the trend of a positive relationship between employee conscientiousness and reported job satisfaction, the indirect effect of multitasking fit on turnover intentions via job satisfaction should be stronger among more conscientious employees (i.e., moderated mediation). Although the initial mediation analysis indicated that multitasking fit neither directly nor indirectly predicted turnover intentions, we proceeded with the moderated mediation analysis to determine whether employee conscientiousness affected this result. To test this hypothesis, we conducted a moderated mediation analysis with 5,000 bootstrapped samples using the PROCESS macro for SPSS (Hayes, 2017). The results of the moderated mediation analysis indicated that the indirect effect of multitasking fit on turnover intentions via job satisfaction was not contingent upon employee conscientiousness. The results failed to provide support for Hypothesis 8b.

**Neuroticism.** Based on the tendency of employees higher in neuroticism to report lower levels of job satisfaction, the indirect effect of needs-supplies fit on employee turnover intentions via reported job satisfaction was hypothesized to be weaker among employees higher in neuroticism (i.e., moderated mediation, Hypothesis 9a). To test this hypothesis, a moderated mediation analysis with 5,000 bootstrapped samples was conducted using the PROCESS macro for SPSS (Hayes, 2017). The results of the moderated mediation analysis indicated that the indirect effect of needs-supplies fit on turnover intentions via job satisfaction was not contingent

upon employee neuroticism. The results of this moderated mediation analysis fail to provide support for Hypothesis 9a.

In accordance with the trend of a negative relationship between employee neuroticism and reported level of job satisfaction, the indirect effect of multitasking fit on turnover intentions via job satisfaction was expected to be weaker among employees higher in neuroticism (i.e., moderated mediation). Although the initial mediation analysis indicated that multitasking fit neither directly nor indirectly predicted turnover intentions, we proceeded with the moderated mediation analysis to determine whether employee neuroticism affected this finding. To test this hypothesis, we conducted a moderated mediation analysis with 5,000 bootstrapped samples using the PROCESS macro for SPSS (Hayes, 2017). The results of the moderated mediation analysis indicated that the indirect effect of multitasking fit on turnover intentions via job satisfaction was not contingent upon employee neuroticism. As such, Hypothesis 9b was not supported.

## **Discussion**

Contemporary workplaces include pervasive technology (Appelbaum, et al., 2008; Spink, et al., 2008), complex task environments (Hunt, 1995; Lindbeck & Snower, 2000), and expansive job roles (Ilgen & Pulakos, 1999). The implication of these workplace characteristics is that multitasking has become a norm of job performance and is sometimes a formal job requirement (Appelbaum, et al., 2008; Colom, et al., 2010; Hunt, 1995; Ilgen & Pulakos, 1999; Lindbeck & Snower, 2000; Monsell, 2003; Rubenstein, et al., 2001; Spink, et al., 2008). This study examined some of the effects of workplace multitasking, including how employee

preferences fit with multitasking demands and how workplace multitasking affects job satisfaction and turnover intentions.

Based on the ASA cycle, individuals tend to seek and structure work environments according to their preferences (Schneider, 1987). The congruence between employee preferences and job characteristics is called person-job fit (Edwards, 1991; Kristof, 1996; Lauver & Kristof-Brown, 2001). When person-job fit is low, several undesirable outcomes may occur, such as lower levels of job satisfaction or increased turnover intentions (Allen, et al., 2010; Cotton & Tuttle, 1986; Mobley, 1977; Porter & Steers, 1973; Steel & Ovalle, 1984). To study the effects of workplace multitasking demands, multitasking fit was compared to needs-supplies fit, a more traditional measure of person-job fit. Both needs-supplies fit and multitasking fit were examined as predictors of job satisfaction and turnover intentions.

This study focused on job satisfaction and turnover intentions as outcomes of person-job fit. Job satisfaction was selected as a focal outcome because increased job satisfaction has demonstrated a positive relationship with frequency of OCBs and a negative relationship with frequency of CWBs (Dalal, 2005); moreover, prior research has identified a negative relationship between job satisfaction and turnover intentions (Allen, et al., 2010; Cotton & Tuttle, 1986; Mobley, 1977; Porter & Steers, 1973; Steel & Ovalle, 1984). Turnover intentions were selected as the other focal outcome for this study because lowering employee turnover can save organizations the cost of recruiting, selecting, and training new employees to replace those who turnover (Allen, et al., 2010).

**Needs-supplies fit.** According to the ASA cycle, individuals are more attracted to, more likely to be selected for, and more likely to remain in jobs that match their preferences (i.e., P-J fit; Edwards, 1991; Kristof, 1996; Schneider, 1987). P-J fit is conceptualized in terms of the

degree of match between the *demands* of the job and an employee's *abilities* (i.e., *demands-abilities fit*) or is conceptualized as the degree of congruence between what an employee *needs*, and what their current job *supplies* (i.e., *needs-supplies fit*; Cable & DeRue, 2002; Edwards, 1991; Kristof, 1996). Demands-abilities fit predicts outcomes such as job performance, while needs-supplies fit predicts outcomes such as job satisfaction and turnover intentions (Edwards, 1991). As this study focused on job satisfaction and turnover intentions as outcomes, needs-supplies fit was used as a predictor.

