THE MODERATING EFFECT OF POLYCHRONICITY IN THE
RELATIONSHIP BETWEEN JOB DEMANDS AND WORK OUTCOMES

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ABSTRACT OF THE THESIS

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Employees in fast-paced work environments are required to juggle various demands throughout the workday that can impact their levels of burnout, job satisfaction, and work engagement. Polychronicity, or a preference for multitasking, helps individuals to effectively switch between tasks and may serve to help employees manage their increased workloads in fast-paced environments. This study examined how polychronicity influences the relationship between the demands of workload, role overload, and role conflict to assess whether individuals who prefer multitasking feel that they are better equipped to overcome demands and therefore experience lower levels of burnout and higher levels of job satisfaction and work engagement.

The present study included 152 participants who were surveyed through Prolific, an online crowdsourcing service that has emerged as an alternative to Amazon Mechanical Turk. Participants were required to be at least 18 years of age, employed in the United States, and working at least part-time. Results indicated that role overload and role conflict were both positively related to burnout and negatively related to job satisfaction. Role conflict was negatively related to work engagement. However, workload was not significantly related to any of the outcomes. Further examination showed workload was positively related to the exhaustion dimension of burnout, but not the disengagement dimension. Additionally, curve estimations of workload suggested that a potential curvilinear relationship may exist between workload and the outcomes.

There was insufficient evidence for the moderating effect of polychronicity between the job demands and work outcomes. However, plots of the relationships suggest that some interactions may exist if a larger sample were utilized. Despite the lack of evidence to support the moderation hypotheses, this study suggests that future research should examine whether polychronicity can act as a buffer in the relationships between work demands and job outcomes.
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CHAPTER 1

THE MODERATING EFFECT OF POLYCHRONICITY IN THE RELATIONSHIP BETWEEN JOB DEMANDS AND WORK OUTCOMES

Employees in fast-paced work environments are required to juggle various demands throughout the workday that can impact their job satisfaction, performance, and stress. A recent Korn Ferry survey found that almost two-thirds of working professionals are experiencing higher stress levels now than they were five years ago (Korn Ferry, 2018). The increase in stress levels may be attributed, in part, to technological advancements that create opportunities for employees to easily access their work at any point during the day and therefore allow employees to take on heavier workloads. Companies are trying to keep up in a competitive business environment and are creating more stressors for their employees that can ultimately cause prolonged strain.

As organizations continue to hire individuals for roles that demand multitasking, it is important for managers to reflect on what is required for the job and determine which candidates would succeed in the role. Some employees may have personal resources that help them overcome demands in the workplace. Polychronicity, or a preference for multitasking, has been shown to be a personal resource for individuals to effectively switch between tasks (Conte et al., 2019); therefore, it may serve to help employees manage their increased workloads in fast-paced environments. The present study will examine how polychronicity influences the relationship between workplace demands and outcomes. Individuals whose preferences for multitasking match the demands of the environment may feel they are better equipped to overcome those demands and therefore experience lower levels of burnout and higher levels of job satisfaction and work engagement. The results of this study might help
inform hiring strategies or management techniques for roles that have heavy workloads or that require employees to take on multiple roles.

**Polychronicity**

Polychronicity was originally defined as completing multiple tasks or activities at once (Hall, 1959). Bluedorn et al. (1999) later revised the definition to include the extent to which a person presumes that others should share their preferences for multitasking. For instance, a polychronic person might prefer to tackle two or more tasks within a specified time block, and according to Bluedorn et al. (1999), they might think that everyone else should also engage in multiple tasks at once. This component that relates to general preferences has since been removed from the definition of polychronicity as researchers realized that those ideas were distinct from one another.

More recent definitions indicate that polychronicity reflects prior experiences in multitasking situations and an individual’s perceptions of multitasking as rewarding instead of stressful (Poposki & Oswald, 2010). It is also important to note that although polychronicity is a reliable predictor of multitasking (Kirchberg et al., 2015), it is a distinct concept that represents the attitude toward the behavior rather than the behavior itself. A person can exhibit one but not the other; for example, a polychronic person might have to put their full attention into a single task even though they would prefer to do multiple things at once. The preferences for multitasking are relatively stable over time, but actual multitasking behavior can change depending on the day or situation (Kirchberg et al., 2015).

Polychronic individuals are likely to have a more dynamic sense of time and succeed in situations that contain uncertainty and pressure (Kaufman-Scarborough & Lindquist, 1998). Additionally, polychronicity is negatively correlated with time awareness and scheduling tendencies according to a study conducted by Conte et al. (1999). Polychronic individuals tend to jump between multiple tasks during a specific period of time rather than focusing on a single task based on a predetermined schedule. Any unexpected events in a polychronic’s day might be considered as a normal part of their schedule, and the polychronic individual would not experience increased stress from the changed plans (Arndt et al., 2006). For instance, a polychronic individual may think it is appropriate to interrupt a meeting with coworkers to ask a colleague passing by a question about a separate project,
and then return to the meeting without experiencing stress from shifting their attention (Cotte & Ratneshwar, 1999).

Polychronicity is considered to be on a continuum ranging from high to low levels rather than falling into polychronic or monochronic groups. Although some people would fall on the extreme ends of the spectrum, most people are not necessarily strictly polychronic. There are also intermediate (neutral) levels between high polychronicity and high monochronicity (Slocombe & Bluedorn, 1999; Zhang et al., 2005). Where polychronicity indicates a preference for doing multiple things at once, monochronicity represents a preference for finishing one task before moving on to another (Hall, 1983). A monochronic individual is likely to put more emphasis on scheduling and is likely to have greater time awareness than a polychronic (Conte et al., 1999). Monochronic individuals may face more challenges in grouping activities together to be performed simultaneously, but they are typically better than polychronic individuals at giving their undivided attention to a single task (Bluedorn et al., 1992). Polychronics and monochrons both manage their time by doing what aligns more closely with their preferences (Kaufman-Scarborough & Lindquist, 1998).

Polychronicity is a relatively stable characteristic that has been found to be somewhat distinct from the Big 5 personality traits (Bluedorn, 2002; Conte & Gintoft, 2005). However, significant correlations have been found between polychronicity and two of the traits: Extraversion and Conscientiousness. Extraversion has a consistently positive relationship with polychronicity across multiple studies as summarized by König and Waller (2010). One of the early definitions of polychronicity proposed that polychronic individuals are more relationship-oriented, tend to form longer-lasting relationships, and maintain elaborate information networks, whereas monochronic individuals tend to be more task-oriented (Hall, 1983; Hall & Hall, 1990). This observation could be due to the tendency for extraverts to be polychronic. If they are placed in a fast-paced work environment, introverts may experience increased anxiety when they are asked to handle multiple tasks at once, so extraverts may perform better in those kinds of settings. Additionally, extraverts enjoy social interactions, and as such, are more likely to be easily distracted by their coworkers by means of a conversation unrelated to work. Extraverts may have developed a preference for multitasking as a way to efficiently shift between tasks and distractions. Research has supported this
tendency for extraverts to be polychronic; for example, Conte and Jacobs (2003) found that Extraversion was positively correlated \( r = .21 \) with polychronicity.

Conscientiousness, on the other hand, has a negative relationship with polychronicity. Conscientious individuals tend to be more organized, responsible, and self-regulating. These tendencies may align more closely with a monochronic orientation since monochronic individuals are more likely to make detailed schedules and stick to them. Conte and Jacobs (2003) found a significant and negative correlation \( r = -.15 \) between polychronicity and Conscientiousness, which follows the idea that conscientious individuals are more likely to be monochronic, or vice versa.

Studies have shown that women appear to be more polychronic than men. Manrai and Manrai (1995) observed that women tend to have more polychronic tendencies than men because they preferred to combine work tasks with their social activities. Additionally, Szameitat and Hayati (2019) more recently found that women consistently rated themselves as higher in polychronicity than men. Women reported that they spend more time multitasking and treat it as an important aspect of their daily lives. Women also reported that their own multitasking abilities were higher than men tended to report, which might account for women’s preferences to engage in multitasking behaviors.

Research focusing on polychronicity differences across ages is limited, but Poposki and Oswald (2010) discuss a potential decline in polychronicity level as individuals get older. Because studies show that multitasking abilities tend to decrease as people age, Poposki and Oswald suggest that preferences for multitasking may also decline. If people find it harder to handle multiple tasks at once, it is possible that their preferences for doing so may also change.

Research on cultural differences in polychronicity has been relatively mixed. When developing the early theories on polychronicity, Hall (1983) expected that individuals from some cultures would be more polychronic (e.g., French, Asians, and Latin Americans), whereas others would be more monochronic (e.g., Germans and Americans). These predictions are likely due to the tendency for certain cultures to be more extraverted or follow schedules more closely than others. However, Hall’s expectations have generally not been supported in studies that followed. Tinsley (1998) found that American managers were more polychronic than Japanese and German managers, which contradicted Hall’s (1983)
expectation that both Germans and Americans would be more monochronic. Additionally, a study conducted by Conte et al. (1999) found that French and American students did not differ significantly in their levels of polychronicity.

Neither polychronicity nor monochronicity is necessarily better for performance as it depends on the environmental or job demands and the match with an individual’s preferences. However, a few studies have shown some relationship with polychronicity and job performance when looking at employees in an environment that demands multitasking. In a sample of train operators whose job required arriving on time and closely keeping to train schedules, Conte and Jacobs (2003) found that polychronicity was negatively related to job performance when rated by supervisors. Polychronic individuals tended to receive lower ratings on both objective and subjective measures of schedule adherence and attentiveness while at work. One point to consider is whether the ratings are influenced by a difference in work styles between the manager and employee. For example, if an employee prefers to multitask but the supervisor does not, it may be possible that the supervisor would perceive the employee as a less efficient worker because they are jumping between tasks. The conflicting time management styles may affect the way people view each other’s performance (Schein, 1992), so it is important for managers and employees to reflect on their own preferences and learn how to effectively communicate work habits to avoid any conflicts.

