

## **Downtime from Work: Relationships among Workaholism, Work Engagement, Work Stress, and Paid Time Off**

**Natalie French**

East Carolina University

**Shahnaz Aziz**

East Carolina University

**Karl L. Wuensch**

East Carolina University

The purpose of this study was to investigate potential associations among workaholism, work engagement, work stress, and paid time off (PTO) usage. Although recovery from daily work stressors is essential for continued work success, almost one-third of PTO provided in the U.S. is not utilized. Therefore, a deeper investigation of who relinquishes this benefit (that enhances health and wellbeing) and, instead, does not use PTO days is crucial. Full-time employees ( $N = 302$ ) in a variety of occupations in the U.S. were surveyed. Specifically, they were assessed on workaholism, work engagement, work stress, and PTO usage and potential relationships were examined. Our findings demonstrated that workaholism is negatively associated with PTO usage and positively related to work stress. Additionally, work stress is negatively linked to PTO usage and work engagement. Continued research on PTO usage, worker characteristics, and work-life initiatives may improve employee benefit packages, which could yield monetary savings for organizations. Furthermore, work-life initiatives enhance employee health and wellbeing, thereby increasing job performance and positively influencing organizations.

As an employee, it is important to know what benefits an employer can provide, above and beyond monetary compensation; time off is one such benefit. Paid time off (PTO) is a benefit provided by the employer to allow for time off, vacation, sick time, and federal holidays, while still receiving a salary (Ford & Locke, 2002). Recovery from daily work stressors is essential for continued work success (de Bloom et al., 2013). For many, weekends are the most accessible time to experience such recovery. This 48-hour period can rejuvenate hardworking employees, unless life stressors interfere—Fritz and Sonnentag (2005) report that for most people, nonwork hassles interfere with downtime. Second, there are several industries whereby workers may not have a 48-hour period for recovery. Instead, they may work overtime or have rest days that are not consecutive. According to the Bureau of Labor Statistics (2020), 32% of workers reported working on weekends. Thus, some employees use PTO for vacations to recover and disengage from work.

Vacations are physically, psychologically, and socially beneficial (de Bloom et al., 2010). Individuals may engage in them to partake in different leisure activities and take a break from the repetitive nature of work (Newman et al., 2014). de Bloom et al. (2010) found time off increased vacationers' overall health and wellbeing, but upon returning to work, the positive effects faded within the week. Regardless, the U.S. is one of five developed nations that does not have any mandated time off for its

workforce (Vartan, 2018). The Organization for Economic Cooperation and Development (OECD) is a group of 34 member countries that discuss economic policies in democratic countries. Of the 34 member countries, the U.S. is the only country with a statutory minimum of zero days PTO (OECD, 2016). In contrast, Finland and France have a minimum of 30 days of annual vacation leave per year, three times the average PTO offered in the U.S. (DeNisi & Griffin, 2015).

Nonetheless, many organizations do offer PTO as part of their benefits packages. Offered PTO varies by industry and occupation, as well as one's time spent working at the company. The average PTO offered per individual per year is 10 days, including national holidays (DeNisi & Griffin, 2015). However, in 2018, American employees left 768 million vacation days unused, thus, on average, employees left 6.5 days of unused PTO, accounting for 27% of all PTO in the U.S. (U.S. Travel Association, 2019).

The extant literature lacks a comprehensive review of why PTO use has declined in recent years. There tends to be a disparity on how different workers view PTO initiatives. Corporate culture and managerial experience contribute to personal attitudes that influence decision-making on whether to use PTO (Cossin et al., 2021). Managers may see PTO usage to categorize their employees, thereby pressuring subordinates to take less time off—for example, employees may feel pressure to com-

plete their work tasks (Barber et al., 2019). Thus, the organizational culture in large companies might contribute to employees working more than is necessary, so they may be seen more favorably. Previous research shows a positive relationship between an overwork climate and workaholism (Cossin et al., 2021; Mazzetti et al., 2014). Workaholics compulsively work more hours than required; they are overinvolved in work and spend less time engaging in other aspects of their lives (Andreassen, 2014; Clark et al., 2016).

In the current study, we evaluated the influence of work and worker characteristics on PTO usage. Specifically, we explored the relationship between workaholism and PTO usage. Previous researchers have discussed the hesitancy for employees to use PTO in terms of organizational work culture and managerial pressure (Ford & Locke, 2002). More recently, self-efficacy was a reason for the extent to which employees will or will not use PTO (Kuykendall et al., 2020). However, the relationship between PTO usage and workaholic tendencies has never been addressed. Considering most individuals find work stressful, but so much of PTO is unused, an investigation of this association will add to the workaholism literature. Relationships between work stress, work engagement, workaholism, and PTO usage were also analyzed.

Understanding why individuals forego their PTO can help organizations implement work-life programs (e.g., flexible work arrangements) to promote healthy working habits. These initiatives support job demands and encourage a healthy lifestyle. Effectively balancing work and life can lead to a successful career and improved psychological wellbeing (Fotiadis et al., 2019). Work-life balance initiatives are highly regarded by employees (de Bloom & Van Reenen, 2006), but are costly and may not be used by all (Darcy et al., 2012). Therefore, such benefits, including PTO, should be created with employees' interests in mind.

## Literature Review

### Workaholism and Work Engagement

Workaholism was first presented by Oates (1971) as a work addiction whereby individuals have an inner compulsion to work. Initially, it was thought workaholics uniquely worked long hours. Continued research has uncovered more aspects to describe workaholism than simply hours worked; quantifiable aspects of work, as well as employees' attitudes and feelings towards their job, were considered (Aziz et al., 2018; Spagnoli et al., 2020). Recent literature conceptualizes workaholism as the compulsive need to work excessively, and views it as a broad construct with multiple facets (Clark et al., 2020).

Many see work engagement as falling under the umbrella of workaholism, thereby deeming workaholic as the 'bad' type of worker and work engaged as the 'good' type; Schaufeli et al. (2006) found a positive link between working excessively in both workaholism and work engagement. What distinguishes workaholism as 'bad' is its positive relationship with compulsive work, while work engagement is strongly associated with passion to work.

Engaged workers view work as highly enjoyable (van Wijhe et al., 2011), while workaholics do not (Clark et al., 2016). As workaholics find reinforcement from tangible rewards like "winner take all systems" (Ng et al., 2007), they are highly influenced by organizational culture (Cossin et al., 2021; Mazzetti et al., 2014).

