

THESIS

MENTAL RESOURCES FOR ACHIEVING FUTURE PLANS:
TRAJECTORIES OF FUTURE SELF-CONTINUITY, STRESSORS, AND PERFORMANCE
OUTCOMES IN THE WORKPLACE

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ABSTRACT

MENTAL RESOURCES FOR ACHIEVING FUTURE PLANS: TRAJECTORIES OF FUTURE SELF-CONTINUITY, STRESSORS, AND PERFORMANCE OUTCOMES IN THE WORKPLACE

In work settings, individuals are faced with tasks and challenges that can result in stress if not faced with adequate resources. This study aims to investigate Future Self Continuity (FSC) as a mental resource that describes how clearly one can link their present and future selves. The Job Demands-Resource theory describes the detrimental effects of lack of resources leading to stress and undermining behavior in an individual (Bakker & Demerouti, 2017). This study originally aimed to examine how the experience of workplace stressors and engagement in work performance outcomes in young workers over the course of three months unfold, as well as how the trajectory of these constructs coincides with changes in FSC. However, results showed that there were no discernible trajectories over the course of three months, and variability in FSC, stressors, and workplace performance were assessed instead. In doing so, this study aims to introduce FSC to the literature on Occupational Future Time Perspective as a resource for organizations to be mindful of. Results show that FSC had a significant direct effect on mean workplace deviance, goal progress, intent to leave, and the variation in intent to leave. In addition, FSC variability had a significant direct effect on workplace deviance variability and intent to leave variability. These direct effects would indicate that FSC does in fact influence performance outcomes in the workplace but the lack of stressor-outcome buffering effects

suggests FSC does not operate as a resource within Job-Demands Resources Theory (Bakker & Demerouti, 2017).

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LITERATURE REVIEW

As long-term hurdles arise in the workplace, it can be difficult to maintain a healthy perspective about the future. Some may feel that as these struggles persevere if there are not enough resources to aid in overcoming these hurdles, their future outlook will look grimmer. When we feel the stress of the workplace is too much, performance can begin to drop, and frustrations take over. Industrial-Organizational (I/O) psychologists interested in the impact that workplace stressors have on work performance may be concerned with how future self-continuity influences one's motivation to persevere through workplace obstacles. Reassessing our future is a common occurrence in the workplace atmosphere and can influence our outlook and level of performance over time. For example, an employee who feels that stressors are constant obstacles for them to do their work may begin to exhibit behaviors that appear as less committed to the organization and its goals. Not only is this damaging to the individual's health and well-being, but this can be very costly to an organization, as loss in productivity due to absenteeism has cost the United States around \$150 billion (Hemp, 2004).

In this paper, I aim to establish Future Self-Continuity (FSC) as a mental resource, as described by the Job Demands-Resource (JDR) model, that can mitigate the stressor-strain relationship and ultimately impact performance outcomes (Bakker & Demerouti, 2017; Hershfield, 2011). In addition, I aim to expand the Occupational Future Time Perspective (OFTP) literature by establishing FSC as a subcomponent that practicing I/O psychologists should be mindful of when encouraging and strengthening the salience of future plans to increase work performance and well-being. Hershfield (2011) found that the more an individual thinks and considers their future plans, the more likely they are to behave in a way at the present time to

help them achieve those plans. However, this perspective has not yet been looked at from a workplace setting and I aim to establish how this may affect workplace behaviors. This study looks at approximately 250 workers who have been in their current careers for less than five years. With many of these young workers having recently graduated from a formal education institution, I recognize that workers have diverse backgrounds and have chosen to look at those who would consider themselves first-generation college graduates to understand if they may have unique stresses and how these challenges may impact their FSC and performance. This study will add to the current literature by analyzing how the changes in stressors over the course of three months may impact the changes in perceived stressors and future self-continuity and, as a result, impact workplace behaviors.

Future time perspective (FTP) is a multi-dimensional cognitive-motivational construct in which individuals look to their goals in the future to determine their actions and behaviors in the present time (Kooij et al., 2018). This mindset has not only shown that people grow towards their goals faster, but they also recover quicker when they encounter a setback (Kooij et al., 2018). Individuals with high FTP do not let past failures define them and are able to ‘bounce back’ and recover more quickly because of their focus on their future. Lastly, those who were high with FTP were less likely to engage in risky behavior in the present due to not wanting to jeopardize their goals. There are five dimensions of FTP: time orientation, extension, density, directionality, and continuity.