One study examining the differences between monochronicity and polychronicity found that the time available to complete a task can significantly affect the performance of both monochrons and polychrons (Goonetilleke & Luximon, 2010). The researchers found that monochrons and polychrons did not significantly differ in cognitive style, perception, memory, or judgement, but they did differ in terms of their attention during an experiment. Both monochrons and polychrons performed with equal accuracy when participants were given equal amounts of time to do one task (paced condition). However, polychrons performed better than monochrons when there were multiple tasks to complete with differing levels of priority in a limited time frame (unpaced condition). Similarly, König and Waller (2010) suggested that polychronicity may be related to higher levels of individual performance, but this was only true for individuals whose preferences for multitasking matched the demands of their job and organization.
The present study will now discuss the job demands-resources model, the workplace demands of workload and role overload, followed by the outcomes of burnout, job satisfaction, and work engagement. Following a review of these constructs, the paper will then connect back to polychronicity and introduce the hypothesized relationships among demands, polychronicity, and the work-related outcomes.

**JOB DEMANDS-RESOURCES MODEL**

Stress was initially studied as a concept in physics in which external forces acted upon an object. Stress was measured as a ratio of force to area, and the resulting strain was observed in the form of distortion of an object. Lazarus and Folkman (1984) describe how this concept has been more recently translated to the social sciences. They explain how various stressors, or external stimuli, can influence a person’s experienced strain through an appraisal and coping process. In physics, if the area upon which a force is acting is too small to handle the force, the object may experience distortion. Similarly, if a person is faced with external stressors but does not have the resources to cope with them, they may experience strain. In the organizational context, a stressor might include heavy workload, whereas a form of strain might be burnout.

After a stressor has been appraised, individuals will work to cope with the stressor. If they feel they have enough resources to overcome the stressor, they are likely to experience lower levels of strain. However, if they view their effort to cope with stressors as draining the critical resources that are necessary for coping with the demands, they may experience negative emotions and lower levels of satisfaction (Podsakoff et al., 2007). This idea stems from the job demands-resources model (Demerouti et al., 2001).

Demerouti and colleagues (2001) defined job demands as the “physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and/or psychological costs” (p. 501). Job resources, on the other hand, are those aspects of the job that can help individuals achieve their work goals and reduce job demands in a way that fosters their personal development (Bakker, 2011; Bakker & Demerouti, 2007; Demerouti et al., 2001). A job demand might be high work pressure or unfavorable work environments, while job resources include autonomy, support from colleagues, and opportunities for growth (Bakker, 2011). Job
demands have been found to be correlates of the exhaustion dimension of burnout, whereas job resources were correlates of the cynicism or disengagement dimension (Bakker & Demerouti, 2017).

Bakker and Demerouti (2017) also describe personal resources (e.g., optimism, self-efficacy), which can have a similar effect to job resources in a motivational manner. Personal resources are the beliefs individuals hold regarding the amount of control they have over stimuli in their environment, and they can moderate the relationship between job demands and strain. For instance, a person with stronger beliefs of control may experience less strain when faced with hindering job demands, and they may also experience higher motivation when faced with challenging job demands (Bakker & Demerouti, 2017). Job resources may act as a buffer in the relationship between job demands and strain, and personal resources may function similarly.

The job demands-resources theory identifies two types of job demands: challenges and hindrances. Challenge job demands cause individuals to exert effort but have the potential to lead to personal growth and a sense of accomplishment (Podsakoff et al., 2007). Hindrance job demands involve constraints that can prevent the individual from achieving their work goals (Cavanaugh et al., 2000). Examples of challenge demands are workload and time pressure, whereas hindrance demands include role overload and role conflict. The present study will focus on workload and role overload as the job demands and will explore the possibility that polychronicity can function as a resource to buffer the impact of these demands on strain.

**WORKLOAD**

Workload is a representation of the amount of work that an employee is required to complete, and it can be applied to any job. However, Spector and Jex (1998) describe workload as consisting of the amount of work in terms of both volume and pace. They also emphasize that workload can include the mental demands of the work on the employee. Whereas other stressors in the workplace might center around the people, workload focuses more on the tasks in the job. Simply having work to do does not necessarily lead to more strain, but a workload that goes above and beyond an employee’s resources might lead to increased burnout.
Employees who feel they do not have sufficient resources might experience uncertainty about whether they can tackle their heavy workload (Beehr & Bhagat, 1985). Additionally, previous studies have found that an increased workload can lead to better performance up until a certain point, and then the quality of performance decreases past a threshold (Brüggen, 2015). Workload was chosen to represent one of the job demands in the present study because individuals who are faced with a heavy workload might be required to multitask to complete all their tasks. Additionally, a heavy workload could lead an individual to neglect other areas of their job or life (Spector & Jex, 1998), which might lead to negative outcomes such as increased burnout or lower job satisfaction and work engagement.

**Role Overload**

Role overload is characterized by a lack of personal resources that are necessary to fulfill obligations or requirements, and it often occurs when an individual is taking on multiple roles at the same time with conflicting demands (Peterson et al., 1995). In particular, role overload tends to occur when individuals have multiple role demands but have insufficient time to fulfill all the demands (Coverman, 1989).

There are two other role stressors that are often examined alongside role overload: role ambiguity and role conflict. Role ambiguity occurs when an individual is unsure about what is required of them in their role, whereas role conflict involves incompatible responsibilities or expectations within their role. Role overload was chosen for the present study because it might involve switching back and forth between demands and is therefore most relevant to polychronicity.

**Burnout**

Early definitions of burnout described it as being composed of three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981). Emotional exhaustion results from a depletion of personal resources when an individual is stretched thin in their work. Depersonalization (also referred to as cynicism) surrounds interpersonal aspects of a job and refers to the callous perception that an individual can have about their co-workers or clients. Reduced personal accomplishment is a negative self-evaluation of one’s work in which an individual is dissatisfied with what they have
accomplished in their job. These three dimensions have been measured using the Maslach Burnout Inventory (MBI) and might be more prevalent in employees who interact with people (i.e., clients) in their daily work (Maslach & Jackson, 1981).

However, an alternative to the MBI has been more recently developed by Demerouti et al. (2003). The Oldenburg Burnout Inventory (OLBI) was developed to address issues that researchers have found with the MBI, including the idea that personal accomplishment is differentially related to the other two dimensions and might be better considered as a personality trait (Halbesleben & Demerouti, 2005). Therefore, the OLBI consists of only two dimensions: exhaustion and disengagement. Exhaustion is characterized by physical, cognitive, or affective strain after prolonged exposure to demands on the job. Disengagement refers to the distancing of oneself from work or work-related tasks.

Burnout was chosen to represent perceived strain because the dimensions are relevant to polychronicity. The types of demands that would require polychronicity and multitasking are likely to lead to psychological strain such as exhaustion and disengagement. Although overcoming demands in the workplace may lead to positive benefits and gain, prolonged exposure to work demands such as heavy workload and role overload can be draining for individuals (Lepine et al., 2005). Similarly, individuals faced with role conflict or red tape would likely experience burnout more quickly than if they did not have those demands to manage on top of their regular workload.

Bakker and Demerouti (2017) discuss loss spirals, the reverse causational process in which job demands cause strain, and the perceived strain leads employees to perceive more job demands. Additionally, Wilkes et al. (2017) found that workload is positively associated with exhaustion ($r = .50, p < .05$). Similarly, Baka and Derbis (2012) found that quantitative workload was significantly and positively related to burnout using the OLBI ($r = .32, p < .01$). Furthermore, in a study on nurses, Dasgupta (2012) found that role overload is significantly and positively related to both dimensions of the OLBI: disengagement and exhaustion ($r = .46$ and $.43$, respectively, $p < .01$). Therefore, in the present study, similar relationships among these demands and burnout are expected to be replicated.

- **Hypothesis 1**: Perceived levels of workload will be positively associated with burnout.
- **Hypothesis 2**: Perceived levels of role overload will be positively associated with burnout.
JOB SATISFACTION

Locke (1969) defined job satisfaction as a positive emotional state following an individual’s appraisal of their job. Individuals may experience overall job satisfaction, or they may be satisfied with certain aspects of their work (i.e., coworkers, advancement opportunities, pay). Organizations may be particularly interested in increasing the job satisfaction of their employees, and it is one of the more widely studied outcomes. Studies have shown that job dissatisfaction is related to turnover intentions (Fried et al., 2008; Locke, 1976), so organizational decision makers that want to retain their talent would be interested in keeping their employees satisfied.

Baka and Derbis (2012) found that quantitative workload was negatively associated with job satisfaction ($r = -0.20, p < .01$). Additionally, in a study of care workers in assisted living facilities, Chou and Robert (2008) found that role overload was negatively associated with job satisfaction ($r = -0.48, p < .01$). Therefore, in the present study, similar relationships among these demands and job satisfaction are expected to be replicated.

- **Hypothesis 3**: Perceived levels of workload will be negatively associated with job satisfaction.
- **Hypothesis 4**: Perceived levels of role overload will be negatively associated with job satisfaction.