Workaholics report higher levels of work stress (Aziz et al., 2018), health issues (Clark et al., 2016), and burnout (Moyer et al., 2017) than non-workaholics. Work can be one of the major stressors in our lives. Bakker et al. (2014) introduced job demands as characteristics of a job that might produce strain, such as workload and physical and emotional demands. Any part of a job that may add stress is considered a job demand. These job demands, or work stressors, have been linked to poorer long-term job performance and a decline in health and wellbeing (Balducci et al., 2020). Additionally, since workaholics spend more time working than others, they experience work-life imbalance (Di Stefano & Gaudiino, 2018) and life dissatisfaction (Vitiello et al., 2016).

### Work Stress

Work stress is a physiological and psychological response to variations between job demands and available resources—it is the outcome of the interaction between the person and the environment, whereby one will perceive an event as stressful if their environment does not provide sufficient resources to successfully combat with perceived demands (Ganster & Schaubroeck, 1991). Work stress constitutes a major stressor, whereby job demands account for a large portion of stress employees feel, and it is related to poor health (Balducci et al., 2020; Kim et al., 2020). While not all job demands are negative, they can evoke stress if an employee feels overwhelmed, which can lead to declining health and lower productivity (Huan & Oppenauer, 2019).

Due to the negative implications of excessive stress, recovery from daily stressors during non-work time is important and leads to more availability of resources while at work (Sonnentag et al., 2017). One should use different leisure activities after work hours to recover from work, however, the mere thought of negative work aspects can impede recovery from stress (Sonnentag et al., 2017). While most workers experience work stress, so many days of PTO go unused, thus, the most accessible way to recover from work is using PTO or vacation time (Hächler et al., 2017).

### Time Off, Vacation, and Leisure Time

Time off gives opportunities for recovery (e.g., detachment, relaxation), especially when energy resources are low, for example, after a critical deadline or hectic work period (Sonntag, 2018). However, it can also give individuals time to pursue personal and social interests outside of work (Syrek et al., 2018). Weekends do not allow sufficient time to recover from the workweek because non-work hassles interfere, thus, PTO allows employees time to recover through short respites or longer vacations (Sonntag et al., 2017).

Vacations are time spent away from home for longer than four days, and respites are low work stress occasions (Westman & Eden, 1997). They offer opportunities to disconnect, engage in leisure activities, and partake in recovery experiences. Vacations have immediate positive effects on health and wellbeing (Virtanen et al., 2020), but gradually fade over a few weeks as one returns to work (de Bloom et al., 2013). Longer vacations (4 or more days) offer better opportunities for recovery than short respites, and individuals who enjoy more recovery experiences during vacation and the following weekends enjoy slower fade-out effects post vacation (Syrek et al., 2018). Vacations permit time for social interests and religious pursuit, as well as travel to experience new places and diverse cultures (Crouch, 2013).

Some may partake in leisure activities to offset work or life stressors (Newman et al., 2014). Leisure activities positively influence wellbeing and life satisfaction (Hächler et al., 2017). de Bloom et al. (2013) found relaxation, passive activities, and social activities were highly related to wellbeing during and after vacation. Tomioka et al. (2019) reported cognitive and physical leisure activities positively influenced senior employees' self-reported health. However, physical leisure activities had longer-lasting effects on overall health. When individuals participate in multiple leisure activities, it substantially affects subjective wellbeing (Newman et al., 2014).

### Study Hypotheses

Social cognitive theory, posited by Bandura (1986), was used to further explain individual differences in PTO usage (Kuykendall et al., 2020). Domain-specific self-efficacy, the extent to which one believes they are capable of handling controllable factors (Bandura, 2005), was an important antecedent for engaging in recovery experiences such as PTO. Kuykendall et al. (2020) demonstrated work addiction is negatively related to PTO usage and self-efficacy. When a climate of overwork exists, efficacious individuals tend to exhibit workaholic tendencies (Cossin et al., 2021; Mazzetti et al., 2014). Workaholics are self-efficacious and compulsively feel the need to spend more time fulfilling their tasks.

Conservation of resources theory (COR; Hobfoll, 1989) suggests individuals are motivated to protect resources that are important to them (Halbesleben et al., 2014). Workaholics work excessively (Clark et al., 2016) and may view their work as a resource to protect, spending more time than necessary working. Work-life imbalance occurs when there is a disproportionate amount of energy spent on aspects of one's work compared to their life outside of work, thereby creating inter-role conflict (Aziz et al., 2006). A primary source of work-life imbalance is the competition for time. To conserve the important resource of work, workaholics spend more time at work and less time on other aspects of life. This notion is supported by Aziz and Zickar (2006), who found workaholics reported a high amount of work interfering with life compared to non-workaholics. Additionally, Clark et al.'s (2016) meta-analysis revealed workaholism was positively related to

work-life imbalance,  $r = .47$ . When there is substantial imbalance in work-life, less time will be spent outside work and with family (Andreassen, 2014), as well as on other life events, such as vacations. Thus, we proposed the following hypothesis:

Hypothesis 1 (H1): Workaholism will be negatively related to PTO usage.

Workaholics find less enjoyment in their work than do engaged workers (Clark et al., 2016; van Wijhe et al., 2011). Although the relationship between workaholism and work engagement has shown mixed results (Clark et al. 2016), further research explains key differences between both worker types. Shimazu and Schaufeli (2009) found a positive correlation between workaholism and poor health, and a positive link between work engagement and wellbeing. van Beek et al. (2012a) refined the definition of workaholism, further differentiating it from work engaged individuals, by their motivating behaviors. Workaholism was positively correlated with only extrinsic motivation and work engagement with both extrinsic and intrinsic motivation. van Beek et al. (2012b) built on the regulatory focus theory by incorporating the prevention versus promotion approach. The regulatory focus theory posits contrasting strategies to "approach pleasure and avoid pain" differ based on the individual (Brockner & Higgins, 2001). Workaholics are driven by prevention and the need for security. Engaged workers are driven by promotion and the need for growth and development (van Beek et al., 2012b).

Although workaholics and engaged workers are highly involved in their work, Shimazu & Schaufeli (2009) found differences in outcome variables. Workaholism was positively related to ill-health, and negatively related to life satisfaction and job performance. Conversely, work engagement was negatively related to ill health, and positively related to life satisfaction and job performance. The prevention versus promotion theory (van Beek et al., 2012b) and the results from Shimazu & Schaufeli (2009), suggest workaholism and work engagement are distinct. Therefore, the following hypothesis was presented:

Hypothesis 2 (H2): Workaholism will be negatively related to work engagement.