Each dimension defines specific characteristics of FTP that determine the way an individual interprets their future (Kooij et al., 2018). Time orientation can be interpreted as either past, present, or future. Naturally, FTP refers to the future tense in which someone projects their focus of themselves in times yet to come. The future can be interpreted in different lengths of

time, such as thinking about what needs to be done by tomorrow, in a week, within a year, or within a career. Extension refers to the length of time that the individual focuses on and those who consistently think further out into the future are more likely to exhibit behaviors that will benefit them in the long run (Hershfield, 2011; Ersner-Hershfield, Garton, Ballard, Samanez-Larkin, Knutson, 2009). Density is defined as the number of goals that the individual hopes to achieve within the extension, or time frame (Kooij et al., 2018). The more goals an individual keeps in mind, the denser their future perspective becomes. Directionality refers to how much a person perceives themselves to be making progress towards their future goals. If a person feels “stuck”, or as though they are not making much progress despite their efforts, they would have low directionality. Finally, Kooij et al. (2018) define continuity as how well the individual can recognize the effects of their current behaviors on whom they will become in the future. Continuity, commonly referred to as future self-continuity (FSC) by Hershfield (2011), will be the focus of the present study, for reasons which I expand upon below.

Future time perspective has been introduced to the I/O psychology literature because of the benefits it has shown to 1) decrease stress in the workplace, through mental well-being, and 2) increasing worker productivity, through higher achievement outcomes (Kooij et al., 2018). Zacher and Frese (2009) further developed FTP in the workplace context and referred to it as occupational future time perspective (OFTP). OFTP differs by specifically analyzing how an individual perceives their future in the context of employment (Rudolf et al., 2018). However, OFTP has only two dimensions, remaining time and remaining opportunities, which have been primarily applied to the aging workforce (Zacher & Frese, 2009). Due to the work population of interest in the present study being young workers at the start of their careers, I propose the use of FSC in the occupational context. Of use to the present study, younger workers likely do not

reflect on their remaining time as a professional to the same extent as older workers. However, the notion of connecting one's current actions to one's future self may be more appropriate for the population of interest in the current workforce. Further, by highlighting the utility of FSC, it may signal the need to broaden OFTP to more closely resemble the different dimensions of FTP to enhance OFTP's applicability across all stages of the workforce and beyond its current focus on retirement (Kooij et al. 2018; Zacher & Frese, 2009).

Future Self-Continuity

Future self-continuity, a traditional social psychology construct, has been defined as the degree to which an individual feels their present self is connected to their future self (Hershfield, 2011). Future self-continuity has been positively correlated with achievement outcomes, mental well-being, healthier behaviors, and retirement planning, and negatively correlated with risk behaviors (Adelman et al, 2017; Hershfield, 2011). When individuals were more focused on their future self, they were more likely to align their behaviors to be consistent with their goals. When behaviors are consistent with their goals, the individual is more likely to develop the character and skills necessary to achieve their goals. In addition, by being more forward focused, these individuals are more likely to perceive future obstacles and properly plan ahead to reduce stress and increase mental well-being (Adelman et al., 2017).

The idea of a "possible self" was introduced in 2006 by Oyserman, Bybee, and Terry as they argued there had to be a more salient connection between the current self and an individual's goals to motivate them to persevere. By making the "possible self" more salient, participants were found to have an increase in self-regulatory behaviors, which then increased academic outcomes and mental well-being (Oyserman et al., 2006). While Oyserman et al. specifically studied the effects of "possible self" on adolescents in academic settings, the idea of