WORK ENGAGEMENT

Work engagement represents an individual’s sense of energetic and effective connection with their work and a feeling that they can handle their work demands. Work engagement is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor is defined as high energy and mental resilience at work, dedication is being involved in work and experiencing meaning and joy, and absorption involves being fully concentrated and immersed in work. While engaged employees are still able to feel tired after work, they tend to view tiredness as indicative of accomplishing their tasks and view it in a more positive light (Bakker & Demerouti, 2008).

Furthermore, previous research has identified work engagement as the opposite of burnout. Studies have shown that the vigor component of work engagement can be placed on a bipolar dimension with exhaustion, whereas dedication and cynicism (or depersonalization) can be paired on a bipolar dimension (González-Romá et al., 2006). Therefore, the present
study expects to find correlations that are in the inverse direction as the correlations between the job demands and burnout.

Tomic and Tomic (2010) found that workload was significantly and negatively correlated with vigor \( (r = -.32, p < .01) \) and dedication \( (r = -.26, p < .01) \). Additionally, in a study on hotel employees’ work engagement, Altinay et al. (2019) found that role overload was significantly and negatively related to work engagement \( (r = -.15, p < .01) \). The present study expects to see similar relationships between these job demands and work engagement.

- **Hypothesis 5:** Perceived levels of workload will be negatively associated with work engagement.
- **Hypothesis 6:** Perceived levels of role overload will be negatively associated with work engagement.

**POLYCHRONICITY AS A MODERATOR**

External stressors in the workplace may be perceived by employees as more or less challenging depending on their personal resources (Demerouti et al., 2001). Highly polychronic individuals who are faced with demands may feel they have the appropriate amount of resources (i.e., multitasking abilities) to overcome the stressor, and as a result, they may feel less strain. For instance, if an individual is faced with a big project to complete in a short amount of time on top of their everyday work activities, those individuals who prefer to multitask may feel better equipped to effectively jump between the heavy workload of their project and their normal tasks and complete all the work by the deadline. Monochronic individuals, on the other hand, may tend to experience more pressure if they are faced with heavy workload demands because they might not feel that they have the right resources to navigate the workload. Therefore, the present study hypothesizes that polychronicity help individuals more effectively tackle workload and role overload in the workplace and experience less burnout.

- **Hypothesis 7:** Polychronicity will moderate the relationship between workload and burnout such that the positive relationship between workload and burnout will be weaker for those high in polychronicity compared to those low in polychronicity.
- **Hypothesis 8:** Polychronicity will moderate the relationship between role overload and burnout such that the positive relationship between role overload and burnout will be weaker for those high in polychronicity compared to those low in polychronicity.
In an environment that demands multitasking, high levels of polychronicity have been shown to lead to higher satisfaction through person-job fit (Arndt et al., 2006; Jang & George, 2012). When measuring job satisfaction, Slocombe and Bluedorn (1999) found that if a person’s level of polychronicity is congruent with the perceptions of polychronicity within the work unit, the individual will be more likely to stay in the company and exert greater effort on behalf of the organization. Additionally, they would perceive that their performance evaluations were fairer.

Conte et al. (1999) found that employees tend to manage their work environment in a way that best fits with their level of polychronicity. Furthermore, Jang and George (2012) studied non-supervisory employees in the hotel industry, and they found a positive association between polychronicity and job satisfaction. If an employee is faced with a high number of demands, they would need to have the right resources (i.e., polychronicity) to overcome them. Employees who overcome the demands may feel a greater sense of satisfaction in their job. Therefore, it is hypothesized that individuals higher in polychronicity will feel they have more resources to handle work demands and therefore experience higher job satisfaction than those who are lower in polychronicity.

- **Hypothesis 9:** Polychronicity will moderate the relationship between workload and job satisfaction such that the negative relationship between workload and job satisfaction will be weaker for those high in polychronicity compared to those low in polychronicity.

- **Hypothesis 10:** Polychronicity will moderate the relationship between role overload and job satisfaction such that the negative relationship between role overload and job satisfaction will be weaker for those high in polychronicity compared to those low in polychronicity.

Conte et al. (2019) found a significant and positive correlation between polychronicity and work engagement ($r = .14, p < .05$). Additionally, they found that polychronicity moderated the relationship between work-family conflict and work engagement such that more polychronic individuals maintained their work engagement levels whereas those lower in polychronicity experienced a decline in work engagement. Given that work-family conflict is similar to the job demands of interest, the present study hypothesizes that individuals higher in polychronicity will also be able to better manage their heavy workload and role overload demands and therefore experience less of a decline in work engagement.
**Hypothesis 11:** Polychronicity will moderate the relationship between workload and work engagement such that the negative relationship between workload and work engagement will be weaker for those high in polychronicity compared to those low in polychronicity.

**Hypothesis 12:** Polychronicity will moderate the relationship between role overload and work engagement such that the negative relationship between role overload and work engagement will be weaker for those high in polychronicity compared to those low in polychronicity.
CHAPTER 2

METHOD

The participants for this study were obtained through the Prolific service. Prolific is an online crowdsourcing service that has emerged as an alternative to Amazon Mechanical Turk (MTurk). Although both MTurk and Prolific capture participants that pass attention-check questions at high rates and result in high-quality data, recent studies show that participants using Prolific come from more diverse backgrounds and are less familiar with common research tasks, and therefore may be more representative of the overall population (Peer et al., 2017). Prolific also offers more transparency about the population of study and provides more efficient pre-screening of participants (Palan & Schitter, 2018). Participants received $2.38 each as compensation for completing the survey for the present study.

Participants were required to be at least 18 years old, employed, living in the United States, and working at least part-time (i.e., 20 hours or more per week on average). They completed an online survey through Qualtrics in which they rated how strongly they agreed with statements about their levels of polychronicity, workload, role overload, burnout, job satisfaction, and work engagement. The survey also included demographic questions, such as gender, age, ethnicity, and highest degree received, and the participants were anonymous. Specific items for the survey can be found in Appendix A.

POWER ANALYSIS

A power analysis was conducted to determine the sample size needed to obtain statistically significant correlations (\( \alpha < .05 \)) between the predictors and outcomes. Previous studies that have examined challenge and hindrance stressors as predictors have found moderate correlations with work outcomes such as perceived strains and job satisfaction. For example, Bowling et al. (2015) found an average correlation of -.18 between workload and job satisfaction, and an average correlation of .38 between workload and emotional
exhaustion. Additionally, Alarcon (2011) found an average correlation of .42 between role conflict and emotional exhaustion, and an average correlation of .40 between workload and emotional exhaustion. Therefore, this study is expected to observe moderate correlations. A power table by Cohen (1992) was used to determine that with a medium effect size ($r = .30$) and a power level of .80, the study should include a minimum of 85 participants to find statistically significant relationships.

Furthermore, a power analysis was conducted to determine the sample size needed to observe a statistically significant ($\alpha < .05$) interaction when performing a multiple regression analysis with two independent variables. Previous studies have not used workload and role overload with polychronicity in the same model, so conservative estimates were used for the expected effect sizes. Using estimated effect sizes for a main-effects only model ($R^2 = .05$) and a model with main effects and an interaction ($R^2 = .10$), it was determined that a minimum of 143 participants are required to find statistically significant interactions with a power level of .80 (Aiken & West, 1991).

**SAMPLE DESCRIPTION**

A total of 169 participants completed the survey through Prolific. Seventeen participants were removed from the study because they either failed attention-check questions or did not qualify for the study based on the average hours worked per week. The final sample size consisted of 152 participants. Of those participants, 42.8% were female and 57.2% were male. The distribution of ethnicities is 61.2% White, 19.1% Asian, 7.2% Hispanic, 5.9% Multiracial, 4.6% African American, and 2.0% Native American or Alaskan Native. The highest degrees obtained were 19.7% high school diplomas, 15.1% Associate Degree, 51.3% Bachelor’s Degree, 10.5% Master’s Degree, and 3.3% Ph.D. 60.5% of the participants held a non-managerial position, 36.2% held a managerial position (supervise at least one person), and 3.3% held an executive position (at least one person they are responsible for supervises others). 77.0% of participants reported that they work full-time, 21.1% work part-time based on a schedule, and 2.0% work part-time on call. Participants ranged from age 18 to 59 with an average age of 31.94 years (SD = 8.70). They have been in their careers for an average of 12.21 years (SD = 8.72), in their present job for an average of 4.65 years (SD = 4.72), and worked an average of 36.76 hours per week (SD = 8.91).
Workload

Workload was measured using Spector and Jex’s (1998) 5-item scale, the Quantitative Workload Index (QWI). Participants were asked to rate how often they experience heavy amounts of work. Each item was rated on a 5-point scale ranging from 1 (Less than once per month or never) to 5 (Several times per day). Spector and Jex reported an internal consistency of .82 for the QWI. The internal consistency reliability of the QWI in the present study was .86. An example item was “How often does your job leave you with little time to get things done?”

Role Overload

Role overload was measured using Peterson et al.’s (1995) 5-item scale. Participants were asked to rate the extent to which they agreed with statements about their role. Each item was rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Peterson et al. reported an internal consistency of .79 for their role overload scale in a sample in the United States. The internal consistency reliability of the role overload scale in the present study was .93. An example item was “I feel overburdened in my role.”

Burnout

Burnout was measured using the Oldenburg Burnout Inventory (Demerouti et al., 2003). The OLBI consists of 16 items rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Halbesleben and Demerouti (2005) reported internal consistency scores for the OLBI ranging from .74 to .87. The internal consistency reliability of the OLBI in the present study was .88. There are two subscales within the OLBI to measure disengagement and exhaustion, with 8 items in each subscale. The internal consistency reliability of the disengagement and exhaustion subscales in the present study were .81 and .82, respectively. An example item for disengagement was “It happens more and more often that I talk about my work in a negative way.” An example item for exhaustion was “During my work, I often feel emotionally drained.”