When there is an imbalance of resources to job demands, individuals feel the burden of work stress (Bakker et al, 2014). Balducci et al. (2020) concluded workaholism uniquely impacts workload. Thus, workaholics will have a higher workload than non-workaholics in the same role. Higher workloads lead to more job demands. There is extensive research on the relationship between workaholism and work stress. The effort-reward imbalance (ERI) model explains that when effort is motivated by external factors (e.g., money) it is followed by minimal gain (Siegrist et al., 2004). Siegrist et al. also indicated the

stress of this imbalance leads to negative health outcomes. Those who are characteristically motivated by excessive work (e.g., workaholics) are more likely to experience the imbalance of high effort and low reward. Generally, workaholics report higher levels of work stress than non-workaholics (Aziz et al., 2018; Clark et al., 2016). Accordingly, the following hypothesis was posited:

Hypothesis 3 (H3): Workaholism will be positively related to work stress.

Workaholics and engaged workers have high work drive and high work involvement (Schaufeli et al., 2006a; Shimazu & Schaufeli, 2009). These two types of working habits inevitably lead to comparable outcomes. In the COR theory, engaged workers view work as a resource that is valuable (Halbesleben et al., 2014; Selenko et al., 2013). In Bonebright et al.'s (2000) study, engaged workers reported almost identical work-life imbalance—both workaholics and engaged workers reported significantly higher work-life imbalance compared to non-workaholics, suggesting both types of workers spend more time at work than they do at home. Additionally, the time they spend at work is to conserve a valuable resource. Thus, we proposed work engagement will have a similar link to PTO usage as workaholism:

Hypothesis 4 (H4): Work engagement will be negatively related to PTO usage.

Excessive workload can lead to work stress (Balducci et al., 2020). Taking PTO or going on a vacation implies work will not get done during that time. Employees may decide not to use their PTO for fear of being more stressed when returning to work. de Bloom et al. (2013) characterized individuals losing the positive vacation-aftereffects quickly after returning to work. Such quick loss of the positive effects could be due to the stressful nature of being away from daily job duties. Syrek et al. (2018) found those who enjoy more recovery experiences while on vacation and the following weekends enjoy slower fade-out effects after vacation. The job demands-resources (JD-R) model states when job demands are high, work absorption increases (Bakker et al., 2014), thereby increasing work stress. Job demands (e.g., work overload) that increase stress may lead to long-term exhaustion (Bakker et al., 2014). Anticipation of the potential stress from the buildup of work while taking time off, may deter one from using PTO. Thus, we presented the following hypothesis:

Hypothesis 5 (H5): Work stress will be negatively related to PTO usage.

## Method

### Participants

The sample consisted of 302 full-time US-based employees, recruited via Amazon's Mechanical Turk

(MTurk). Participants ranged from 21 to 69 years old ( $M = 38.86$ ,  $SD = 10.41$ ). Just over half of the respondents identified as male (55.2%) and 44.1% as female. Seventy eight percent identified as Caucasian/White, 7% as African American or Black, 7.5% as Asian/Pacific Islander, 4% as Hispanic or Latino, 1.5% as Native American or American Indian, and 1.2% as other. Many participants reported receiving a bachelor's degree (48.9%), followed by master's degree (16.7%), high school or less (15.5%), and associate's degree (13.8%). Other education included doctorate degree (1.9%) and professional degree (2.2%). Just under two-thirds of the participants reported they were married (62.2%) and 27.1% reported being single. Sixty-one percent indicated they have children.

Participants varied in work field, with the most common being information technology (15.3%) and health science (12.1%), followed by education (8.2%) and business management administration (7.3%). On average, participants reported working at the same organization for 7.2 years and holding the same position for 5.6 years. Sixty-six percent reported being mid-level employees, 18.6% entry-level, and 14.8% senior-level. About half (49.8%) of the respondents reported making less than \$60,000 per year, with 2% making less than \$20,000; 16% percent earned over \$100,000 per year.

On average, including remote work, participants worked 44.8 hours weekly ( $SD = 6.8$ ). Of those who reported working more than 40 hours a week, 42.7% worked those extra hours to complete projects by a set deadline and 33% for overtime pay. Fifty-three percent of participants reported not expending all their PTO, with the average having 10.16 days left over, ( $SD = 11.89$ ). Only 13.6% of participants who did not utilize all their PTO stated their company 'paid out' unused PTO. Sixty-one percent indicated using PTO for a vacation (i.e., 4 or more days away from work), while 5% reported using none of their PTO in the last calendar year.

### Procedure

Upon approval by the Institutional Review Board, survey items were compiled via Qualtrics and administered through MTurk. MTurk is a crowdsourcing marketplace that allows companies to outsource virtually for various tasks, allowing for a demographically diverse participant pool. MTurk enables employers or researchers to post Human Intelligence Tasks (HITs) that specify requirements for who can qualify to complete the tasks. These crowd-workers complete HITs in exchange for a rate set by the researcher and receive HIT approval rates depending on if they finish a task. The qualifications to complete this survey were set at: US-based participant, minimum HIT approval of 95%, and a full-time employee. Participants were briefed on the purpose of the study and the expected time for completion. They were provided with an informed consent document, explaining participation is voluntary and assures confidentiality. Participants were assessed on workaholism, work engagement, work stress, and PTO usage. Demographics were collected, and they received a monetary compensation (i.e., \$0.25) in exchange for survey completion.

## Measures

**Workaholism.** The 29-item Workaholism Analysis Questionnaire (WAQ; Aziz, Uhrich, Wuensch, & Swords, 2013) was used to assess workaholism. It uses a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), whereby higher scores indicate greater levels of workaholism. A sample item includes, "I enjoy spending evenings and weekends working." A Cronbach's alpha of .96 was obtained.

**Work engagement.** The shortened Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006b) was used to assess work engagement. It uses a seven-point frequency scale ranging from 0 (never) to 6 (every day); higher scores suggest greater levels of work engagement. A sample item is, "At work, I feel bursting with energy." A Cronbach's alpha of .94 was obtained.

**Work stress.** The 8-item Stress in General Scale-Revised (SIG-R; Yankelevich et al., 2012) was used to assess work stress. A sample question is "Does this describe your job...Demanding", with 'yes', 'no', and 'cannot decide' given as possible response options. Higher scores indicate more work stress. Only one item is reverse-scored, otherwise answers are coded as 3, 0, and 1.5. A Cronbach's alpha of .85 was obtained.

**PTO usage.** Respondents were asked how many days of PTO were offered to them in the last year and how many of those days did they take. PTO usage was computed as the ratio of the number of hours of PTO that the respondent used in the last calendar year to the number of hours offered to them in the last calendar year.