Job satisfaction was operationally defined as an employee's perception of how well their needs are met by their job (Dawis & Loftquist, 1984). Prior research indicated a positive relationship between needs-supplies fit and job satisfaction; therefore, needs-supplies fit was hypothesized to share a positive relationship to job satisfaction in the context of this study (Cable & DeRue, 2002; Edwards, 1991; Locke, 1976). As expected, the findings of the present study bolstered the claims of previous research, by demonstrating that needs-supplies fit shared a positive relationship with job satisfaction. Previous research indicated a negative relationship between needs-supplies fit and turnover intentions; thus, needs-supplies fit was expected to share a negative relationship to turnover intentions in the present study (Cotton & Tuttle, 1986; Kristof-Brown, et al., 2005; Lee & Mowday, 1987). The results of this study demonstrated that needs-supplies fit was negatively associated with turnover intentions, further supporting the results of prior studies (Locke, 1976; Mobley, 1977; Porter & Steers, 1973; Steel & Ovalle, 1984). As an extension of previous work, the outcome of this study provided support for job satisfaction as a mediator of the relationship between needs-supplies fit and turnover intentions. This finding means that employees who reported higher levels of needs-supplies fit, tended to report higher levels of job satisfaction, and lower levels of turnover intentions.

**Multitasking fit.** To create a multitasking-specific conceptualization of needs-supplies fit, workplace multitasking was characterized as a job supply, while employee preference for multitasking (i.e., polychronicity) was classified as an employee need. As such, the concept of multitasking fit was operationally defined as the degree of congruence between an employee's level of polychronicity and the demand or opportunities to multitask within their job. Preference for multitasking in context of the ASA cycle would mean that an employee high in polychronicity would be attracted to, more likely to be selected for, and more likely to remain in a job that allowed for or required frequent multitasking (Schneider, 1987). On the other hand, an employee low in polychronicity would be less attracted to, less likely to be selected for, and less likely to remain in a job that required frequent multitasking (Schneider, 1987).

As multitasking fit was conceived as a multitasking-specific conceptualization of needs-supplies fit, we hypothesized that the positive relationship between needs-supplies fit and job satisfaction would generalize to the relationship between multitasking fit and job satisfaction (Cable & DeRue, 2002; Cable & Judge, 1996; Dawis & Loftquist, 1984; Desmond & Weiss, 1973; Drexler & Lindell, 1981; Edwards, 1991; French, et al., 1982; Kristof-Brown, Zimmerman, & Johnson, 2005; Locke, 1976). The results demonstrated that the positive relationship between needs-supplies fit and job satisfaction did not generalize to the relationship between multitasking fit and job satisfaction, as multitasking fit was unrelated to job satisfaction.

One potential explanation for this finding is that polychronicity may have been misclassified as an employee need. In a needs-supplies fit framework, employee needs include goals, values, interests, and preferences (Cable & DeRue, 2002; Campbell & Hansen, 1981; Chatman, 1989; Edwards, 1991; Lee, Locke, & Latham, 1989; Locke, 1976; Pryor, 1987). Examples provided in the literature of employee needs include childcare, above-market pay

levels, promotion opportunities, recognition, positive work environments, and challenging or interesting work (Cable & DeRue, 2002; Jurgensen, 1978; Milkovich & Newman, 1999; Powell, 1984). It is possible that polychronicity is an inclination that some employees may have, but not an employee need.

Likewise, the opportunity or requirement for multitasking at work may be misclassified as a job supply. In the literature, job supplies have been described as occupational characteristics, organizational attributes, and job attributes (Cable & DeRue, 2002; Holland, 1985; Jurgensen, 1978; Milkovich & Newman, 1999; Powell, 1984). Examples of job supplies in previous research have included pay, role clarity, interesting and challenging work, and autonomy (Alutto & Belasco, 1972; Cable & DeRue, 2002; Edwards, 1991; Jurgensen, 1978; Lyons, 1971; Powell, 1984). It is possible that the opportunity or requirement to multitask constitutes a job demand, rather than a job supply. Therefore, frequent workplace multitasking would not correspond to employee polychronicity (i.e., needs-supplies fit), but may instead correspond to employee multitasking ability (i.e., demands-abilities fit). Moreover, if polychronicity or the opportunities and requirements for workplace multitasking were misclassified as needs or supplies, respectively, then the relationship between needs-supplies fit and other constructs should not generalize to the relationship between multitasking fit and other constructs. This theory is supported by another finding from this study, which indicated that multitasking fit did not predict employee turnover intentions. The lack of a relationship between multitasking fit and turnover intentions provided additional evidence that multitasking fit did not relate to turnover intentions in the way that needs-supplies fit does.