Job Satisfaction

Job satisfaction was measured using a 5-item scale created by Brayfield and Rothe (1951) and modified by Judge et al. (1998). Judge and colleagues reported an internal
consistency reliability of .88 and found that this measure has a correlation of .89 on average with items in the Job Descriptive Index. The internal consistency reliability of the job satisfaction scale in the present study was .88. The items were rated on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). An example item was “Most days I am enthusiastic about my work.”

**Work Engagement**

Work engagement was measured using the UWES-3, a 3-item version of the Utrecht Work Engagement Scale (Schaufeli et al., 2019). Schaufeli and colleagues reported internal consistencies higher than .70 in samples across five countries, and another study (Schaufeli, 2015) reported an internal consistency of .95 for the UWES-3. The internal consistency reliability of the UWES-3 in the present study was .87. The items were rated on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). An example item was “At my work, I feel bursting with energy.”

**Polychronicity**

Polychronicity was measured using both the Inventory of Polychronic Values (IPV) and the Multitasking Preference Inventory (MPI). Both the IPV and MPI were chosen because they address different aspects of polychronicity. The IPV measures individual preferences along with general beliefs about the way people should approach tasks. The MPI, on the other hand, focuses only on individual preferences. Conte et al. (2019) examined how the IPV and MPI differ when looking at moderation hypotheses, and they concluded that the MPI may be more effective for measuring multitasking preferences because it does not include the general belief component. However, many studies have used the IPV to measure polychronicity, so the present study will use both measures to examine moderating effects.

The IPV (Bluedorn et al., 1999) consists of 10 items that are rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Schell and Conte (2008) reported an internal consistency reliability of .84 for the IPV as used in an employee sample. The internal consistency reliability of the IPV in the present study was .87. An example item from the IPV was “I believe it is best to complete one task before beginning another”. The MPI (Poposki & Oswald, 2010) consists of 17 items that will be rated on a 7-point Likert
scale ranging from 1 (strongly disagree) to 7 (strongly agree). Poposki and Oswald (2010) reported an internal consistency reliability of .88 for the MPI. The internal consistency reliability of the MPI in the present study was .94. An example item from the MPI was “When doing a number of assignments, I like to switch back and forth between them rather than do one at a time.”

**Analytic Strategy**

Hypotheses 1-6 were tested by calculating correlations among the variables described in each hypothesis. The $p$-values for the correlations were compared to the critical value of .05, and any value lower than .05 was considered significant. Hypotheses 7-12 were tested using multiple regression analyses with burnout, job satisfaction, and work engagement as the criterion variables. Hypotheses 7, 9, and 11 included workload and polychronicity as predictors in the regression, whereas hypotheses 8, 10, and 12 included role overload and polychronicity as predictors. To test for a moderation effect, interaction terms were included in the equation as the product of workload or role overload and polychronicity, and a moderation was considered present if the coefficient for the interaction term was significant ($p < .05$).

**Survey Responses**

Although respondents on Prolific have been shown to have high passing rates of attention-check questions (Peer et al., 2017), there was a possibility that some participants will respond without reading the item carefully. The present study included three attention-check questions that were staggered throughout the survey. An example item was “Select ‘Moderately Agree’ for this item.” If a participant did not respond correctly to the attention-check questions, they may have responded inaccurately to the other questions, so their data was removed. The attention-check questions had correct response rates of 96%, 98%, and 99%, so response carelessness is not a significant concern for this data.
CHAPTER 3

RESULTS

Means, standard deviations, correlations, and coefficient alphas for the variables in this study are displayed in Table 1.

TESTS OF HYPOTHESES

Hypotheses 1-6 were tested using correlational analyses. Hypothesis 1 predicted that perceived levels of workload would be positively correlated with burnout. Workload was found to have a positive correlation with burnout ($r = .10, p = .23$), but it was not statistically significant, so hypothesis 1 was not supported. Hypothesis 2 stated that role overload would be significantly and positively correlated with burnout, and results showed that hypothesis 2 was supported ($r = .41, p < .01$).

Hypothesis 3 stated that perceived levels of workload would be significantly and negatively correlated with job satisfaction. Results showed that while workload and job satisfaction were negatively correlated, the correlation was not significant ($r = -.06, p = .47$). Therefore, hypothesis 3 was not supported. Hypothesis 4 stated that role overload would be significantly and negatively correlated with job satisfaction. Role overload was found to have a strong negative correlation with job satisfaction ($r = -.35, p < .01$), so Hypothesis 4 was supported.

Hypothesis 5 stated that workload would be significantly and negatively correlated with work engagement. Contrary to the predictions, workload was found to have a positive correlation with work engagement, but the correlation was not significant ($r = .16, p = .05$). Therefore, hypothesis 5 was not supported. Finally, hypothesis 6 stated that role overload would be significantly and negatively correlated with work engagement. Results showed that while the correlation was negative, the relationship was not significant ($r = -.16, p = .05$).
Table 1. Descriptive Statistics for Study Constructs

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td>1. Workload</td>
<td>16.14</td>
<td>4.98</td>
<td>.86</td>
<td></td>
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<td></td>
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<tr>
<td>2. Role Overload</td>
<td>16.08</td>
<td>7.49</td>
<td>.56**</td>
<td>.93</td>
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<td></td>
<td></td>
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<tr>
<td>3. Role Conflict</td>
<td>27.69</td>
<td>10.50</td>
<td>.44**</td>
<td>.72**</td>
<td>.88</td>
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<td>4. Polychronicity (IPV)</td>
<td>35.19</td>
<td>10.48</td>
<td>.13</td>
<td>.11</td>
<td>.17*</td>
<td>.87</td>
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<td>5. Polychronicity (MPI)</td>
<td>49.65</td>
<td>16.90</td>
<td>.10</td>
<td>.11</td>
<td>.19*</td>
<td>.88**</td>
<td>.94</td>
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<td>6. Burnout</td>
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<td>.45**</td>
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<td>7. Job Satisfaction</td>
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<td>-.40**</td>
<td>.10</td>
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<td>8. Work Engagement</td>
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<td>-.16</td>
<td>-.16*</td>
<td>.17*</td>
<td>.10</td>
<td>-.76**</td>
<td>.81**</td>
<td>.87</td>
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<tr>
<td>9. Disengagement</td>
<td>30.30</td>
<td>8.56</td>
<td>.00</td>
<td>.27**</td>
<td>.35**</td>
<td>-.11</td>
<td>-.07</td>
<td>.92**</td>
<td>-.85**</td>
<td>-.82**</td>
<td>.81</td>
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<td>10. Exhaustion</td>
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<td>8.29</td>
<td>.18*</td>
<td>.47**</td>
<td>.48**</td>
<td>-.14</td>
<td>-.09</td>
<td>.91**</td>
<td>-.67**</td>
<td>-.56**</td>
<td>.68**</td>
<td>.82</td>
<td></td>
</tr>
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<td>11. Age</td>
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<td>-.15</td>
<td>-.21**</td>
<td>.11</td>
<td>.05</td>
<td>-.36**</td>
<td>.24**</td>
<td>.23**</td>
<td>-.30**</td>
<td>-.35**</td>
<td>-</td>
</tr>
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<td>12. Gendera</td>
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<td>.50</td>
<td>-.17*</td>
<td>-.01</td>
<td>-.14</td>
<td>-.08</td>
<td>-.05</td>
<td>.02</td>
<td>-.08</td>
<td>-.09</td>
<td>.05</td>
<td>-.01</td>
<td>.07</td>
</tr>
</tbody>
</table>

Note: Internal consistency reliability estimates are reported in bold in the diagonal.
* Correlation is significant at the .05 level.
**Correlation is significant at the .01 level.
aCoded: 0 = female, 1 = male
Hypotheses 7-12 were tested using multiple regression analyses. Each hypothesis was tested using two sets of analyses, one that used the IPV and one using the MPI for the measure of polychronicity. None of the moderations were significant when running the analyses with just the predictors and interaction terms, so control variables were identified and added. Age was found to be positively correlated with work engagement \((r = .23, p < .01)\) and job satisfaction \((r = .24, p < .01)\), and negatively correlated with burnout \((r = -.36, p < .01)\). Therefore, age was added to each of the analyses as a control variable in the first step of the regression. Additionally, given that women tend to be slightly more polychronic than men, gender was added as another control variable in the first step. The second step added the predictor variables (i.e., workload or role overload and polychronicity), and the third step added the interaction term. The regression models with the interaction terms are displayed in Tables 2-7.

For the hypotheses related to burnout, the first regression equation containing only gender and age as predictors \((R^2 = .13)\) indicated that age was significantly related to burnout \((\beta = -.36, p < .01)\), but gender was not \((\beta = .05, p = .54)\). This first model will be used as the comparison for hypotheses 7 and 8.

Hypothesis 7 stated that polychronicity would moderate the relationship between workload and burnout such that the positive relationship between workload and burnout would be significantly weaker for those high in polychronicity compared to those low in polychronicity. When using the IPV, the second regression equation \((R^2 = .15)\) indicated that neither workload \((\beta = .13, p = .10)\) nor polychronicity \((\beta = -.11, p = .15)\) are significantly related to burnout. The interaction term between workload and IPV was added to the third step of the regression equation \((R^2 = .16)\), and it did not account for a significant increase in the variance in burnout \((\Delta R^2 < .01, \beta = .30, p = .43)\). Therefore, hypothesis 7 was not supported when using the IPV.