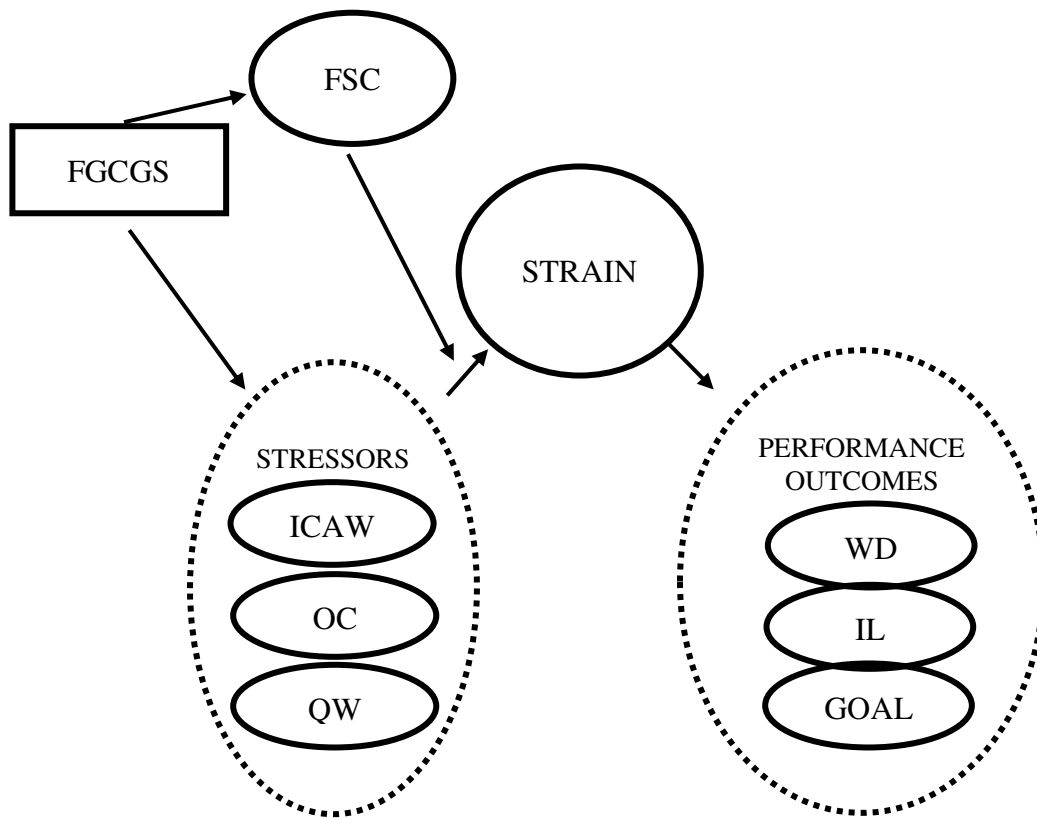
connecting one's current self to their future successful self has aided self-regulatory behaviors and temporal discounting across younger and older adults (Adelman et al, 2017; Hershfield, 2011). Future self-continuity was introduced as a continuation of the "possible self" literature as Ersner-Hershfield et al. (2009) conducted a series of studies to determine what factors lead to higher levels of FSC and how stable individuals felt their current traits or states were in comparison to whom they would become.

One example of preparing for the future self may be the thought process that a graduate student goes through as they prepare for their professional career. Quinn et al. (2020) found that as pharmacy students began to focus on what kind of specialization they wanted in the field, they felt more responsible in their schoolwork and began to see themselves as training professional. This process can begin even as early as high school; Chishima and Wilson (2020) found that as high school students engaged in activities to think about their future self, they showed an increase in FSC and academic delay of gratification with respect to preparing for their future careers. It is important to view this as a continuum in which people can feel connected to a certain extent, rather than being defined as completely connected or disconnected. As Chishima and Wilson (2020) further explain, this can be visualized as how much a person will have in common with themselves in the future or the extent they will be a completely different person. This degree will often change as obstacles are introduced and overcome, which underlies the importance of early development of the skills and behaviors consistent with future goals. Future self-continuity contains three dimensions: similarity, vividness, and positivity.

Each of these dimensions plays an important role in bridging the distance between the present self and future self. Similarity refers to when an individual thinks of their future self, they may feel either very similar or very different from their current self. Sometimes, it can be hard to

support and act on behalf of the future self if it feels as though it is a completely different person (Hershfield, 2011; Strauss, Griffin, & Parker, 2012). By increasing the feeling of similarity between the current self and the future, the individual is more likely to appreciate their future self. Vividness refers to the individual's ability to see in their mind's eye how their future will look (Hershfield, 2011). The more details an individual can imagine when describing how their future self will look the more likely they are to work towards those goals. Lastly, the attitude, or positivity, that an individual holds about their future is critical as it measures how much they are looking forward to becoming their future self. If an individual does not think positively of their future self, then there will be no motivation to exhibit behaviors that align with becoming that person. These three subcomponents work in conjunction to produce the effects of FSC.

Due to its ability to align behaviors with future goals and outcomes, FSC can be viewed as a personal resource that one contains. Job Demands-Resource (JDR) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) describes how job characteristics can be classified as either a job demand or a job resource, which each affects workers differently. Job demands are any task or responsibility that produces stressors on an individual. Whereas, job resources buffer the strength of the stressors on the individual and reduce strain in general (Bakker & Demerouti, 2017). Resources can be created through the organization, resulting in job resources, or by the individual, resulting in personal resources. Some common examples of personal resources may be optimism, self-efficacy, self-esteem, and mastery (Ganster & Perrewe, 2011). FSC could be described as a personal resource because, when acquired, it can inspire an individual to be positive and persevere through obstacles. Building from this focus on FSC, the following sections describe the rationale behind the conceptual model investigated in this study (depicted in Figure 1).