## Data Analysis

Demographics (e.g., age, gender identity, race/ethnicity) and work-related factors (e.g., industry type, hours worked per week) were used to describe the study participants. SPSS v27 was utilized to clean and analyze the data, as well as run descriptive statistics (i.e., means, standard deviations, and ranges) for workaholism, work engagement, work stress, and PTO usage. Reliability analyses were conducted to determine the internal consistency (i.e., Cronbach's alpha) of the measures. Pearson correlations were computed between the study variables; they were used to address H1 to H5.

SPSS v27 was utilized to conduct a sequential multiple regression analysis to test the effects of workaholism, work stress, and work engagement on PTO after controlling for demographic variables. In the first step, all the demographic variables were entered (i.e., education, career status, marital status, race/ethnicity, income, gender identity, and age). In the second step, workaholism, work stress, and work engagement were entered. A .05 criterion of statistical significance was employed for all tests.

After controlling for demographic variables, the hypothesized variable relationships were tested for explaining PTO.

## Results

There was mixed support for the study hypotheses (see Table 1). H1 was supported, as workaholism was signifi-

cantly and negatively related to PTO usage,  $r = -.18$ ,  $p = .002$ . H2 was not supported as workaholism was not significantly correlated with work engagement,  $r = .08$ ,  $p = .15$ . There was also a positive significant correlation between workaholism and work stress,  $r = .48$ ,  $p < .001$ , thereby supporting H3. Work engagement was not significantly related to PTO usage,  $r = -.01$ ,  $p = .92$ , thus H4 was not supported. H5 was supported, as work stress was significantly and negatively related to PTO usage,  $r = -.15$ ,  $p = .009$ .

A sequential multiple regression analysis was used to test the effects of workaholism, work stress, and work engagement on PTO after controlling for demographic variables. In the first step, all the demographic variables were entered (education, career status, marital status, race/ethnicity, income, gender identity, and age). The first model was significant,  $F(9, 285) = 2.09$ ,  $p = .030$ ,  $R^2 = .062$ , adjusted  $R^2 = .032$ . Only the two education dummy variables had significant unique effects and indicated that those with graduate or professional degrees had lower PTO than those with less advanced degrees (Table 2).

In the second step, workaholism, work stress, and work engagement were entered, significantly increasing the  $R^2$  to .102,  $F(3, 282) = 4.19$ ,  $p = .006$  (Table 3). The second model was significant,  $F(12, 282) = 2.67$ ,  $p = .002$ , adjusted  $R^2 = .06$ . Only the two education dummy variables and workaholism were significant. For workaholism,  $\beta = -.138$ ,  $p = .049$ . Univariate analysis showed that income was significantly inversely correlated with PTO,  $r = -.125$ ,  $p = .030$ . Education level was also significantly related with PTO,  $F(2, 297) = 6.18$ ,  $p = .002$ ,  $R^2 = .040$ , with PTO being significantly lower among those with graduate or professional degrees than among those without such advanced degrees.

## Discussion

Workaholism is associated with negative work and life

**Table 1**

### *Descriptive Statistics and Intercorrelations*

| Variable               | 1        | 2      | 3      | 4     |
|------------------------|----------|--------|--------|-------|
| 1. Workaholism         | (.96)    |        |        |       |
| 2. Work Engagement     | .08      | (.94)  |        |       |
| 3. Work Stress         | .48**    | -.34** | (.85)  |       |
| 4. Paid Time Off (PTO) | -.18**   | -.01   | -.15** | -     |
| Range                  | 1 - 4.86 | 0 - 6  | 0 - 3  | 0 - 1 |
| M                      | 2.70     | 3.55   | 1.69   | .66   |
| SD                     | .78      | 1.36   | 1.03   | .33   |

*Note.*  $N = 302$ . Entries on the main diagonal are Cronbach's alphas. PTO usage is a percentage. It was computed as the ratio of the number of hours of PTO that the respondent used in the last calendar year to the number of hours offered to them in the last calendar year. \*\* $p < .01$

**Table 2***Multiple Regression Predicting PTO from Demographics*

| Predictor       | $\beta$ | p   |
|-----------------|---------|-----|
| Career Status 1 | -.06    | .50 |
| Career Status 2 | -.08    | .34 |
| Education 1     | .19*    | .02 |
| Education 2     | .22*    | .01 |
| Race = White    | .04     | .50 |
| Income          | -.11    | .10 |
| Married         | -.07    | .24 |
| Gender = Female | .05     | .40 |
| Age             | .03     | .08 |

Note. Exact  $p$  values are for the unique effects of the predictors. Career status 1 contrasted entry level respondents with those with higher levels. Career status 2 contrasted those with mid-level status with all others. Education 1 contrasted those whose highest degree was an associate degree or less with those with higher degrees. Education 2 contrasted those whose highest degree was a bachelor's degree with all others. \* $p < .05$

**Table 3***Multiple Regression Predicting PTO from All Predictors*

| Predictor       | $\beta$ | $p$ |
|-----------------|---------|-----|
| Career Status 1 | -.06    | .47 |
| Career Status 2 | -.09    | .28 |
| Education 1     | .16*    | .04 |
| Education 2     | .18*    | .02 |
| Race = White    | .04     | .49 |
| Income          | -.12    | .06 |
| Married         | -.07    | .23 |
| Gender = Female | .07     | .26 |
| Age             | .00     | .98 |
| Workaholism     | -.14*   | .04 |
| Work Engagement | -.03    | .61 |
| Work Stress     | -.10    | .15 |

Note. Exact  $p$  values are for the unique effects of the predictors. \* $p < .05$

outcomes, including work stress (Aziz et al., 2018). The number of job demands can increase one's level of work stress. The combination of such demands and a lack of job resources (e.g., task autonomy) can make combating work stress even more difficult (Bakker et al., 2014). Thus, work stress can lead to feelings of fatigue, poor job

performance, and burnout (Andreassen, 2014; Smith et al., 2018). To alleviate stress and work pressures, many companies implement work-life balance initiatives, including PTO. While several of these initiatives improve overall life satisfaction (Blair-Loy & Wharton, 2002), no relationship has been found between them and job performance (de Bloom & Van Reenen, 2006). For many working adults, especially those with families, weekends do not offer enough time to recover from work (Fritz & Sonnentag, 2005). Thus, PTO can offer extended time off from work and time to pursue non-work interests. However, despite the positive effects of vacations and other forms of PTO, much of the PTO in the U.S. goes unused. Thus, we examined work-related characteristics that may lead to individuals forgoing their PTO.