Another potential explanation for this finding is that employees did not multitask enough at work to make a difference in job satisfaction or turnover intentions. Previous research

investigating the effects of workplace multitasking on employee outcomes such as job performance involved jobs that required frequent multitasking (e.g., Delbridge, 2000; Ishizaka, Marshall, & Conte, 2001; König, et al., 2005; König, et al., 2010). In the present study, the average rating for items on the multitasking behavior inventory (MBI) was 2.85, meaning that employees only multitasked at work about half of the time. As such, the participants in the present study occupied jobs that did not require a high base rate of multitasking behavior. In occupations that require frequent multitasking, multitasking fit might be a more relevant predictor of employee outcomes than in occupations that do not require frequent multitasking. That is, as workplace multitasking increases in prevalence, the relative importance of multitasking fit may likewise increase.

**Conscientiousness.** Another contribution of this study was the investigation of how employee personality characteristics of conscientiousness and neuroticism influenced the relationship between person-job fit, job satisfaction, and turnover intentions. Previous meta-analytic findings indicated a positive relationship between conscientiousness and job satisfaction (Judge, et al., 2002). Prior research also found that conscientious employees also tend to exhibit better job performance than less conscientious employees (Ackerman, et al., 1995; Judge, et al., 2002; Orvis, et al., 2008; Salgado, 2002; Schmidt & Hunter, 1998; Singh, et al., 2014). Taken together, these findings suggest that if a conscientious employee takes care to exhibit characteristic behaviors such as orderliness and reliability in the workplace, it is reasonable to assume that the employee would expect their employer to reciprocate those benevolent behaviors by meeting their needs. Therefore, it was expected that as employee conscientiousness increased, the positive relationship between needs-supplies fit and job satisfaction would strengthen (i.e., that conscientiousness would moderate the indirect effect of needs supplies fit on turnover

intentions, through job satisfaction). The results of our study indicated that employee conscientiousness moderated the indirect effect of needs-supplies fit on turnover intentions, via job satisfaction. This result means that as employee conscientiousness increased, the positive relationship between needs-supplies fit and job satisfaction was strengthened. Moreover, this positive moderation effect yielded a lower level of reported turnover intentions, as a function of the indirect effect of needs-supplies fit on turnover intentions, via job satisfaction.

Previous research demonstrated a negative relationship between conscientiousness and multitasking frequency, based on the mismatch between deliberative tendencies of conscientious individuals and the task demands characteristic of multitasking (e.g., rapid, reflexive responding; Cable & DeRue, 2002; Edwards, 1991; Oswald, et al., 2007). As such, within the framework of the ASA model, individuals higher in conscientiousness would be likely to seek out and structure their work environments to avoid workplace multitasking (Schneider, 1987). Prior research also indicated that employee conscientiousness positively relates to job performance, which in turn drives increased job satisfaction (Ackerman, et al., 1995; Judge, et al., 2002; Schmidt & Hunter, 1998). Given these findings, we expected employee conscientiousness to moderate the indirect effect of multitasking fit on turnover intentions, through job satisfaction. The results indicated that employee conscientiousness did not moderate the indirect effect of multitasking fit on turnover intentions via job satisfaction. Instead, the finding from the initial mediation analysis on multitasking fit (Table 5) was replicated, which confirmed that multitasking fit did not predict reported job satisfaction or turnover intentions. This result is likely due to the lack of relationship between employee conscientiousness and multitasking fit. Although the data replicated previous findings of a negative relationship between conscientiousness and polychronicity ( $r = -.15, p < .05$ ), conscientiousness was unrelated to actual multitasking behavior, which contradicts previous

research findings (Cable & DeRue, 2002; Edwards, 1991; Oswald, et al., 2007). It is possible that even though conscientious employees possess lower levels of polychronicity, they may multitask anyway if it is a requirement of their job.

**Neuroticism.** Previous meta-analytic research demonstrated that neuroticism negatively relates to job satisfaction (Judge, et al., 2002). The negative relationship between neuroticism and job satisfaction is driven by job performance and/or interpersonal factors (Ackerman, et al., 1995; Judge, et al., 2002; König, et al., 2005; Locke, 1976; Oswald, et al., 2007; Poposki, et al., 2009; Schmidt & Hunter, 1998). Research has demonstrated that neuroticism affects job satisfaction through job performance because individuals high in neuroticism tend to perform relatively poorly in highly stimulating situations, compared to the better performance demonstrated by individuals low in neuroticism in the same highly stimulating situations (König, et al., 2005). Poorer job performance is not awarded the intrinsic and extrinsic rewards associated with good job performance, which in turn relates to lower levels of job satisfaction (Ackerman, et al., 1995; Judge, et al., 2002; Schmidt & Hunter, 1998). Neuroticism affects job satisfaction through interpersonal conflict because individuals higher in neuroticism tend to have more negative affect, which may yield interpersonal conflict if workplace colleagues perceive this negative affect as abrasiveness or coarseness (Goldberg, 1990). Although the previous research demonstrated a positive relationship between needs-supplies fit and job satisfaction, neuroticism was expected to attenuate this relationship because of its negative relationship to job satisfaction via lower job performance and interpersonal factors (Ackerman, et al., 1995; Judge, et al., 2002; König, et al., 2005; Locke, 1976; Oswald, et al., 2007; Poposki, et al., 2009; Schmidt & Hunter, 1998). The results indicated that employee neuroticism did not moderate the indirect effect of needs-supplies fit on turnover intentions, via job satisfaction. This result means

that the positive relationship between needs-supplies fit was not affected by employee neuroticism.