When using the MPI for hypothesis 7, the second regression equation \((R^2 = .15)\) indicated that neither workload \((\beta = .12, p = .11)\) nor polychronicity \((\beta = -.08, p = .32)\) were significantly related to burnout. The interaction term between workload and MPI was added to the third step of the regression equation \((R^2 = .15)\), and it did not account for a significant increase in the variance in burnout \((\Delta R^2 < .01, \beta = .17, p = .63)\). Therefore, hypothesis 7 was not supported when using the MPI.
Hypothesis 8 stated that polychronicity would moderate the relationship between role overload and burnout such that the positive relationship between role overload and burnout would be significantly weaker for those high in polychronicity compared to those low in polychronicity. When using the IPV, the second regression equation ($R^2 = .28$) indicated that role overload was significantly and positively related to burnout ($\beta = .38, p < .01$), and polychronicity was significantly and negatively related to burnout ($\beta = -.15, p = .04$). The interaction term between role overload and IPV was added to the third step of the regression equation ($R^2 = .28$), and it did not account for a significant increase in the variance in burnout ($\Delta R^2 < .01, \beta = .08, p = .79$). Therefore, hypothesis 8 was not supported when using the IPV.

When using the MPI for hypothesis 8, the second regression equation ($R^2 = .27$) indicated that role overload was significantly and positively related to burnout ($\beta = .37, p < .01$), but polychronicity was not significantly related to burnout ($\beta = -.11, p = .13$). The interaction term between role overload and MPI was added to the third step of the regression equation ($R^2 = .27$), and it did not account for a significant increase in the variance in burnout ($\Delta R^2 < .01, \beta = .14, p = .61$). Therefore, hypothesis 8 was not supported when using the MPI.

For the hypotheses related to job satisfaction, the first regression equation containing only gender and age as predictors ($R^2 = .07$) indicated that age was significantly related to job satisfaction ($\beta = .25, p < .01$), but gender was not ($\beta = -.10, p = .21$). This first model will be used as the comparison for hypotheses 9 and 10.

Hypothesis 9 stated that polychronicity would moderate the relationship between workload and job satisfaction such that the negative relationship between workload and job satisfaction would be significantly weaker for those high in polychronicity compared to those low in polychronicity. When using the IPV, the second regression equation ($R^2 = .08$) indicated that neither workload ($\beta = -.09, p = .26$) nor polychronicity ($\beta = .08, p = .33$) were significantly related to job satisfaction. The interaction term between workload and IPV was added to the third step of the regression equation ($R^2 = .08$), and it did not account for a significant increase in the variance in job satisfaction ($\Delta R^2 < .01, \beta = -.08, p = .83$). Therefore, hypothesis 9 was not supported when using the IPV.

When using the MPI for hypothesis 9, the second regression equation ($R^2 = .07$) indicated that neither workload ($\beta = -.08, p = .30$) nor polychronicity ($\beta = .01, p = .94$) were significantly related to job satisfaction. The interaction term between workload and MPI was
added to the third step of the regression equation ($R^2 = .08$), and it did not account for a significant increase in the variance in job satisfaction ($\Delta R^2 < .01, \beta = -.20, p = .59$). Therefore, hypothesis 9 was not supported when using the MPI.

Hypothesis 10 stated that polychronicity would moderate the relationship between role overload and job satisfaction such that the negative relationship between role overload and job satisfaction would be significantly weaker for those high in polychronicity compared to those low in polychronicity. When using the IPV, the second regression equation ($R^2 = .16$) indicated that role overload was significantly and negatively related to job satisfaction ($\beta = -.34, p < .01$), but polychronicity was not related to job satisfaction ($\beta = .11, p = .14$). The interaction term between role overload and IPV was added to the third step of the regression equation ($R^2 = .15$), and it did not account for a significant increase in the variance in job satisfaction ($\Delta R^2 = .15, \beta = .16, p = .61$). Therefore, hypothesis 10 was not supported when using the IPV.

When using the MPI for hypothesis 10, the second regression equation ($R^2 = .15$) indicated that role overload was significantly and negatively related to job satisfaction ($\beta = -.33, p < .01$), but polychronicity was not significantly related to job satisfaction ($\beta = .04, p = .64$). The interaction term between role overload and MPI was added to the third step of the regression equation ($R^2 = .14$), and it did not account for a significant increase in the variance in job satisfaction ($\Delta R^2 < .01, \beta = -.18, p = .52$). Therefore, hypothesis 10 was not supported when using the MPI.

For the hypotheses related to work engagement, the first regression equation containing only gender and age as predictors ($R^2 = .06$) indicated that age was significantly related to work engagement ($\beta = .24, p < .01$), but gender was not ($\beta = -.11, p = .18$). This first model will be used as the comparison for hypotheses 11 and 12.

Hypothesis 11 stated that polychronicity would moderate the relationship between workload and work engagement such that the negative relationship between workload and work engagement would be significantly weaker for those high in polychronicity compared to those low in polychronicity. When using the IPV, the second regression equation ($R^2 = .10$) indicated that neither workload ($\beta = .12, p = .12$) nor polychronicity ($\beta = .12, p = .13$) are significantly related to work engagement. The interaction term between workload and IPV was added to the third step of the regression equation ($R^2 = .10$), and it did not account
for a significant increase in the variance in work engagement ($\Delta R^2 = .01, \beta = .44, p = .27$). Therefore, hypothesis 11 was not supported when using the IPV.

When using the MPI for hypothesis 11, the second regression equation ($R^2 = .09$) indicated that neither workload ($\beta = .13, p = .10$) nor polychronicity ($\beta = .07, p = .39$) were significantly related to work engagement. The interaction term between workload and MPI was added to the third step of the regression equation ($R^2 = .10$), and it did not account for a significant increase in the variance in work engagement ($\Delta R^2 = .01, \beta = .47, p = .20$). Therefore, hypothesis 11 was not supported when using the MPI.

Hypothesis 12 stated that polychronicity would moderate the relationship between role overload and work engagement such that the negative relationship between role overload and work engagement would be significantly weaker for those high in polychronicity compared to those low in polychronicity. When using the IPV, the second regression equation ($R^2 = .10$) indicated that neither role overload ($\beta = -.15, p = .07$) nor polychronicity ($\beta = .15, p = .06$) were significantly related to work engagement. The interaction term between role overload and IPV was added to the third step of the regression equation ($R^2 = .11$), and it did not account for a significant increase in the variance in work engagement ($\Delta R^2 = .01, \beta = .32, p = .32$). Therefore, hypothesis 12 was not supported when using the IPV.

When using the MPI for hypothesis 12, the second regression equation ($R^2 = .09$) indicated that neither role overload ($\beta = -.14, p = .09$) nor polychronicity ($\beta = .10, p = .23$) were significantly related to work engagement. The interaction term between role overload and MPI was added to the third step of the regression equation ($R^2 = .09$), and it did not account for a significant increase in the variance in work engagement ($\Delta R^2 < .01, \beta = .24, p = .42$). Therefore, hypothesis 12 was not supported when using the MPI.

**EXPLORATORY ANALYSES**

Given that the correlations and interactions for workload were not significant, further analyses were conducted to examine the relationship between workload and the work outcomes. A curve estimation of the data for the present study showed that a quadratic relationship may be present between workload and the work outcomes, specifically job satisfaction and work engagement (Figures 1 and 2, respectively).
When examining the relationship between workload and job satisfaction, the linear estimation was nonsignificant ($R^2 < .001$, $F(1, 150) = .53, p = .470$), but there was evidence of a potential quadratic relationship ($R^2 = .07$, $F(2, 149) = 5.47, p < .01$). Similarly, the linear relationship between workload and work engagement was nonsignificant ($R^2 = .02$, $F(1, 150) = 3.77, p = .05$), but the quadratic estimation was significant ($R^2 = .07$, $F(2, 149) = 5.77, p < .01$).

Role overload is often examined alongside role conflict, so the present study also investigated role conflict, which occurs when a person experiences incompatibility or incongruency in their role requirements (Rizzo et al., 1970). Individuals who experience role conflict might be given tasks that they do not have the time or resources to complete, or they might receive assignments from two different groups that have conflicting requirements. Role conflict was measured using an 8-item scale (Rizzo et al., 1970). Participants were asked to rate the extent to which they agreed with statements about their role. Each item was rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Rizzo and colleagues (1970) reported an internal consistency of .82 for their role conflict scale. An example item was “I receive incompatible requests from two or more people.”

Results showed that role conflict was significantly and positively correlated with burnout ($r = .45, p < .01$), and significantly and negatively correlated with both job satisfaction ($r = -.40, p < .01$) and work engagement ($r = -.16, p = .048$).

When using the IPV, the second regression equation for burnout ($R^2 = .31$) indicated that both role conflict ($\beta = .44, p < .01$) and polychronicity ($\beta = -.18, p = .01$) are significantly related to burnout. The interaction term between role conflict and IPV was added to the third step of the regression equation ($R^2 = .32$), and it did not account for a significant increase in the variance in burnout ($\Delta R^2 = .01, \beta = -.34, p = .31$). When using the MPI, the second regression equation for burnout ($R^2 = .31$) indicated that both role conflict ($\beta = .44, p < .01$) and polychronicity ($\beta = -.15, p = .03$) are significantly related to burnout. The interaction term between role conflict and MPI was added to the third step of the regression equation ($R^2 = .31$), and it did not account for a significant increase in the variance in burnout ($\Delta R^2 < .01, \beta = -.20, p = .52$).