The current study contributes to the existing research on workaholism, work stress, and work engagement in many ways. First, it fills a gap in terms of how workaholism relates to work stress and work engagement. While engaged workers are characterized distinctly by their passion for work (Shimazu, & Schaufeli, 2009), there is some overlap with workaholism. Therefore, it is important to know how these two worker characteristics may relate. Moreover, we contribute to the dearth in PTO literature in that a significant relationship was established between PTO usage and workaholism. We also sought to understand types of individuals who decide to forego PTO offered by their employer; those characterized as workaholics use less PTO than other types of workers. Therefore, we demonstrated that low PTO usage is an observable behavior seen in workaholics.

First, the association between workaholism and PTO usage was investigated. As predicted, workaholism was negatively related to PTO usage (H1). Many researchers have established workaholism is related to work-life imbalance, and workaholics spend more time working than other types of workers (Andreassen, 2014; Aziz & Zickar, 2006; Clark et al., 2016). Additionally, COR theory suggests individuals are motivated to protect resources that are important to them (Halbesleben et al., 2014). For workaholics, an important resource may be job security, which further explains why they forego their PTO days and choose to work instead.

The relationship between workaholism and work engagement was examined. Contrary to expectation that workaholism would be negatively related to work engagement (H2), we found an insignificant relationship. Research is inconclusive on the nature of the relationship between workaholism and work engagement (Clark et al., 2016). However, there are distinct similarities and differences between them (Aziz & Zickar, 2006; Schaufeli et al., 2006a; Shimazu & Schaufeli, 2009). Both engaged workers and workaholics work excessively with a high drive to work (Aziz & Zickar, 2006). The distinction between these two worker characteristics is characterized by their level of work enjoyment (Schaufeli et al., 2006a). Workaholics also differ from engaged workers in that they are motivated by extrinsic factors (van Beek et al., 2012a). These competing commonalities and differences may explain why no significant relationship was found.

Next, the relationship between workaholism and work stress was investigated. As predicted, there was a positive correlation between them, supporting H3. While the breadth of workaholism research is expanding, many studies conclusively find workaholics report higher stress levels than non-workaholics (Aziz & Zickar, 2006; Clark et al., 2016). This aligns with the ERI model, which indicates when individuals (e.g., workaholics) are motivated by external factors, there is typically minimal gain (Siegrist et al., 2004). This imbalance leads to detrimental health outcomes such as stress, thereby supporting the positive association between workaholism and work stress.

No relationship was observed between work engagement and PTO usage, thus, H4 was not supported. Previous research confirms there are clear differences between workaholics and engaged workers. Compared to workaholics, engaged workers report less stress (Aziz et al., 2018; Clark et al., 2016), less health issues, and more life satisfaction (Shimazu & Schaufeli, 2009). Time off can provide the chance for stress recovery and reduce the likelihood of burnout (Sonnetag, 2018). Engaged workers may spend more time working than other types of workers, but might take advantage of work-life initiatives such as PTO to provide stress relief. This might explain why a relationship was not found between work engagement and PTO usage.

The relationship between work stress and PTO usage was also examined. Support was obtained for H5 in that there was a negative association between them. Given that excessive workload can lead to work stress (Balducci et al., 2020), the fear of stress during vacation may deter individuals from taking PTO (Kuykendall et al., 2020). Additionally, due to stress, positive vacation after-effects rapidly fade after returning to work (de Bloom et al., 2013). As explained by the JD-R model, when job demands are high, work absorption increases (Bakker et al., 2014), thus amplifying work stress. It should be noted that when all other variables were covaried, the strength of the relationship between PTO and work stress fell to insignificant. Exploratory multiple regression analysis indicated this was not due to redundancy with the demographics (work stress was not significantly related to any of the demographic variables), but was due to redundancy with workaholism and work engagement (work stress was significantly positively related with workaholism and negatively related with work engagement, both beyond the .01 level of significance). Spector (2021) suggests the hierarchical iterative control approach to determine a link between two or more constructs and then add control variables, hierarchically, to rule in or out their impact. Thus, a series of studies are conducted to iteratively test associations among key variables, with the use of different control variable techniques comprising various approaches.

The regression results indicated those with less advanced degrees (versus graduate or professional degrees) and lower income had higher PTO. There are several reasons why these factors may lead to taking more PTO. For instance, such individuals might have limited access to

healthcare, which could result in more health problems and, accordingly, require greater PTO to tend to medical needs. Additionally, low-income jobs are typically characterized by manual labor or physical demands, thereby leading to higher workplace injuries and necessitating PTO to recover. Further, limited opportunities for education and low income could result in greater stress, which may negatively influence health and result in higher PTO usage to address mental health issues. As another example, those with lower income might find it challenging to afford childcare, thereby leading to more PTO to tend to sick children.

### Study Limitations and Future Research

Amazon's MTurk was used to recruit study participants. There are benefits to using MTurk, such as obtaining a representative sample. The sample was similar in terms of proportion of women (44.1%) and men (55.2%). Additionally, because our survey was open to anyone using MTurk and who fulfilled the study requirements, there was a large age range (21 to 69) and a representative sample of education level and industry in which the participant worked. While a representative sample is important, our sample was not diverse in terms of race/ethnicity. There was a disproportionately larger number of Caucasian/White (78%) respondents. Future researchers could benefit from an ethnically diverse sample to investigate possible differences in demographic groups. While this study encompassed a diverse sample in many ways, limited representativeness of racial and ethnic backgrounds may constrain the applicability to a general audience.

MTurk enables a global reach of participants. Those recruited through MTurk do not pose a threat to validity, and yield quality data (Buhrmester et al., 2011). However, this does not negate the fact that there will be participants who do not pay attention. Goodman et al. (2012) found the implementation of instructional manipulation checks (IMC) into the survey reduced statistical noise. Thus, another limitation while using MTurk was the lack of using such IMCs as attention checks.

The study design being cross-sectional instead of longitudinal may pose some limitations. Spector (2019) asserts the two major pitfalls of cross-sectional designs are issues in method variance and the lack of causality. Given that we used the self-report method, participants' answers may be subject to biases and correlations between variables can be inflated due to common method variance (CMV). However, Spector (2006) contends this is misleading and oversimplifies reality. He suggests the term CMV no longer be used and, instead, we should concentrate on measurement bias that results between the interchange of variables and their assessment methods. A principal components analysis of all the variables indicated that 18.5% of the variance was due to measurement method. Additionally, because data in cross-sectional designs are gathered synchronously, causality cannot be drawn. Despite the drawbacks, cross-sectional designs allow researchers to study how two (or more) variables are related (Spector,

2019). Cross-sectional designs using regression analyses to first control for distal variables, e.g., demographics, such as education and income here, can test the initial impact of such distal variables on PTO, as well as then provide for a stronger test of the relationship between more proximal variables, here workaholism, work engagement and work stress to PTO. Moreover, cross-sectional designs can aid in ruling out other covariates as explanations of the relationship between two variables (Spector, 2019).