The tendency of neurotic individuals to ineffectively regulate their anxiety was expected to conflict with the task demands associated with multitasking (e.g., rapid and reflexive responding; Cable & DeRue, 2002; Edwards, 1991; Oswald, et al., 2007). Within the framework of the ASA cycle, the conflict between neuroticism and multitasking demands would indicate that employees high in neuroticism would likely prefer not to occupy jobs that require frequent multitasking (Schneider, 1987). To align preferences with job characteristics, multitasking fit was expected to be especially important for job satisfaction for employees high in neuroticism. That is, employee neuroticism was expected to moderate the indirect effect of multitasking fit on turnover intentions through job satisfaction. The results indicated that employee neuroticism did not moderate the indirect effect of multitasking fit on turnover intentions, via job satisfaction. Instead, the finding from the initial mediation analysis on multitasking fit (Table 5) was replicated, which confirmed that multitasking fit did not predict reported job satisfaction or turnover intentions. This result is likely due to the lack of relationship between employee neuroticism and workplace multitasking. Although previous research indicated that individuals higher in neuroticism tend to prefer not to multitask, the present research did not demonstrate that neuroticism relates to polychronicity, frequency of multitasking behavior, or multitasking fit (Cable & DeRue, 2002; Edwards, 1991; Oswald, et al., 2007).

## **Limitations**

One limitation of this study was that employees reported a wide range of frequency of multitasking behaviors at work. Although this range of frequency of multitasking behaviors

provided a dataset fruitful for investigating the effects of multitasking fit across a variety of occupations, the results demonstrated that multitasking fit did not act as a predictor of job satisfaction or turnover intentions across this range of occupations. A small subset of research participants indicated that, on average, they multitask at work “always” or “most of the time” (n = 15). However, this subset of participants who frequently multitask at work was not large enough to test hypotheses about whether multitasking fit predicts job satisfaction or turnover intentions in occupations that require frequent multitasking. It is possible that prior to organizations instituting remote work policies in response to the COVID-19 pandemic, employees may have typically multitasked more in their regular work environments (e.g., more distractions from colleagues, busy office environment, etc.)

Another limitation of this study was that job performance was not measured. This decision was made because in self-report measures, survey respondents tend to report inflated estimates of socially desirable behaviors, such as good job performance (Furnham, 1986). Instead, job satisfaction and turnover intentions were measured. Findings of previous research were replicated by the present research finding that needs-supplies fit predicts job satisfaction and turnover intentions (Allen, et al., 2010; Cotton & Tuttle, 1986; Mobley, 1977; Porter & Steers, 1973; Steel & Ovalle, 1984); however, multitasking fit did not predict job satisfaction and job performance. This means that multitasking fit likely does not constitute a multitasking-specific conceptualization of needs-supplies fit, as hypothesized. On the other hand, if multitasking fit is analogous to demands-abilities fit rather than needs-supplies fit, then it might have predicted job performance, if it were measured.

Another potential limitation of this study was the timing of the data collection, which occurred amidst the COVID-19 pandemic. The primary issue with this timing was the economic

downturn caused by the pandemic, which may have had a strong impact on individual's reported turnover intentions. Under normal economic circumstances, individuals may have reported a higher base rate of turnover intentions. However, the pandemic resulted in mass layoffs throughout the United States throughout March and April of 2020 (U.S. Department of Labor, Bureau of Labor Statistics, 2020). Due to the scarcity of employment caused by the COVID-19 pandemic, individuals may have been far less likely to intend to leave their jobs (U.S. Department of Labor, Bureau of Labor Statistics, 2020). One exception to this effect would be if the individual's present job did not fulfill their needs (e.g., adequate pay, healthcare). Support for this theory was demonstrated by the indirect effect of needs-supplies fit on turnover intentions, via job satisfaction. If alternative employment opportunities were plentiful, employees might have demonstrated a higher rate of turnover intentions for reasons less vital to socioeconomic security, such as multitasking fit. To investigate whether the COVID-19 pandemic affected the results of the study in respect to reported turnover intentions, data of reported turnover intentions under normal economic conditions should be compared to the data on turnover intentions collected during the COVID-19 pandemic.

### **Future Directions**

Future research should investigate the utility of multitasking fit as a predictor of job satisfaction and turnover intentions within occupations that require frequent multitasking. If a job does not require frequent multitasking, then an employee's polychronicity would be irrelevant for predicting job satisfaction or turnover intentions. By this rationale, multitasking fit would not predict job satisfaction or turnover intentions in jobs that do not require frequent multitasking. The results of the present study support the theory that multitasking fit does not predict job

satisfaction or turnover intentions when the job does not require frequent multitasking. However, future research is needed to examine the theory that multitasking fit may predict job satisfaction and turnover intentions to the extent that the job requires multitasking.