Note. This model was to depict both the static and dynamic relationships between latent variables. Stressors and Performance Outcomes are depicted as dotted circles to convey that the constructs contained within were considered similarly as indicators of a domain of constructs represented by each circle (e.g. Organizational Constraint being a specific Stressor). FSC = Future Self-Continuity, ICAW = Interpersonal Conflict at Work, OC = Organizational Constraint, QW = Quantitative Workload, WD = Workplace Deviance, GOAL = Goal Progress, IL = Intentions to Leave, and FGCGS = First-Generation College Graduate Status.

Figure 1

Original Conceptual Model Proposed in this Manuscript.

Stressors

Stressors in the workplace can have a major impact on the way workers perceive their job and job roles. Stressors are defined as conditions or stimuli that induce the stress process and lead to strain (Lepine, Padsakoff, Lepine, 2005). Strains, as a result of the stressors, lead to adverse experiences, such as anxiety, depression, exhaustion, and burnout (Jex, 1998). Examples of stressors can include job demands, lack of resources to meet demands, interpersonal conflict, and poor organizational culture (De Lange et al., 2004). These stressors commonly compound upon each other, leading to increased strain levels that often result in compromised health and a lack of motivation and performance at the level an organization strives for (Ganster & Perrewe, 2011; Hakanen & Bakker, 2017). This set of relationships is also referred to as the stressors-strain-outcome model (Koeske & Koeske, 1993; Um & Harrison, 1998). However, in the present work I focus primarily on the relationships between stressors and outcomes, acknowledging that past work suggests that potential relationships are likely explained by the experience of strain (Totterdell, Wood, & Wall, 2006; Sonnetag & Zijlstra, 2006; Iles et al., 2011).

In the present work, I examine the specific stressors of quantitative workload, interpersonal conflict at work, and organizational constraints (Spector & Jex, 1998). Quantitative workload (QW) describes the amount of work that is required of an individual, or in this instance, the perceived amount of work that is required. This stressor is unique from the others because it relates to the task itself, rather than interactions with others. In a meta-analysis of 336 studies, QW is associated with negative affectivity, role ambiguity, role conflict, and work-family conflict because of the uncertainty that one often feels on whether they will be able to complete all of their responsibilities (Bowling et al., 2013). Interpersonal conflict at work (ICAW) describes the experience that workers have when they engage in a disagreement or are

treated poorly at work (Spector & Jex, 1998). Interestingly, consequences of ICAW differs based on who the conflict is with. Frone (2000) found that when young workers experienced conflict with their supervisor, they were more likely to experience lower job satisfaction, organizational commitment, and greater intent to leave. Whereas when conflict was with a coworker, individuals were more likely to experience depression and lower self-esteem. Individuals who experienced greater amounts of ICAW were more likely to have negative personal affect and less agreeableness and social support (Iles et al., 2011). Lastly, organizational constraints (OC) are the barriers or situations that prevent employees' efforts and skills from transferring into high quality work (Spector & Jex, 1998). Pindek and Spector (2016) conducted a meta-analysis of 84 studies to analyze the most common outcomes of organizational constraints and found that there were significant interactions with problematic behaviors (i.e., workplace deviance), physical somatic symptoms, psychological strains. In investigating this array of stressors, I hope to demonstrate the role of FSC as a general resource rather than having some sort of effect related to a specific stressor.

Job Demands-Resource model describes the relationship between job stressors and resources and their long-term impact on workers' health and job performance (Bakker & Demerouti, 2017). Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) found that individuals who possessed high levels of personal resources, such as high self-esteem or optimism, were more likely to engage in work tasks and motivated to take advantage of job resources. Similarly, as individuals were given more job resources, they were more likely to engage in work and increase their personal resources over time. Individuals who are generally more connected to resources, versus those who are generally not, are more likely to have a buffer that mitigates compounding stressors and strain that occurs in the workplace.