Perceived work pressure was a common theme in the literature on hesitation to take vacations or time off from work (Kuykendall et al., 2020; Mazzetti et al., 2014). Kuykendall et al. (2020) found correlations with stress before vacation, during vacation, and unused vacation days. Organizational culture may also encourage employees to work more than necessary because of perceived work pressure to do so (Barber et al., 2019). For future research, perceived work pressure could be incorporated to see if a relationship with PTO usage exists. As indicated earlier, negative psychological outcomes (e.g., lower wellbeing, lower self-efficacy) are correlates of workaholism (Clark et al., 2016; Chamberlin & Zhang, 2009). Further, future researchers should assess employee concern about PTO (e.g., perhaps they feel they will miss out on something important), as well as coworker norms for PTO (e.g., organizational culture may inhibit PTO; Cossin et al., 2021; Mazzetti et al., 2014).

### Organizational Implications

Workaholism can negatively influence job performance (Schaufeli et al., 2006a). Notably, it leads to burnout, which is linked to higher turnover and negative organizational perceptions (Moyer et al., 2017). Recovery from daily work stressors is critical to minimize burnout and enhance work success (de Bloom et al., 2013). Since work-life initiatives, including PTO, offer mental and physical recovery, it is important for researchers to consider employees who forego these options. Moreover, if workaholic and work-engaged individuals do not use their PTO, then it is essential for organizations to offer other programs for them to recover from work stress. For example, incorporating more comprehensive benefits packages and wellness programs into the workplace. One-size-fits-all benefits packages do not serve all employees equally and may even be costlier rather than beneficial (Darcy et al., 2012).

Our findings will add to the occupational health psychology field and help managers to better understand employee characteristics that may lead to lack of wellness and work-life initiative usage, specifically PTO. Gaining deeper insight as to why one may forego their PTO can also help create enriched work-life initiatives and preferred benefit plans. Many organizations spend copious time, energy, and equity to create wellness programs and work-life initiatives. Continued research in PTO usage, worker characteristics, and work-life initiatives can improve employee benefit packages, including perks that

more accurately represent the benefits employees use. Accordingly, this could yield monetary savings for organizations. Also, the work-life initiatives employees use will improve overall health and wellbeing, thereby leading to higher job performance and positively influencing organizations.

Our findings demonstrate individuals with lower income and less advanced degrees have higher PTO. The organizational implications are manifold. With less employees to fulfill key responsibilities, this may result in decreased productivity, which can detrimentally impact the efficiency of the organization. Also, compensating employees for time they are not working might lead to increased labor costs and possibly hurt the company's budget. Further, coworkers may need to work more when other employees take more PTO. Additionally, providing equitable PTO benefits might influence employee recruitment and retention, especially for those with lower income and education levels. Finally, these workers are more likely to experience stress, so permitting them to take more PTO may enhance their well-being and job satisfaction.

### References

- Andreassen, C.S. (2014). Workaholism: An overview and current status of the research. *Journal of Behavioral Addictions, 3* (1), 1-11. <https://doi.org/10.1556/JBA.2.2013.017>
- Aziz, S., Uhrich, B., Wuensch, K. L., & Swords, B. (2013). The Workaholism Analysis Questionnaire: Emphasizing work-life imbalance and addiction in the measurement of workaholism. *Journal of Behavioral and Applied Management, 14*(2), 71-86. <https://doi.org/10.21818/001c.17923>
- Aziz, S., Zamy, S., & Wuensch, K. (2018). The endless pursuit for self-validation through attainment: An examination of self-esteem in relation to workaholism. *Personality and Individual Differences, 121*, 74-79. <http://dx.doi.org/10.1016/j.paid.2017.09.024>
- Aziz, S. & Zickar, M. J. (2006). A cluster analysis investigation of workaholism as a syndrome. *Journal of Occupational Health Psychology, 11*(1), 52-62. <https://doi.org/10.1037/10768998.11.1.52>
- Bakker, A. B., & Demerouti, E. (2014). Job demands-resources theory. In P. Y. Chen & C. L. Cooper (Eds.), *Work and Wellbeing, Vol. III*. (pp. 37-64). Wiley Blackwell. <https://doi.org/10.1002/9781118539415.wbwell019>
- Balducci, C., Alessandri, G., Zaniboni, S., Avanzi, L., Borgoni, L. & Fraccaroli, F. (2020). The impact of workaholism on day-level workload and emotional exhaustion, and on longer term job performance. *Work & Stress, 1-21*. <https://doi.org/10.1080/02678373.2020.1735569>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Bandura, A. (2005). Guide for constructing self-efficacy scales. In T. Urday & F. Pajares (Eds.), *Self-efficacy beliefs of adolescents* (pp. 307-337). Information Age Publishing.