Future researchers should replicate this study under typical economic conditions to examine and better understand the mechanisms underpinning the observed results of the present study. To slow the spread of the virus, the COVID-19 pandemic forced many organizations to institute hiring freezes and layoffs (Dietrich, Keuster, Müller, & Schoenle, 2020; Gentilini, Almendi, Orton, & Dale, 2020). At the time the data was collected for this study in April of 2020, the United States unemployment rate was 14.7% (Bureau of Labor Statistics, 2020). Furthermore, the results of a survey of a group of United States citizens conducted in late March showed that 44% of respondents indicated that they are afraid of losing their job (n = 3954; Dietrich, et al., 2020). The hiring freezes and layoffs concomitant with the COVID-19 pandemic made job opportunities scarce, compared to the number of jobs available pre-COVID-19 (Bureau of Labor Statistics, 2020; Dietrich, et al., 2020; Gentilini, et al., 2020). If employees are unable to find alternative job prospects, then those persons would be highly unlikely to leave a job unless it did not satisfy a basic need, such as healthcare. This theory is supported by the results of this study, which indicated that needs-supplies fit positively related to job satisfaction and negatively related to turnover intentions. On the other hand, multitasking fit did not predict job satisfaction or turnover intentions in the present study. However, if alternative job prospects were widely available, employees might be less satisfied with their jobs or more likely to leave their jobs for more trivial reasons, such as poor multitasking fit.

Last, future research should examine the validity and practical utility of the MBI in other studies and participant samples. The researchers adapted the MBI from the MPI (Poposki &

Oswald, 2010) to measure the frequency of workplace multitasking behaviors. This scale might be used to examine how workplace multitasking behaviors affect other occupational outcomes, such as organizational citizenship behavior (OCBs), counterproductive workplace behaviors (CWBs), burnout, work-family balance, and job performance. Future researchers should seek to develop a measure to directly assess multitasking fit.

### **Conclusions**

This study supported previous findings that P-J fit constitutes a useful framework for selecting and placing employees in specific jobs to maximize their longevity in those positions. Needs-supplies fit provided a more specific model of P-J fit by examining the degree of congruency between what employees need and how well characteristics of their jobs meet those needs. The results of this study indicated that needs-supplies fit shared a positive relationship to job satisfaction and a negative relationship to turnover intentions. However, the ubiquity of workplace multitasking presented a new challenge when considering P-J fit in the selection and placement process: ensuring that the demands of workplace multitasking do not conflict with employee characteristics. The present research examined this issue through the lens of a new type of P-J fit, called multitasking fit. Multitasking fit considered how well characteristics of the employee, such as polychronicity, match with the multitasking demands and opportunities in their jobs. Although multitasking fit did not predict job satisfaction or turnover intentions, future research may investigate multitasking fit as a predictor of job satisfaction and turnover intentions within occupations requiring high levels of workplace multitasking.

This research further extended models of needs-supplies fit and multitasking fit by considering the role of employee personality in the fit-satisfaction-turnover intentions

relationship. Employee conscientiousness acted as a positive moderator of the relationship between needs-supplies fit and job satisfaction, which in turn negatively related to turnover intentions. These findings indicate that as employee conscientiousness increases, the positive relationship between needs-supplies fit and job satisfaction was strengthened, which resulted in lower reported turnover intentions. Employers may implement this finding by selecting for employees high in conscientiousness who will have good needs-supplies fit for the job in an effort to reduce costs associated with employee turnover. Although employee neuroticism did not act as a negative moderator of the relationship between needs-supplies fit or multitasking fit and job satisfaction, future research may investigate the role of neuroticism in the relationship between needs-supplies fit or multitasking fit with job satisfaction and turnover intentions under normal economic circumstances.

The results of the present study replicated previous empirical evidence that needs-supplies fit predicts job satisfaction and turnover intentions. Since this finding has been repeated across several studies, this knowledge should be implemented in a personnel selection and placement context to ensure better job satisfaction and lower turnover intentions for an organization's employees. Increasing needs-supplies fit or considering the needs-supplies fit of prospective employees can improve the longevity of employees and ultimately may yield a cost-savings for the organization. It is important to note that the costs of employee turnover are both seen, such as the loss of an employee on an assembly line, and unseen, such as the loss of organizational knowledge or changes in team dynamics. As such, preventing high levels of employee turnover is integral to long-term organizational survival. Furthermore, job satisfaction shares a positive relationship with some other occupational behaviors, such as OCBs and organizational commitment, while sharing a negative relationship with some undesirable

workplace behaviors, such as CWBs. As such, good needs-supplies fit can be valuable for organizational culture, for protecting against the loss of knowledge, and for cost savings associated with employee turnover.