When using the IPV, the second regression equation for job satisfaction ($R^2 = .22$) indicated that role conflict was significantly and negatively related to job satisfaction ($\beta = -
.41, p < .01), but polychronicity was not related to job satisfaction (β = .14, p = .06). The interaction term between role conflict and IPV was added to the third step of the regression equation (R² = .20), and it did not account for a significant increase in the variance in job satisfaction (ΔR² < .01, β = .24, p = .50). When using the MPI, the second regression equation (R² = .21) indicated that role conflict was significantly and negatively related to job satisfaction (β = -.40, p < .01), but polychronicity was not related to job satisfaction (β = .08, p = .31). The interaction term between role conflict and MPI was added to the third step of the regression equation (R² = .21), and it did not account for a significant increase in the variance in job satisfaction (ΔR² < .01, β = -.30, p = .37).

When using the IPV, the second regression equation for work engagement (R² = .11) indicated that both role conflict (β = -.16, p = .047) and polychronicity (β = .16, p = .04) were significantly related to work engagement. The interaction term between role conflict and IPV was added to the third step of the regression equation (R² = .12), and it did not account for a significant increase in the variance in work engagement (ΔR² = .02, β = .65, p = .08). When using the MPI, the second regression equation (R² = .09) indicated that neither role conflict (β = -.16, p = .06) nor polychronicity (β = .11, p = .17) were significantly related to work engagement. The interaction term between role conflict and MPI was added to the third step of the regression equation (R² = .10), and it did not account for a significant increase in the variance in work engagement (ΔR² < .01, β = .25, p = .48).
CHAPTER 4

DISCUSSION

The main goal of the present study was to determine whether polychronicity moderates the relationships between job demands and work outcomes. Overall, polychronicity was not found to significantly moderate the relationships among these specific job demands (i.e., workload and role overload) and outcomes (i.e., burnout, job satisfaction, and work engagement). Previous studies have found that polychronicity is related to higher job satisfaction (Arndt et al., 2006) and work engagement (Conte et al., 2019). However, given the current study’s findings, it is possible that polychronicity does not have a significant impact on the way that people process increased workload and role overload in terms of overall burnout, job satisfaction or work engagement. The lack of moderation could indicate that employers might not need to develop different strategies to help monochronics and polychronics manage their workload and role overload with the intent of increasing job satisfaction and work engagement and decreasing burnout. Perhaps individuals find their own ways to manage their workload based on their personal preferences for multitasking.

Additionally, the present study aimed to determine whether the data collected from Prolific are high quality. This was the first study to measure these specific variables together using Prolific for data collection. Results showed that the correlations among these variables were similar in magnitude to the correlations from other studies. Participants also were attentive while reading the questions, which suggests that they provided quality answers to the survey overall. These findings indicate that future studies could collect data from Prolific as an alternative to Amazon MTurk.

CORRELATION HYPOTHESES

Results showed that workload was not significantly related to any of the work outcomes. There was a slight positive correlation with burnout, but the lack of significance was
surprising given that Baka and Derbis (2012) found a positive correlation between quantitative workload and burnout using the OLBI. Further examination of the data showed that workload is not related to the disengagement dimension of the OLBI, but it is significantly and positively related to the exhaustion dimension. Workload was not significantly related to work engagement, so this suggests that perhaps a heavy workload does not reduce the level of engagement or disengagement, but instead can lead to feelings of exhaustion. This finding is consistent with previous meta-analyses that found moderate correlations between workload and emotional exhaustion, but nonsignificant correlations between workload and employee engagement (Bowling et al., 2015).

Furthermore, results showed a slight negative but nonsignificant correlation between workload and job satisfaction, and a positive but nonsignificant correlation between workload and work engagement. Previous studies suggest that there may be a curvilinear relationship between workload and work engagement (Montani et al., 2019). Similarly, the curve estimation of the data for the present study showed that increased workload may lead to higher levels of job satisfaction and work engagement until a certain point, but when it gets to be too heavy, those outcomes start to decrease.

Role overload was significantly related to job satisfaction and burnout. More specifically, higher levels of role overload indicate lower levels of job satisfaction and higher levels of burnout, and this is consistent with previous findings (Chou & Robert, 2008; Dasgupta, 2012). The correlation between role overload and work engagement was negative but not significant. Based on previous findings (i.e., Altinay et al., 2019), it was surprising that the correlation in the present study was not significant \( r = -.16, p = .05 \), although the \( p \)-value suggests that perhaps a larger sample size would have produced a significant correlation. Role overload was also more strongly correlated with the exhaustion dimension of the OLBI \( r = .47, p < .01 \) than with the disengagement dimension \( r = .27, p = .01 \). These results may suggest that role overload can lead to more feelings of exhaustion if individuals are fulfilling multiple roles without the resources to perform them all simultaneously, and it appears that engagement levels do tend to decrease as role overload increases.

The exploratory analyses also examined the relationship between role conflict and work outcomes. Results showed that increased work conflict is significantly related to higher
levels of burnout, lower levels of job satisfaction, and lower levels of work engagement. Role conflict involves incompatible or overlapping roles (Rizzo et al., 1970), and the results suggest that individuals may experience more strain when faced with conflicting roles than they do when faced with higher role overload or workload. Having inconsistent or conflicting expectations from others might cause more strain than when the expectations exceed the individual’s abilities and resources.

**Moderation Hypotheses**

Contrary to the predictions, none of the moderation hypotheses were supported using polychronicity measured with either the IPV or the MPI as moderators. Previous studies did show support for the MPI as a moderator between demands, such as work-family conflict, and outcomes, such as job satisfaction and engagement (Conte et al., 2019), so it was surprising to see that none of the interactions were significant in the present study. The results indicated that there is not enough evidence to suggest whether relationships among the job demands and work outcomes significantly differ across monochronics and polychronics.

It could be possible that monochronics and polychronics have each established their own strategies for managing their heavy workload and therefore do not significantly differ in terms of work attitudes. Previous research suggests that there may be a positive relationship between polychronicity and job satisfaction (Jang & George, 2012), and researchers have found that employees whose preferences match the multitasking needs of the organization will experience higher satisfaction based on perceptions of employee fit (Arndt et al., 2006). However, the present study did not examine actual multitasking behavior or requirements. Individuals in this study may be in industries that do not require high levels of multitasking, so they may be able to adjust their behavior to match their preferences, or vice versa.

Furthermore, interactions were not significant when looking at polychronicity as a moderator in the relationship between role overload and work outcomes. Role overload might represent a lack of specific resources, including time, money, energy, or information (Kaufman et al., 1991). Polychronicity might have an influence when looking at temporal role overload because it deals more with how people manage their time. However,
participants may have been considering other types of role overload when filling out the survey, which could therefore lead to nonsignificant interactions.

The interactions were plotted to examine whether any relationships appear to be heading in the direction of the hypotheses. Several graphs did reveal that a potential interaction may exist, and perhaps a larger sample size would have led to significant results in the regression analyses. The interaction that was closest in to being significant was the relationship between role conflict and work engagement with the IPV as a potential moderator. Similarly, the graph of this relationship (Figure 3) showed that the negative relationship between role conflict and work engagement was less negative for polychronic individuals than it was for monochronic individuals.

Additionally, more of the graphs that examined polychronicity measured with the MPI as a potential moderator showed that a potential interaction may exist compared to the ones that used the IPV as a moderator. This is consistent with findings from Conte et al. (2019) that showed the MPI served as a significant moderator in the relationship between work-family conflict and work engagement, but none of their interaction terms using the IPV were significant. The IPV includes items that are related to a general belief that everyone should multitask, so perhaps the MPI is a better measure of actual preference to multitask (Conte et al., 2019). For instance, the graph of the relationship between workload and job satisfaction with the IPV as a moderator (Figure 4) does not appear to illustrate an interaction, but the graph with the MPI as a moderator (Figure 5) indicates that an interaction may exist.

Further examination of the curve estimations showed that there may be a difference in the curvilinear relationship between workload and work engagement at different levels of polychronicity measured using the MPI. The relationship was more significant when estimated as a quadratic curve for those who reported below average polychronicity, but was more significant as a linear estimation in the positive direction for those who reported above average polychronicity. This suggests that perhaps highly polychronic individuals might be more resilient to heavy workloads and are more engaged in their work as a result. However, additional data should be collected to confirm whether this is the case.
PROLIFIC DATA

Prolific was founded in 2014, and it is still emerging as an alternative to other crowdsourcing sites such as Amazon MTurk. This study contributes information about the reliability and validity of the data collected from Prolific. The internal consistency reliabilities were above .80 for all the survey measures, which is above the commonly acceptable level of .70. Additionally, the correlations among the demands and outcomes are consistent with findings from past research. For instance, the correlation between role overload and burnout was found to be .41 (p < .01), and the correlation between role conflict and burnout was .45 (p < .01). In a meta-analysis on the relationship between job stressors and job burnout, Lee et al. (2019) also found moderate correlations between role overload and burnout (r = .31), and between role conflict and burnout (r = .32). The results from the present study show that the Prolific data is similar to results from previous studies, so Prolific may be seen as a valid alternative to MTurk.