Personal resources are essential tools to have in an employee's arsenal as they arm up to face the demands of their job (Bakker & Demerouti, 2017). For example, those who viewed their future as more positive, rather than in a negative light, were more likely to feel motivated and excited to work towards their goals and overcome difficulties (Hershfield, 2011). Therefore, if FSC is a buffer and an individual possesses very little FSC, they may not have enough of this personal resource to combat the stressors they face when obstacles arise. Likewise, high levels of FSC may be resourceful in mitigating stressors. Thus, the novel expectation I investigated here is that FSC, in general, may be a personal resource and as such buffer the relationship between stressors and distal outcomes (each outcome described further below).

Thus far, I have described the relationships among constructs from a static perspective. However, Bakker and Demerouti (2017) have noted that many perceive gain and loss spirals of stressors that unfold over time, potentially leading to negative outcomes. Through the JDR lens, stressors in the workplace may create barriers for workers to feel that they are able to complete their work. The JDR model proposes that loss spirals take place as employees begin to become strained by their work and engage in undermining behaviors that lead to more demands and resulting in an increase in strain (Bakker & Demerouti, 2017). As time progresses, changes in the number of stressors may activate this loss spiral and impact perceptions of resources. Workers who had higher levels of cynicism, or perhaps lower levels of personal resources, were more likely to perceive higher levels of job demands five years later (Bakker, Schaufeli, Sixma, Bosveld, & Van Dierendonck, 2000). Thus, there have been empirical demonstrations of how stressors can build over time.

In addition to meeting current demands, progressing in one's career is often filled with stressful and challenging events that can often impact the worker's drive to achieve their goals.

Depending on the job, daily tasks can be demanding, such as cognitive load, emotional strain, or physical effort. If these demands persist over time without recovery time to replenish oneself, the workers wellbeing is often compromised. Goplerud (2001) found this to be the case for college students as they progressed throughout the semester and stress levels increased. This study both evaluates stressors over time from growth perspective and looks at multiple undermining, problematic behaviors that may affect the organization, such as counterproductive workplace behaviors (CWBs), intent to leave, and goal progress (or lack thereof).

Outcomes Impacted by Stressors among those Early in their Career

Counterproductive Workplace Behaviors

Counter productive workplace behaviors (CWBs) describe when individuals behave in a manner that ultimately hurts the organization (Martinko et al., 2002). These behaviors often occurs due to a breakdown in the self-regulatory systems that controls behavior (Robinson, Wang, & Kiewtiz, 2014) and capture a broad array of ways that employees may harm the organization and the people associated with it, whether it be coworkers, supervisors, or clients. CWBs also capture varying levels of severity including major offenses, such as co-worker harassment or property damage, or minor offenses, such as gossiping about workers or petty theft (Robinson & Bennett, 1995). The deviant behaviors that are the focus of this study include interpersonal deviance (i.e. making fun of a coworker) and organizational deviance (i.e. daydreaming while on the job).

Workers have shown to engage in CWBs when work demands increase by resources do not (Penny, Hunter, & Perry, 2011). For example, Smoktunowicz et al. (2015) found an indirect relationship between high job demands and high levels of CWBs through the experience of burnout among police officers asked to reflect on their work in general. Further, the relationship

between burnout and engagement in CWBs was moderated by work-related resources. Importantly, Smoktunowicz et al. (2015) establish that workers may be more likely to engage in CWBs as a result of high job demands. If CWBs can be used to describe the undermining behaviors Bakker and Demerouti (2017) claim occur under circumstances of extreme resource loss, then individuals who view their stress level as increasing and their resources as depleting may engage in more CWBs over time. In the present study, I focus on the quantity of stressors as a reflection of one's experience of job demands over time.

As young working professionals enter their careers, they are commonly exposed to new stressors that come with being introduced to new organizations and people. Young workers are more likely to engage in CWBs than older workers (Hollinger & Clark, 1983; Gruys & Sackett, 2003) and once all workers, younger and older, engage in one form of CWB, they are more likely to continue that behavior as time increases. As a result, industries that are more likely to hire younger workers as their main work force are more likely to have work contexts where employees commit more CWBs (Gruys & Sackett, 2003). As young workers adjust to their new career and must navigate how they achieve their future goals, role clarity is a basic need that can often be overlooked in the workplace (Karkkola et al., 2019). At the same time, they are still held to high standards to produce efficiently, which can be thought of as a job demand that may be particularly stressful (Hobfoll, Halbesleben, Neveu, & Westman, 2018; Bakker & Demerouti, 2017), without always receiving the necessary resources, such as job training or tools, to produce at a high level are more likely to lead to workers engaging in CWB (Aleksic et al., 2019). Identification of these behaviors are not as obvious as one would expect either. Spanouli & Hoffman (2020) found that these changes in behaviors often occur within-person and not simply between-person, meaning that someone who engages in CWBs most likely does not do so all the

time. Therefore, it is not simply a “bad worker,” but rather, one must be evaluated over time to understand their CWB engagement.