Last, the finding that conscientiousness moderated the indirect effect of needs-supplies fit on turnover intentions, via job satisfaction is useful for hiring practitioners. Employees high in conscientiousness, are more likely to report higher levels of job satisfaction and lower levels of turnover intentions. Assessment of needs-supplies fit and conscientiousness is simple, quick, and inexpensive; therefore, it is likely that organizations will see a positive return on their investment in assessing prospective employees for these characteristics. Thus, to increase the likelihood of a positive organizational climate and low turnover costs, hiring practitioners should take needs-supplies fit and employee conscientiousness into special consideration when selecting and placing prospective employees for their organizations.

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Table 1

*Task Features*

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Physical Nature

Processes (e.g., reading on a computer versus typing on a computer)

Apparatus (e.g., listening to someone speak face-to-face versus listening to someone speak over the radio)

Demands

Different knowledge, skills, and abilities needed to complete each task (e.g., one task might require advanced psychomotor skills, while another task might necessitate critical thinking skills)

Outcomes

Performance on one task does not dictate performance on another task

Performance outcomes are independent of one another

Perceptions

Tasks must be perceived as distinct by the task performer

Novices may perceive tasks as separable, while experts may perceive the same set as one general task

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Table 2  
*Racial Composition of Participants (n = 187)*

	Frequency	Percent
Hispanic/Latino(a)	26	13.9
American Indian	2	1.1
Asian	16	8.6
Black	22	11.8
White	147	78.6

Table 3 – Means, Standard Deviations, Internal Consistency, and Correlations of Variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Gender	1.42	.49														
2 Age	39.16	11.53	.13													
3 Work Hrs	41.57	5.31	-.09	-.04												
4 N-S Fit	3.66	1.13	-.13	.06	.03	(.94)										
5 Job Sat	3.85	.74	-.15*	.06	-.02	.82**	(.94)									
6 Turn Intent	2.35	1.26	.04	-.04	.03	-.51**	-.57**	(.87)								
7 Polychron	2.77	.93	.20	.13	.02	-.03	-.01	.03	(.94)							
8 MT Behave	2.85	.76	.13	.13	.06	-.11	-.03	.08	.70**	(.90)						
9 MT Fit	-1.12	9.36	.13	.03	-.04	.08	.01	-.05	.59**	-.16**	(.73)					
10 Openness	3.74	.69	-.00	.10	.03	.29**	.35**	-.24**	.14	.08	.11	(.84)				
11 Conscient	4.11	.69	.07	.06	-.09	.38**	.44**	-.29**	-.15*	-.10	-.10	.38**	(.85)			
12 Extravert	3.09	1.01	-.05	.02	.01	.31**	.33**	-.14	.27**	.15*	.20**	.31**	.29**	(.90)		
13 Agree	3.92	.74	-.07	.02	-.04	.36**	.42**	-.18*	.00	.03	-.03	.35**	.56**	-.41**	(.83)	
14 Neuro	2.39	.97	.23**	-.03	.06	-.48**	-.49**	.28**	-.01	.03	-.04	-.35**	-.53**	-.41**	-.63**	(.90)

Note.  $n = 187$ . Gender (1 = Male), Work Hrs = hours worked per week, N-S Fit = reported needs-supplies fit, Job Sat = reported job satisfaction, Turn Intent = reported turnover intentions, Polychron = polychronicity, MT Behave = reported multitasking behaviors, MT Fit = multitasking fit. Diagonals contain Cronbach's Alpha. \* $p < .05$ , \*\* $p < .01$

Table 4 – Effect of Needs-Supplies Fit (X) on Turnover Intentions (Y), as mediated by Job Satisfaction (M)

Direct Effects	Coefficient	SE	<i>t</i>	<i>p</i>	Model <i>R</i> <sup>2</sup>
Job Satisfaction as DV					
Constant	1.91	0.11	18.12	0.00	
Needs-supplies Fit	0.53	0.03	19.29	0.00	0.67
Turnover Intentions as DV					
Constant	5.96	0.43	13.94	0.00	
Needs-supplies Fit	-0.15	0.12	-1.30	0.20	
Job Satisfaction	-0.79	0.18	-4.43	0.00	0.33
Indirect Effect	Effect	Boot SE	Boot LLCI	Boot ULCI	
Needs-supplies Fit on Turnover Intentions	-0.42	0.10	-0.62	-0.22	
Standardized Indirect Effect	Effect	Boot SE	Boot LLCI	Boot ULCI	
Needs-supplies Fit on Turnover Intentions	-0.38	0.09	-0.55	-0.20	

Table 5 – Effect of Multitasking Fit (X) on Turnover Intentions (Y), as mediated by Job Satisfaction (M)

Direct Effects	Coefficient	SE	<i>t</i>	<i>p</i>	Model <i>R</i> <sup>2</sup>
Job Satisfaction as DV					
Constant	3.85	0.05	70.88	0.00	
Multitasking Fit	0.00	0.01	0.17	0.86	0.00
Turnover Intentions as DV					
Constant	6.13	0.41	15.09	0.00	
Multitasking Fit	-0.01	0.01	-0.62	0.54	
Job Satisfaction	-0.98	0.10	-9.48	0.00	0.33
Indirect Effect	Effect	Boot SE	Boot LLCI	Boot ULCI	
Multitasking Fit on Turnover Intentions	-0.01	0.01	-0.01	0.01	
Standardized Indirect Effect	Effect	Boot SE	Boot LLCI	Boot ULCI	
Multitasking Fit on Turnover Intentions	-0.01	0.05	-0.10	0.08	