PRACTICAL IMPLICATIONS

Although many of the hypotheses in the present study were not supported, the findings still provide valuable information about how individuals manage their job demands in the workplace. Several graphs of the data show that polychronicity might moderate the relationships between some demands and workplace attitudes, so although the results were not statistically significant, future research should examine these relationships with a larger sample size. More polychronic individuals do tend to have slightly higher levels of job satisfaction and work engagement, as well as lower levels of burnout. It is possible that workplaces are requiring high levels of multitasking in their daily work, so monochronics are less satisfied with how they are required to manage their workload. If this is the case, then organizations might want to keep polychronicity in mind when hiring for positions that require heavy multitasking. Perhaps managers can develop strategies to help monochronics manage their workloads and role demands in ways that lend better to their individual preferences for multitasking, therefore increasing their satisfaction and engagement in their job.
STRENGTHS AND LIMITATIONS

One strength of the current study is the inclusion of data collected from Prolific. The sample was relatively diverse in terms of ethnicity and gender. Although the majority of participants were White, there was good representation of Asians, Hispanics, African Americans, Native Americans, and multiracial individuals. A survey conducted in 2019 by the U.S. Bureau of Labor Statistics found that Whites made up the majority of the workforce (77%), African Americans and Asians made up a combined 19%, and Hispanics (of any race, potentially overlapping with the previous percentages) made up 18% (U.S. Bureau of Labor Statistics, 2020). The sample for the present study had a similar breakdown of ethnicities, so it is comparable to the overall composition of the workforce in the United States. Additionally, both females and males were well-represented. The sample also varied in terms of highest degree held by participants. Approximately half of participants held a bachelor’s degree, whereas the other half held either a high school diploma, an associate degree, or a higher education degree. Despite being a convenience sample, the Prolific users who responded to the survey seem to be relatively diverse and representative of the larger population.

Participants from Prolific also showed to be attentive and provide quality data as discussed earlier. A major strength of the present study is that it showed that the quality of participants is similar to those from other studies, and therefore suggests that Prolific could be used more often in research that examine the specific variables in this study. MTurk has typically been more widely utilized in industrial/organizational psychology research, but as a result, participants may be more familiar with common survey measures. Prolific provides access to a new group of participants who are generally paid higher amounts for participation than other crowdsourcing sites (Palan & Schitter, 2018), which may therefore increase their motivation to provide quality responses. This study might encourage future researchers to use Prolific as a valid alternative.

A limitation to the study is the relatively small sample size. Previous studies that have found significant interactions with polychronicity as a potential moderator have had much larger sample sizes (i.e., Conte et al., 2019), so perhaps the present study would have found significant results if more participants were included. Although the power analysis determined that 143 participants minimum were required, other studies suggest that 300
participants are needed to detect moderate to large effects for interactions (Aguinis, 1995; Aguinis & Gottfredson, 2010). This study also collected self-report data, which is necessary for constructs such as polychronicity and the work outcomes, but it may have helped to have an additional source of data to represent the participants’ actual workload. However, we can consider perceived workload in this study rather than actual workload.

Additionally, given that the data collected were from a convenience sample, there could be some limitations to the quality of data. The responses to the survey were sent in very shortly (i.e., within a few hours) after the study was posted in Prolific, so the time of day that the study was posted might impact the results. The majority of participants reported working full-time (77%), whereas only 2% reported working part-time and on-call. 60.5% held non-managerial roles, whereas only 3.3% held executive positions. If the survey had been posted at different times throughout the day, there may have been a greater representation of part-time workers or executives. The survey did not ask for the industry in which participants work, so it is possible that the respondents are from fields that do not require heavy amounts of multitasking or vice versa. Furthermore, the sample consists of cross-sectional data. The survey data were collected at one point in time, but given that workload and role overload might change based on a particular day or season, we might see that the relationships between these variables differ when looking at different periods of time.

Another potential limitation to the study is that the data were collected nearly one year into the COVID-19 pandemic. A significant number of workplaces have transitioned to virtual work during the pandemic, so it is possible that participants’ attitudes about their work have shifted. Employees may also experience different levels of role overload or role conflict when working from home. For example, managers might think that employees have more time to do work when they do not need to commute into the office, and they might increase their responsibilities (Kumar et al., 2021). Some participants may also feel varying levels of job satisfaction and burnout as a result of the switch to virtual work and due to the pandemic in general. Therefore, although these results do provide some interesting findings, they might not generalize well to the work situation that develops post-pandemic.
SUGGESTIONS FOR FUTURE RESEARCH

Future research that examines the variables from the present study may want to collect a larger sample size to test whether the interactions would be significant on a larger scale. A sample size of at least 300 is recommended based on previous studies (Aguinis, 1995). Additionally, future studies could collect data from both Prolific and MTurk to compare samples and determine more concretely whether Prolific is a valid alternative to MTurk when examining variables of this nature.

Other constructs could also be included in the survey, such as questions about the amount of multitasking that is required in their jobs, or a measure of actual multitasking behavior. It may also be useful to gather data on the participants’ type of job or industry to see if any trends emerge in terms of job attitudes or multitasking requirements. Researchers may find that polychronicity acts as a moderator in some positions that require heavy levels of multitasking, but not in positions that involve less task switching.

Finally, future studies might examine the potential curvilinear relationship between workload and job satisfaction or work engagement more closely. It would be interesting to determine whether polychronics and monochronics differ in their satisfaction and engagement at particularly low and high levels of workload, as well as whether the curvilinear relationship changes depending on the level of polychronicity.

CONCLUSION

The present study examined relationships among work demands, including workload, role overload, and role conflict, and workplace outcomes, such as burnout, job satisfaction, and work engagement. The analyses also included polychronicity as a potential moderator in the relationships. Whereas several correlations were found to be significant, such as the relationships between role overload and burnout, role overload and job satisfaction, and role conflict with all three outcomes, none of the moderations were supported. However, several of the relationships did seem to be headed in the direction that was hypothesized, especially when using the MPI as the measure of polychronicity compared to the IPV.

This was the first study to examine polychronicity as a moderator in the relationships using these specific variables. It also contributes information about the validity and reliability of work-related data collected from Prolific. Results showed that Prolific is a valid
crowdsourcing tool for studies using variables related to the workplace, so future studies may be able to make use of Prolific as an alternative to MTurk.
REFERENCES


APPENDIX

SURVEY ITEMS

Demographic Questions

1. Which one best describes your current job?
   a. Full-time
   b. Part-time (scheduled)
   c. Part-time (on call)
2. How many years have you been working, total? _____
3. How many years have you been working in your present job? _____
4. How many hours per week do you work, on average? _____
5. Which one best describes your current positions?
   a. Non-managerial: I do not currently supervise anyone
   b. Managerial: I supervise at least one person when I am at work
   c. Executive: At least one person I am responsible for supervises others
6. Which one indicates your highest degree earned?
   a. High school diploma
   b. Associate Degree
   c. Bachelor’s Degree
   d. Master’s Degree
   e. Ph.D.
7. What is your age in years? _____
8. Which best represents your ethnicity?
   a. African American
   b. American Indian/Alaskan Native
   c. Asian
   d. Multiracial
   e. Hispanic
   f. Native Hawaiian/Pacific
   g. White
9. Which one best describes your gender?
   a. Female
   b. Male
   c. Other
Inventory of Polychronic Values (Bluedorn et al., 1999)

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10. I like to juggle several activities at the same time.
11. I would rather complete an entire project every day than complete parts of several projects.
12. I believe people should try to do many things at once.
13. When I work by myself, I usually work on one project at a time.
14. I prefer to do one thing at a time.
15. I believe people do their best work when they have many tasks to complete.
16. I believe it is best to complete one task before beginning another.
17. I believe it is best for people to be given several tasks and assignments to perform.
18. I seldom like to work on more than a single task or assignment at the same time.
19. I would rather complete parts of several projects every day than complete an entire project.

Multitasking Preference Inventory (Poposki & Oswald, 2010)

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20. I prefer to work on several projects in a day, rather than completing one project and then switching to another.
21. I would like to work in a job where I was consistently shifting from one task to another, like a receptionist or an air traffic controller.
22. 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.
23. When doing a number of assignments, I like to switch back and forth between them rather than do one at a time.
24. I like to finish one task completely before focusing on anything else.
25. It makes me uncomfortable when I am not able to finish one task completely before focusing on another task.
26. I am much more engaged in what I am doing if I am able to switch between several different tasks.
27. I do not like having to shift my attention between multiple tasks.
28. I would rather switch back and forth between several projects than concentrate my efforts on just one.
29. I would prefer to work in an environment where I can finish one task before starting the next.
30. I don’t like when I have to stop in the middle of a task to work on something else.
31. When I have a task to complete, I like to break it up by switching to other tasks intermittently.
32. I have a “one-track” mind.
33. I prefer not to be interrupted when working on a task.

Oldenburg Burnout Inventory (Demerouti et al., 2003)

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<td>4 Neither Agree nor Disagree</td>
<td>5 Slightly Agree</td>
<td>6 Moderately Agree</td>
<td>7 Strongly Agree</td>
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34. I always find new and interesting aspects in my work.
35. There are days when I feel tired before I arrive at work.
36. It happens more and more often that I talk about my work in a negative way.
37. After work, I tend to need more time than in the past in order to relax and feel better.
38. I can tolerate the pressure of my work very well.
39. Lately, I tend to think less at work and do my job almost mechanically.
40. I find my work to be a positive challenge.
41. During my work, I often feel emotionally drained.
42. Over time, one can become disconnected from this type of work.
43. After working, I have enough energy for my leisure activities.
44. Sometimes I feel sickened by my work tasks.
45. After my work, I usually feel worn out and weary.
46. This is the only type of work that I can imagine myself doing.
47. Usually, I can manage the amount of my work well.
48. I feel more and more engaged in my work.
49. When I work, I usually feel energized.
Job Satisfaction (Judge et al., 1998)

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50. I feel fairly well satisfied with my present job.
51. Most days I am enthusiastic about my work.
52. Each day of work seems like it will never end.
53. I find real enjoyment in my work.
54. I consider my job rather unpleasant.