- Barber, L. K., Conlin, A. L., & Santuzzi, A. M. (2019). Workplace telepressure and work-life balance outcomes: The role of work recovery experiences. *Stress Health, 35*, 350-362. <https://doi.org/10.1002/smi.2864>
- Blair-Loy, M., & Wharton, S. A. (2002). Employees' use of work-family policies and the workplace social context. *Social Forces, 80*(3), 813-845. <https://doi.org/10.1353/sof.2002.0002>
- Bonebright, C. A., Clay, D. L., & Ankenmann, R. D. (2000). The relationship of workaholism with work-life conflict, life satisfaction, and purpose in life. *Journal of Counseling Psychology, 47*(4), 469-477. <https://doi.org/10.1037//0022-0167.47.4.469>
- Brockner, J. & Higgins, T. (2001). Regulatory focus theory: Implications for the study of emotions at work. *Organizational Behavior and Human Decision Processes, 86*(1), 35-66. <https://doi.org/10.1006/obhd.2001.297>
- Buhrmester, M., Kwang, T. & Gosling, S. D. (2011). Amazon's mechanical turk: A new source of inexpensive yet high-quality, data? *Perspectives on Psychological Science, 6*(1), 3-5. <https://doi.org/10.1177/1745691610393980>
- Bureau of Labor Statistics. (2020, June 25). *American time use survey- 2019 results*. U.S. Department of Labor. Retrieved from: <https://www.bls.gov/news.release/pdf/atus.pdf>
- Chamberlin, C., & Zhang, N. (2009). Workaholism, health, and self-acceptance. *Journal of Counseling and Development, 87*, 159-169. <https://doi.org/10.1002/j.1556-6678.2009.tb00563.x>
- Clark, M. A., Michel, J. S., Zhdanova, L., Pui, S. Y., & Baltes, B. B. (2016). All work and no play? A meta-analytic examination of the correlates and outcomes of workaholism. *Journal of Management, 42*(7), 1836-1873. <https://doi.org/10.1177/0149206314522301>
- Clark, M. A., Smith, R. W., & Haynes, N. J. (2020). The Multi-dimensional Workaholism Scale: Linking the conceptualization and measurement of workaholism. *Journal of Applied Psychology, 105*(11), 1281. <https://doi.org/10.1037/apl0000484>
- Cossin, T., Thaon, I., & Lalanne, L. (2021). Workaholism prevention in occupational medicine: A systematic review. *International Journal of Environmental Research and Public Health, 18*(13), 7109. <http://dx.doi.org/10.3390/ijerph18137109>
- Crouch, G. (2013). Homo sapiens on vacation: What can we learn from Darwin? *Journal of Travel Research, 52*(5), 575-590. <https://doi.org/10.1177/0047287512475219>
- Darcy, C., McCarthy, A., Hill, J., & Grady, G. (2012). Work-life balance: One size fits all? An exploratory analysis of the differential effects of career stage. *European Management Journal, 30*, 111-120. <https://doi.org/10.106/j.emj.2011.11.001>
- de Bloom, J., Geurts, S. A. E., & Kompier, M. A. (2013). Vacation (after-) effects on employee health and well-being, and the role of vacation activities, experiences, and sleep. *Journal of Happiness Studies, 14*, 613-633. <https://doi.org/10.1007/s10902-012-9345-3>
- de Bloom, J. Geurts, S. A. E., Taris, T. W., Sonnentag, S., Weerth, C., & Kompier, M. A. (2010). Effects of vacation from work on health and well-being: Lots of fun, quickly gone. *Work & Stress, 24*(2), 196-216. <https://doi.org/10.1080/02678373.2010.493385>
- de Bloom, N. & Van Reenen, J. (2006). Management practices, work-life balance, and productivity: A review of some recent evidence. *Oxford Review of Economic Policy, 22*(4), 457-482. <https://doi.org/10.1093/oxrep/grj027>
- DeNisi, A. S., & Griffin, R. W. (2015). *Compensation & benefits*. In *Human resources* (3rd ed., pp. 196-217). Cengage Learning.
- Di Stefano, G., & Gaudiino, M. (2018). Differential effects of workaholism and work engagement on the interference between life and work domains. *Europe's Journal of Psychology, 14*(4), 863-879. <https://doi.org/10.5964/ejop.v14i4.1626>
- Ford, L. R. and Locke, K. (2002). Paid time off as a vehicle for self-definition and sensemaking. *Journal of Organizational Behavior, 23*, 489-509. <https://doi.org/10.1002/job.152>
- Fotiadis, A., Abdulrahman, K., & Spyridou, A. (2019). The mediating roles of psychological autonomy, competence and relatedness on work-life balance and well-being. *Frontiers in Psychology, 10*, 1-7. <https://doi.org/10.3389/fpsyg.2019.01267>
- Fritz, C., & Sonnentag, S. (2005). Recovery, health, and job performance: Effects of weekend experiences. *Journal of Occupational Health Psychology, 10*(3), 187-199. <https://doi.org/10.1037/1076-8998.10.3.187>
- Ganster, D. C., & Schaubroeck, J. (1991). Work stress and employee health. *Journal of Management, 17*(2), 235-271. <https://doi.org/10.1177/014920639101700202>
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2012). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making, 26*, 213-224. <https://doi.org/10.1002/bdm.1753>
- Hächler, P., Pereira, D., & Achim, E. (2017). Recovery experiences during vacation and their association with job stressors and health. *Psychological Writings, 10*(1), 13-30. <https://doi.org/10.5231/psy.writ.2017.1001>
- Halbesleben, J. R. B., Neveu, J. P., Paustian-Underdahl, S. C. & Westman, M. (2014). Getting to the "COR": Understanding the role of resources in conservation of resources theory. *Journal of Management, 40*(5), 1334-1364. <https://doi.org/10.1177/0149206314527130>
- Heo, Y. S., Leem, J. H., Park, S. G., Jung, D. Y., & Kim, H. C. (2015). Job stress as a risk factor for absences among manual workers: a 12-month follow-up study. *Industrial Health, 53*, 542-552. [doi:10.2486/indhealth.2015-0021](https://doi.org/10.2486/indhealth.2015-0021)
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*(3), 513-524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Huan, V. C., Oppenauer, V. (2019). The role of job demands and negative work reflection in employees' trajectory of sleep quality over the workweek. *Journal of Occupational Health Psychology, 24*(6), 675-688. <http://dx.doi.org/10.1037/ocp0000156>
- Kim, S.-Y., Shin, Y.-C., Oh, K.-S., Shin, D.-W., Lim, W.-J., Kim, E.-J., Cho, S. J., & Jeon, S.-W. (2020). The association of occupational stress and sleep duration with anxiety symptoms among healthy employees: A cohort study. *Stress and Health, 36*(5), 675-685. <https://doi.org/10.1002/smi.2948>
- Kuykendall, L. C., Stikma, M., & Guarino, K. (2020). Understanding employee's unused vacation days: A social cognitive approach. *Journal of Occupational Health Psychology, 26*(2), 69-85. <https://doi.org/10.1037/ocp0000182>