Individuals who maintain high levels of FSC may decrease the irrationality that leads to CWBs. Individuals who are high in FSC are more likely to connect the consequences of their current actions to their future selves (Hershfield, 2011). CWBs are self-sabotaging and generally lead to negative consequences for the self (Robinson, Wang, & Kiewtitz, 2014). Therefore, higher FSC should lead one to be less likely to engage in self-sabotaging behaviors such as CWB. Haskin and van Dellen (2019) found that FSC bolstered self-regulatory behaviors through increasing vividness of the ideal self and increasing commitment to that future ideal self. Relatedly, Hershfield et al. (2011) found that workers who obtained higher levels of FSC were more likely to see the consequences of their risky behavior and determine its effects on their future. Furthermore, research has also found that CWBs were positively related to work-related identity discrepancies (Liu et al., 2020), and I argue that FSC could be viewed as a potential identity discrepancy because it captures the connection (or disconnection) between one’s current and future self. Therefore, as FSC increases over time, CWB should decrease in the form of lowering absenteeism and decreasing avoidance.

However, though a direct relationship between FSC and CWB will be evaluated, the core idea investigated in the present work is whether FSC buffers the taxing relationship stressors may have with outcomes. Specifically, drawing from JDR theory suggests that stressors may make one more likely to engage in CWB (Bakker & Demerouti, Hobfoll et al., 2018). However, for those high in FSC, a connection with one’s future self may equip oneself with the means to resist the link between stressors and CWB, perhaps due to being more attuned with the consequences of their behavior (Hershfield et al. 2011). Finally, extending prior work suggesting

that the constructs discussed thus far have the potential to follow a trend over time (e.g. Bakker & Demerouti, 2017; Hershfield et al., 2011; Spanouli & Hoffman, 2020), I anticipate observing the buffering effect of FSC as a resource whether constructs are related in a static or longitudinal fashion.

Intent to Leave

Intent to leave is defined as the deliberate and conscience want to leave an organization (Cho, Johanson, & Guchait, 2009) and is considered the third and final step of the cognitive withdrawal sequence before actual turnover. The cognitive withdrawal sequence measures one's thoughts of quitting, intentions to search for other jobs, and lastly the intention to quit (Carmeli and Weisberg, 2006) and found that intention to quit was the strongest predictor of actual turnover. In addition, intent to leave was a stronger predictor of turnover than affective measures, such as job satisfaction (Steel and Ovalle, 2004). Turnover is one of the top expenses for an organization, as it often costs an additional 33% of one's annual salary to search, hire, and train a new employee as a replacement (Hall, 2019). As intent to leave is a top predictor for turnover, it will be beneficial to understand the connection of FSC as resource and whether it can mitigate the urge to look elsewhere for employment. However, because intent to leave is one of the final stages of turnover, it is also beneficial to look at other behaviors that may indicate dissatisfaction in an earlier stage of the career, such as goal progress.

Stressors are also an established predictor of intent to leave. Widerszal-Bazyl, Radkiewicz, Hasselhorn, Conway, and van der Hiejden (2008) found that job demands were a strong predictor of intent to leave among over 16,000 nurses, particularly when alternative employment are scarce. Further, Volpone and Avery (2013) also found across multiple studies that perceived discrimination, conceptualized as a stressor, predicted multiple physical

withdrawal behaviors including intent to leave. Thus, I propose evaluating intent leave as I do other outcomes in the present study whereby stressors predict this outcome, but that the strength of this relationship may be buffered by FSC, both in general and over time.

Goal Progress

To simply have a goal is not enough to achieve that goal, there are many components that impact whether that goal will come to fruition, such as intent, control over performance (Sheeran, Trafimow, & Armitage, 2003), attaining resources, and one's habits (Neal, Wood, Wu, & Kurlander, 2011), and regulation of progress (Webb et al., 2016). When individuals consistently regulated their goal progress, Webb et al. (2016) found in a meta-analysis of 138 studies, a significant effect in goal attainment ($d = 0.40$, 95% CI [0.32, 0.48]). This medium effect size could indicate the real importance that goal progression has on employee satisfaction in their career. In addition, monitoring goal progress mediated the relationships between the effects of interventions and attaining the goal. Therefore, by monitoring and seeing when progress is being made toward a goal, has helped individuals increase their likelihood of successfully accomplishing their goals. While I am not specifically proposing an intervention, it may be helpful for future research to consider the impact that FSC and goal progression have on each other and how this may impact the success of an intervention to increase personal resources. In this study, I measure goal progress as an outcome to establish whether individuals felt that they had come closer to attaining their goals in the three-month time span.