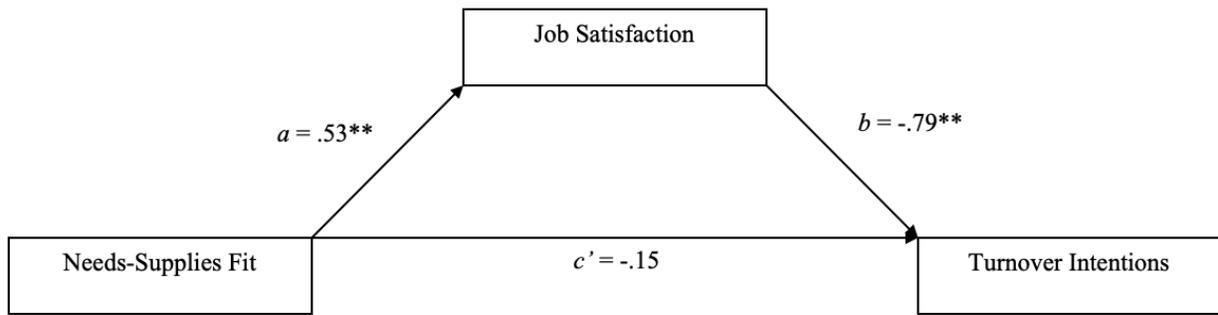


Figure 3. A mediation model of the relationships between needs-supplies fit, job satisfaction, and turnover intentions.

Note. \* $p < .05$ , \*\* $p < .01$

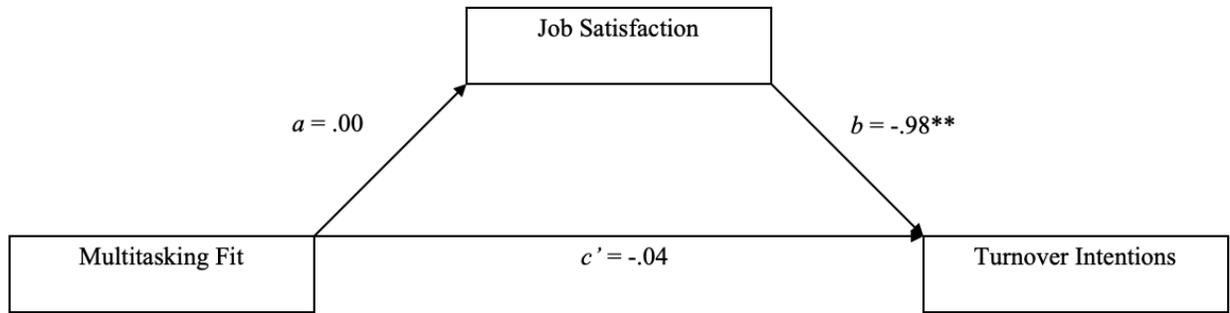


Figure 4. A mediation model of the relationships between multitasking fit, job satisfaction, and turnover intentions.

Note.  $*p < .05$ ,  $**p < .01$

**Appendix A:** Person-job fit index (Cable & DeRue, 2002)

Instructions: Please indicate how well each item describes you on a scale of 1 (strongly disagree) to 5 (strongly agree).

*Needs-supplies items* (Kristof, 1996; Edwards, 1991)

1. There is a good fit between what my job offers me and what I am looking for in a job.
2. The attributes that I look for in a job are fulfilled very well by my present job.
3. The job that I currently hold gives me just about everything that I want from a job.

**Appendix B:** Minnesota Satisfaction Questionnaire – Short Form (MSQ-S; Weiss, 1967)

Ask yourself: *How satisfied am I with this aspect of my job?* Please indicate your level of satisfaction with each of the following aspects of your job, on a scale of 1 (very dissatisfied) to 5 (very satisfied).

*On my present job, this is how I feel about...*

1. Being able to keep busy all the time
2. The chance to work alone on the job
3. The chance to do different things from time to time
4. The chance to be “somebody” in the community
5. The way my boss handles his/her workers
6. The competence of my supervisor in making decisions
7. Being able to do things that don’t go against my conscience
8. The way my job provides for steady employment
9. The chance to do things for other people
10. The chance to tell people what to do
11. The chance to do something that makes use of my abilities
12. The way company policies are put into practice
13. My pay and the amount of work I do
14. The chances for advancement of this job
15. The freedom to use my own judgement
16. The chance to try my own methods of doing the job
17. The working conditions
18. The way my co-workers get along with each other

19. The praise I get for doing a good job

20. The feeling of accomplishment I get from the job

**Appendix C: Turnover Intention Questionnaire (Yücel, 2012)**

Instructions: Please indicate how well each item describes you on a scale of 1 (strongly disagree) to 5 (strongly agree).