- Mazzetti, G., Schaufeli, W., & Gulielmi, D. (2014). Are workaholics born or made? Relations of workaholism with person characteristics and overwork climate. *International Journal of Stress Management*, 21(3), 227-254. <https://doi.org/10.1037/a0035700>
- Moyer, F., Aziz, S., & Wuensch, K. (2017). From workaholism to burnout: Psychological capital as a mediator. *International Journal of Workplace Health Management*, 10(3), 213-227. <https://doi.org/10.1108/IJWHM-10-2016-0074>
- Newman, D. B., Tay, L., & Diener, E. (2014). Leisure and Subjective Well-Being: A model of psychological mechanism as mediating factors. *Journal of Happiness Studies*, 15, 555-578. <https://doi.org/10.1007/s10902-013-9435-x>
- Ng, T. W. H., Sorensen, K. L., & Feldman, D. C. (2007). Dimensions, antecedents, and consequences of workaholism: A conceptual integration and extension. *Journal of Organizational Behavior*, 28(1), 111-136. Retrieved August 24, 2020, from <http://www.jstor.org/stable/30164479>
- Oates, W. E. (1971). *Confessions of a workaholic: The facts about work addiction*. World. Organization for Economic Cooperation and Development. (2016, January 12). Additional leave entitlements for working parents. Retrieved from: [http://www.oecd.org/els/soc/PF2\\_3\\_Additional\\_leave\\_entitlements\\_of\\_working\\_parents.pdf](http://www.oecd.org/els/soc/PF2_3_Additional_leave_entitlements_of_working_parents.pdf)
- Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2006a). Dr. Jekyll or Mr. Hyde? On the differences between work engagement and workaholism. In R. J. Burke (Ed.), *New horizons in management. Research companion to working time and work addiction* (p. 193-217). Edward Elgar Publishing. <https://doi.org/10.4337/9781847202833.00018>
- Schaufeli, W., Bakker, A., & Salanova, M. (2006b). The measurement of work engagement with a short questionnaire. *Educational and Psychological Measurement*, 66(4), 701-716. <https://doi.org/10.1177/0013164405282471>
- Selenko, E., Makikangas, A., Mauno, S., Kinnunen, U. (2013). How does job security relate to self-reported job performance? Analyzing curvilinear associations in a longitudinal sample. *Journal of Occupational and Organizational Psychology*, 86(4), 522-542. <https://doi.org/10.1111/joop.12020>
- Shimazu, A. & Schaufeli, W. B. (2009). Is workaholism good or bad for employee wellbeing? The distinctiveness of workaholism and work engagement among Japanese employees. *Industrial Health*, 47(5), 495-502. <https://doi.org/10.2486/indhealth.47.495>
- Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., & Peter, R. (2004). The measurement of effort-reward imbalance at work: *European comparisons*. *Social Science & Medicine*, 58(8), 1483-1499. [https://doi.org/10.1016/S0277-9536\(03\)00351-4](https://doi.org/10.1016/S0277-9536(03)00351-4)
- Smith, T. D., Hughes, K., DeJoy, D. M., & Dyal, M. (2018). Assessment of relationships between work stress, work-family conflict, burnout, and firefighter safety behavior outcomes. *Safety Science*, 103, 287-292. <https://doi.org/10.1016/j.ssci.2017.12.005>
- Sonnentag, S., Venz, L., & Casper, A. (2017). Advances in recovery research: What have we learned? What should be done next? *Journal of Occupational Health Psychology*, 22(3), 365-380. <http://dx.doi.org/10.1037/ocp0000079>
- Sonnentag, S. (2018). The recovery paradox: Portraying the complex interplay between job stressors, lack of recovery, and poor well-being. *Research in Organizational Behavior*, 38, 169-185. <https://doi.org/10.1016/j.riob.2018.11.002>
- Spagnoli, P., Molino, M., Molinaro, D., Giancaspro, M. L., Manuti, A., & Ghislieri, C. (2020). Workaholism and technostress during the COVID-19 emergency: The crucial role of the leaders on remote working. *Frontiers in Psychology*, 11, 620310. <https://doi.org/10.3389/fpsyg.2020.620310>
- Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, 9(2), 221-232. <https://doi.org/10.1177/1094428105284955>
- Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34, 125-137. <https://doi.org/10.1007/s10869-018-09613-8>
- Spector, P.E. (2021). Mastering the use of control variables: the Hierarchical Iterative Control (HIC) approach. *Journal of Business and Psychology*, 36(4), 737-750. [doi.org/10.1007/s10869-020-09709-0](https://doi.org/10.1007/s10869-020-09709-0)
- Syrek, C. J., Weigelt, O., Kühnel, J., & de Bloom, J. (2018). All I want for Christmas is recovery—Changes in employee affective well-being before and after vacation. *Work & Stress*, 32(4), 313-333. <https://doi.org/10.1080/02678373.2018.1427816>
- Tomioka, K. Kurumatani, N., & Saeki, K. (2019). Cross-sectional association between types of leisure activities and self-rated health according to gender and work status among older Japanese adults. *Journal of Epidemiology*, 29(11), 424-431. <https://doi.org/10.2188/jea.JE20180108>
- U.S. Travel Association. (2019, February 3). *Paid time off trends in the U.S.* <https://www.ustravel.org/toolkit/time-and-vacation-usage>
- van Beek, I., Hu, Q., Schaufeli, W. B., Taris, T. W., & Schreurs, B. (2012a). For fun, love, or money: What drives workaholic, engaged, and burned-out employees at work? *Applied Psychology: An International Review*, 61(1), 30-55. <https://doi.org/10.1111/j.1464-0597.2011.00454.x>
- van Beek, I., Taris, T., Schaufeli, W., Brennikemijer, V. (2012b). Heavy work investment: It's motivational make-up and outcomes. *Journal of Managerial Psychology*, 29(1), 46-62. <https://doi.org/10.1108/JMP-06-2013-0166>
- van Wijhe, C. I., Peeters, M. C. & Schaufeli, W. B. (2011). To stop or not to stop, that's the question: About persistence and mood of workaholics and work engaged employees. *International Journal of Behavioral Medicine*, 18, 361-372. <https://doi.org/10.1007/s12529-011-9143-z>
- Vartan, S. (2018, January 30). *Why vacations matter for your health*. *Cable News Network*. <https://www.cnn.com/travel/article/why-vacations-matter/index.html>
- Vitiello, K., Aziz, S., & Wuensch, K. L. (2016). Workaholism and authenticity: The role of life satisfaction. *Journal of Behavioral and Applied Management*, 116-133. <https://doi.org/10.21818/001c.17923>
- Virtanen, A., de Bloom, J., and Kinnunen, U. (2020). Relationships between recovery experiences and well-being among younger and older teachers. *International Archives of Occupational and Environmental Health*, 93, 213-227. <http://doi.org/10.1007/s00420-019-01475-8>

Westman, M. & Eden, D. (1997). Effects of a respite from work on burnout: Vacation relief and fade-out. *Journal of Applied Psychology*, 82(4), 516-527. <https://doi.org/10.1037/0021-9010.82.4.516>

Yankelevich, M., Broadfoot, A., Gillespie, J. Z., Gillespie, M. A., & Guidroz, A. (2012). General job stress: A unidimensional measure and its non-dimensional relations with outcome variables. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 28(2), 137-148. <https://doi.org/10.1002/smi.1413>.

---

**Natalie French** (neffrench20@gmail.com)

**Shahnaz Aziz** (azizs@ecu.edu)

**Karl L. Wuensch** (wuenschk@ecu.edu)

---