Stressors have been negatively linked to goal progress in multiple situations. For instance, Swedish employees reported that they experienced less emotional well-being both at work and outside of work when goal progress was impeded (Gärling et al., 2016). The impact of

goal progress extends beyond employee's health and well-being in the organization, but can also impact satisfaction outside in one's personal life. In addition, Garriott and Nisle (2018) found that students in college were less likely to make progress towards their academic goals when more stressors were present and fewer resources were available. In addition, they also recognize that first-generation college students experienced more stressors than continuing-generation students, making it more difficult to recognize goal progress.

First Generation College Students

One demographic that is faced with unique stressors throughout their college careers are first generation college students (FGCS). Students who are considered first generation are those whose parents or guardians did not achieve a four-year college education (Chen, 2005). The experience of FGCS has been considered notably more difficult than a "traditional" student, or one who has at least one parent with a bachelor's degree, because it is typically harder for these students to engage in the classroom and overall university culture (Pike & Kuh, 2005; Soria & Stebleton, 2015). These students commonly have intersectional identities, such as being of marginalized minority status or lower socioeconomic status (Engle & Tinto, 2008; Tate et al., 2015) that are not as frequently represented at the university setting. With these compounding identities and struggles, it is common for FGCS to struggle to adjust to their new environment when going to college.

In addition, FGCS commonly struggle to adapt to college because they lack crucial social resources that traditional students typically have, such as knowledge about college applications, Free Application for Federal Student Aid (FAFSA), and scholarship opportunities (Tate et al., 2015). Due to a lack of resources, Terezini et al. (1996) found that FGCS were more likely to work jobs and live off-campus, making it harder for them to engage in the opportunities that the

university provided to build community and further predicted that this would become more problematic over the next decade. Unfortunately, this trend did continue on into the twenty-first century as Ishitani (2003) found through longitudinal research that FGS had a 71% higher attrition rate after their first year and were 51% less likely to graduate within four years compared to their traditional counterparts (Ishitani, 2006; Chen, 2005).

Stephens, Fryberg, Markus, Johnson, and Covarrubias (2012a) argue that college is often a student's first encounter experiencing a cultural mismatch, for both FGCS and traditional students. However, due to the common representation of independence in university culture, students who are the first of their family to attend college tend to experience more cultural differences as they are more commonly from the working class (Stephens et al. 2012a). This culture shock, and lack of understanding the higher education system, has often left students disadvantaged and experiencing microaggressions when slip-ups or misunderstandings happen, leading to identity threats over time (Gray et al., 2018). Furthermore, due to this difference in cultural expectations from university life and home life, many FGS experience that their friends and family at home are less understanding of the college process and demands, and, therefore, less supportive when there are conflicting priorities (Adelman et al., 2017). Adelman et al. found that this cultural mismatch led to FGCS having shown lower levels of FSC than traditional students. It is harder for students to see themselves as future graduates when those roles and the path to achieving them have not been modeled before by family or other close role models. In sum, a heightened cultural mismatch appears to be a defining characteristic of the university experience among FGCS.

However, this mismatch does not always go away by graduation as research has found that FGCS also struggle in navigating the professional job market (Tate et al., 2015). Due to a

lack of parental education and knowledge about certain career fields, many FGCS perceive less opportunities for the job market and less guidance on how to be considered strong applicants, especially in more competitive industries. In addition, individuals were less likely to pursue organizations where employees do not share common salient identities as themselves. According to Social Identity Theory, individuals classify those who they share commonalities with as a part of their “in-group” and those who they do not share any commonalities as their “out-group” (Tajfel & Turner, 1979). Naturally, individuals are drawn to industries and organizations that make them feel as though they would be a part of the in-group and avoid or feel uncomfortable with organizations that make them feel like the out-group (Foster, 2021). Because of these gaps, FGCS tend to eliminate their career options prematurely if they perceive these goals to be too difficult to achieve (Ma & Shea, 2021). This is concerning because these behaviors perpetuate the marginalization of their identities that these students are actively trying to overcome. As a result, I argue that this cultural difference may make it harder for workers with first generation student status to see their future self in an organization that is so culturally different than who they are, or their community of origin, and will likely experience less FSC over time.