1. I intend to leave my organization.
2. I intend to make a genuine effort to find another job over the next few months.
3. I often think about quitting.

**Appendix D:** The Multitasking Preference Inventory (MPI; Poposki & Oswald, 2010)

Instructions: Please indicate how well each item describes you on a scale of 1 (strongly disagree) to 5 (strongly agree).

1. I prefer to work on several projects in a day, rather than completing one project then switching to another.
2. I would like to work in a job where I was constantly shifting from one task to another, like a receptionist or an air traffic controller.
3. I lose interest in what I am doing if I have to focus on the same task for long periods of time, without thinking about or doing something else.
4. When doing a number of assignments, I like to switch back and forth between them rather than do one at a time.
5. I like to finish one task completely before focusing on anything else. (R)
6. It makes me uncomfortable when I am not able to finish one task completely before focusing on another task. (R)
7. I am much more engaged in what I am doing if I am able to switch between several different tasks.
8. I do not like having to shift my attention between multiple tasks. (R)
9. I would rather switch back and forth between several projects than concentrate my efforts on just one.
10. I would prefer to work in an environment where I can finish one task before starting the next. (R)
11. I don't like when I have to stop in the middle of a task to work on something else. (R)

12. When I have a task to complete, I like to break it up by switching to other tasks intermittently.

13. I have a “one-track” mind. (R)

14. I prefer not to be interrupted when working on a task. (R)

*Note.* Items followed by (R) are reverse scored.

**Appendix E:** The Multitasking Behavior Inventory (MBI; Adaptation of the Multitasking Preference Inventory; Poposki & Oswald, 2010)

Instructions: Please indicate how often each item describes your behavior at work on a scale of 1 (never) to 5 (always).

1. I work on several projects in a day, rather than completing one project then switching to another.
2. I work in a job where I am constantly shifting from one task to another, like a receptionist or an air traffic controller.
3. I lose interest in what I am doing if I focus on the same task for long periods of time, without thinking about or doing something else.
4. When doing a number of assignments, I switch back and forth between them rather than do one at a time.
5. I finish one task completely before focusing on anything else. (R)
6. It makes me uncomfortable when I am not able to finish one task completely before focusing on another task. (R)
7. I am much more engaged in what I am doing when I switch between several different tasks.
8. I do not shift my attention between multiple tasks. (R)
9. I switch back and forth between several projects rather than concentrate my efforts on just one.
10. I work in an environment where I can finish one task before starting the next. (R)
11. I do not stop in the middle of a task to work on something else. (R)
12. When I have a task to complete, I break it up by switching to other tasks intermittently.

13. I have a “one-track” mind. (R)

14. I prefer not to be interrupted when working on a task. (R)

*Note.* Items followed by (R) are reverse scored.

**Appendix F:** The Big Five Inventory (BFI; John & Srivastava, 1999)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please indicate the extent to which you agree or disagree with each statement on a scale of 1 (strongly disagree) to 5 (strongly agree).

*I see myself as someone who...*

1. Is talkative
2. Tends to find fault with others (R)
3. Does a thorough job
4. Is depressed, blue
5. Is original, comes up with new ideas
6. Is reserved (R)
7. Is helpful and unselfish with others
8. Can be somewhat careless (R)
9. Is relaxed, handles stress well (R)
10. Is curious about many different things
11. Is full of energy
12. Starts quarrels with others (R)
13. Is a reliable worker
14. Can be tense
15. Is ingenious, a deep thinker
16. Generates a lot of enthusiasm
17. Has a forgiving nature

18. Tends to be disorganized (R)
19. Worries a lot
20. Has an active imagination
21. Tends to be quiet (R)
22. Is generally trusting
23. Tends to be lazy (R)
24. Is emotionally stable, not easily upset (R)
25. Is inventive
26. Has an assertive personality
27. Can be cold and aloof (R)
28. Perseveres until the task is finished
29. Can be moody
30. Values artistic, aesthetic experiences
31. Is sometimes shy, inhibited (R)
32. Is considerate and kind to almost everyone
33. Does things efficiently
34. Remains calm in tense situations (R)
35. Prefers work that is routine (R)
36. Is outgoing, sociable
37. Is sometimes rude to others (R)
38. Makes plans and follows through with them
39. Gets nervous easily
40. Likes to reflect, play with ideas

- 41. Has few artistic interests (R)
- 42. Likes to cooperate with others
- 43. Is easily distracted (R)
- 44. Is sophisticated in art, music, or literature

*Note.* Items followed by an (R) are reverse-scored

## **Appendix G: Demographic Questionnaire**

Instructions: Please answer the following questions to be best of your ability.

1. What is your gender? (male/female/other)
2. What is your age? (drop down option with ages 18-100)
3. What is your race? (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or other Pacific Islander, White)
4. What is your ethnicity? (Hispanic, Latino/a, or of Spanish origin; not of Hispanic, Latino/a, or of Spanish origin)
5. How many hours do you work per week? (drop down option with 30-80 hours)
6. Do you work in an office or do you work remotely?