Quantitative Workload Inventory (Spector & Jex, 1998)

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<td></td>
<td>Less than once per month or never</td>
<td>Once or twice per month</td>
<td>Once or twice per week</td>
<td>Once or twice per day</td>
<td>Several times per day</td>
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55. How often does your job require you to work very fast?
56. How often does your job require you to work very hard?
57. How often does your job leave you with little time to get things done?
58. How often is there a great deal to be done?
59. How often do you have to do more work than you can do well?

UWES-3 (Schaufeli et al., 2019)

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<td>Moderately Agree</td>
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60. At my work, I feel bursting with energy.
61. I am enthusiastic about my job.
62. I am immersed in my work.
Role Overload (Peterson et al., 1995)

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63. There is a need to reduce some parts of my role.
64. I feel overburdened in my role.
65. I have been given too much responsibility.
66. My work load is too heavy.
67. The amount of work I have to do interferes with the quality I want to maintain.

Role Conflict (Rizzo et al., 1970)

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68. I have to do things that should be done differently.
69. I receive an assignment without the manpower to complete it.
70. I have to buck a rule or policy in order to carry out an assignment.
71. I work with two or more groups who operate quite differently.
72. I receive incompatible requests from two or more people.
73. I do things that are apt to be accepted by one person and not accepted by others.
74. I receive an assignment without adequate resources and materials to execute it.
75. I work on unnecessary things.
Table 2. Moderated multiple regression analysis of workload predicting burnout, job satisfaction, and work engagement based on levels of polychronicity using the IPV.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Burnout</th>
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<th>Job Satisfaction</th>
<th></th>
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<th>Work Engagement</th>
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<td></td>
<td>β</td>
<td>p</td>
<td>95% CI</td>
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<td>p</td>
<td>95% CI</td>
<td>β</td>
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<td>95% CI</td>
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<td><strong>Main Effects</strong></td>
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<tr>
<td>Gender</td>
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<td>.50</td>
<td>[-3.16, 6.41]</td>
<td>-.11</td>
<td>.20</td>
<td>[-3.55, .74]</td>
<td>-.09</td>
<td>.29</td>
<td>[-2.06, .62]</td>
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<td>Age</td>
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<td>&lt;.01</td>
<td>[-.90, -.36]</td>
<td>.24</td>
<td>&lt;.01</td>
<td>[.06, .30]</td>
<td>.21</td>
<td>.01</td>
<td>[.03, .18]</td>
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<td>Workload</td>
<td>-.07</td>
<td>.79</td>
<td>[-1.80, 1.38]</td>
<td>-.04</td>
<td>.89</td>
<td>[-.76, .66]</td>
<td>-.16</td>
<td>.55</td>
<td>[-.58, .31]</td>
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<td>Polychronicity (IPV)</td>
<td>-.31</td>
<td>.24</td>
<td>[-1.22, .31]</td>
<td>.14</td>
<td>.62</td>
<td>[-.26, .43]</td>
<td>-.17</td>
<td>.54</td>
<td>[-.28, .15]</td>
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<td><strong>Interaction</strong></td>
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<td>Workload x Polychronicity (IPV)</td>
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<td>.43</td>
<td>[-.03, .06]</td>
<td>-.08</td>
<td>.83</td>
<td>[-.02, .02]</td>
<td>.44</td>
<td>.27</td>
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</table>

| R²                         | .16     |                  |                | .08              |                  |                | .10             |                  |                |
| ΔR²                        | <.01    |                  |                | <.01             |                  |                | .01             |                  |                |
| F for change in R²         | .63     | p = .43          |                | .05              | p = .83          |                | 1.23            | p = .27          |                |
Table 3. Moderated multiple regression analysis of workload predicting burnout, job satisfaction, and work engagement based on levels of polychronicity using the MPI.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th></th>
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<tbody>
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<td>p</td>
<td>95% CI</td>
<td>β</td>
<td>p</td>
<td>95% CI</td>
</tr>
<tr>
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<td></td>
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<td></td>
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<tr>
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<td>.20</td>
<td>[-3.56, .76]</td>
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<td>&lt;.01</td>
<td>[.07, .31]</td>
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<tr>
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<td>[-.66, .30]</td>
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<td>.59</td>
<td>[-.16, .27]</td>
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<tr>
<td><strong>Interaction</strong></td>
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<tr>
<td>Workload x Polychronicity (MPI)</td>
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<td>.63</td>
<td>[-.02, .03]</td>
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<td>.59</td>
<td>[-.02, .01]</td>
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<table>
<thead>
<tr>
<th></th>
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<th>Job Satisfaction</th>
<th>Work Engagement</th>
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<td>&lt;.01</td>
<td>.01</td>
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<td>$F$ for change in $R^2$</td>
<td>.23</td>
<td>$p = .63$</td>
<td>.30</td>
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</table>
Table 4. Moderated multiple regression analysis of role overload predicting burnout, job satisfaction, and work engagement based on levels of polychronicity using the IPV.

<table>
<thead>
<tr>
<th>Independent Variable</th>
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<th>Job Satisfaction</th>
<th>Work Engagement</th>
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<td>Main Effects</td>
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<tr>
<td>Gender</td>
<td>.03</td>
<td>.65</td>
<td>[.34, 5.37]</td>
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<tr>
<td>Age</td>
<td>-.29</td>
<td>&lt;.01</td>
<td>[-.76, -.26]</td>
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<tr>
<td>Role Overload</td>
<td>.32</td>
<td>.19</td>
<td>[-.32, 1.64]</td>
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<td>Polychronicity (IPV)</td>
<td>-.18</td>
<td>.24</td>
<td>[-.72, .18]</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Overload x Polychronicity (IPV)</td>
<td>.08</td>
<td>.79</td>
<td>[-.02, .03]</td>
</tr>
</tbody>
</table>

| $R^2$ | .28 | .15 | .11 |
| $\Delta R^2$ | <.01 | <.01 | .01 |
| $F$ for change in $R^2$ | .07 | $p = .79$ | .26 | $p = .61$ | .99 | $p = .32$ |
Table 5. Moderated multiple regression analysis of role overload predicting burnout, job satisfaction, and work engagement based on levels of polychronicity using the MPI.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Burnout</th>
<th></th>
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<th>Job Satisfaction</th>
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<th>Work Engagement</th>
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<tr>
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<td>( p )</td>
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<td>( \beta )</td>
<td>( p )</td>
<td>95% CI</td>
<td>( \beta )</td>
<td>( p )</td>
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<td>-.09</td>
<td>.23</td>
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<tr>
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<tr>
<td>Role Overload x Polychronicity (MPI)</td>
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<td>.61</td>
<td>[-.01, .02]</td>
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<td>.52</td>
<td>[-.01, .01]</td>
<td>.24</td>
<td>.42</td>
<td>[-.003, .01]</td>
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</table>

\[
\begin{align*}
R^2 & = .27 \\
\Delta R^2 & = <.01 \\
F \text{ for change in } R^2 & = .27, p = .61
\end{align*}
\]
Table 6. Moderated multiple regression analysis of role conflict predicting burnout, job satisfaction, and work engagement based on levels of polychronicity using the IPV.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Burnout</th>
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<th>Work Engagement</th>
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<td>β</td>
<td>p</td>
<td>95% CI</td>
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<td><strong>Main Effects</strong></td>
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<td>.99</td>
<td>[-.54, .55]</td>
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<td>.31</td>
<td>[-.03, .01]</td>
<td>.24</td>
<td>.50</td>
<td>[-.01, .01]</td>
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</table>

| R²                           | .32  |       |                  | .20  |       |                  | .12  |       |                  |
| ΔR²                          | .01  |       |                  | <.01 |       |                  | .02  |       |                  |
| F for change in R²           | 1.05 | p = .31 |                  | .46  | p = .50 |                  | 3.07 | p = .08 |                  |
Table 7. Moderated multiple regression analysis of role conflict predicting burnout, job satisfaction, and work engagement based on levels of polychronicity using the MPI.

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Burnout</th>
<th></th>
<th></th>
<th>Job Satisfaction</th>
<th></th>
<th></th>
<th>Work Engagement</th>
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<td>$\beta$</td>
<td>$p$</td>
<td>95% CI</td>
<td>$\beta$</td>
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<tr>
<td>Gender</td>
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<td>.14</td>
<td>[-2.34, .32]</td>
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<tr>
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<td>&lt;.01</td>
<td>[-.72, -.22]</td>
<td>.16</td>
<td>.04</td>
<td>[.01, .23]</td>
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<td>.02</td>
<td>[.02, .17]</td>
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<tr>
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<td>[-.12, .10]</td>
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<tr>
<td><strong>Interaction</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Role Conflict x Polychronicity (MPI)</td>
<td>-.20</td>
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<td>-.30</td>
<td>.37</td>
<td>[-.01, .003]</td>
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<td>[.002, .01]</td>
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<table>
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<tr>
<th></th>
<th>$R^2$</th>
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<th>$F$ for change in $R^2$</th>
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<th>$p = .52$</th>
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</tbody>
</table>

Note: The table displays the results of a moderated multiple regression analysis with role conflict as the predictor variable, burnout, job satisfaction, and work engagement as the outcome variables, and polychronicity (MPI) as the moderator.
FIGURES

Figure 1. Linear and quadratic curve estimations of the relationship between workload and job satisfaction.
Figure 2. Linear and quadratic curve estimations of the relationship between workload and work engagement.
Figure 3. Relationship between role conflict and work engagement at high and low levels of polychronicity using the IPV.

Figure 4. Relationship between workload and job satisfaction at high and low levels of polychronicity using the IPV.
Figure 5. Relationship between workload and job satisfaction at high and low levels of polychronicity using the MPI.