There is currently a gap in the literature that highlights the struggles FGCS experience as they continue past graduation into the workforce because the literature has focused on student’s perceptions rather than experiences. With this gap, it is hard to predict FGCS comfortability, or stress response, once entering an organization in a competitive industry. Prior research found that FGCS had higher cortisol levels than their traditional counterparts when asked to give a speech about their university when it was framed as an independent culture, which was typically different than their community of origin (Stephens, Townsend, Markus, & Phillips, 2012b). Therefore, when cultural differences arise and FGCS are less able to connect their identity with

their organization, it is not only harder for them to fit in and imagine themselves succeeding, but they also experience physiological stress. From the JDR perspective, FGCS are more likely to enter the job market with less resources and experience greater stressors in culturally different environments.

PRESENT STUDY

Based on the reviewed literature, resources operate within JDR Theory as a buffer between stressors and ultimately outcomes via strain (Bakker & Demerouti, 2017). I am also asserting that FSC may operate as a resource, both in general and over time. Thus, I pose the following hypotheses:

Hypotheses

Hypothesis 1: FSC will moderate the relationship between each stressors (quantitative workload, interpersonal conflict at work, and organizational constraints) and performance outcomes (workplace deviance, intention to leave, and goal progress) in that those with higher FSC will experience a less positive relationship between stressors and intent to leave and deviance, and less negative relationship between stressors and goal progress.

Hypothesis 2: FSC change over the course of three months will moderate the dynamic relationship between each stressor; quantitative workload, interpersonal conflict at work, and organizational constraints; and performance outcomes; workplace deviance, intention to leave, and goal progress; in that those with higher FSC over three months will experience a less positive relationship over time between stressors and intent to leave and deviance, and less negative relationship over time between stressors and goal progress.

Though stressors have been described in the literature as capable of growth (Bakker & Demerouti, 2017), an empirical demonstration has yet to be provided. If stressors exhibit growth, I propose that growth in stressors should relate to growth in outcomes similarly to the static version of these relationship. Further, FSC should operate as a resource via buffering negative effects, both in general and over time. As such, I hypothesize:

Hypothesis 3: Changes in stressors (quantitative workload, interpersonal conflict at work, and organizational constraints) over the course of three months will relate to changes in performance behavior (workplace deviance, intention to leave, and goal progress) over the course of three months.

Hypothesis 4: Static representation of FSC will moderate the relationship between changes in stressors (quantitative workload, interpersonal conflict at work, and organizational constraints) and changes in performance (workplace deviance, intention to leave, and goal progress).

Hypothesis 5: FSC change over the course of three months will moderate the relationship between changes in stressors (quantitative workload, interpersonal conflict at work, and organizational constraints) and changes in performance (workplace deviance, intention to leave, and goal progress) over the course of three months.

Finally, I have outlined how first generation college graduates may have a different initial experience of their careers than their peers with regard to FSC and the experience of stressors.

As such, I hypothesize that:

Hypothesis 6: First generation college graduates will have a negative influence on changes of future self-continuity for workers over the course of three months.

Hypothesis 7: First generation college graduates will have a positive influence on changes in stressors for workers throughout the course the of three months.

As young professionals progress through their careers, they will encounter different obstacles that may increase their stress and force them to reevaluate their stress levels, behaviors, and their perception of their future. To evaluate these ideas, I conducted a study measuring the constructs in question over the course of three months via three measurement occasions. This

study hopes to capture these changes throughout the course of a three-month timespan and understand the trajectories of each construct.

METHOD

Participants and Procedure

The original sample included 358 young workers recruited for this multiple-timepoint study throughout the three-month time span from Amazon's Mechanical Turk (Mturk).

Participants met the following criteria of inclusion: 1) at least 18 years or older, 2) currently employed, 3) and had worked at current employment for less than 5 years. As the main focus of this study was to focus on early-career employees, eligibility requirements tried to mitigate participants that had been in their field for many years.

Participants were compensated \$3.00 for each time point they complete, with a \$2.00 bonus for completing all surveys, for a maximum compensation of \$11.00 per participant. Respondents had one week to respond to each survey, followed by a two-week break. Three-time points are necessary to capture the change over time in a longitudinal study of this kind. However, I chose the minimum number of time points so as not to overburden workers with extra work to increase response rates. Respondents must have completed two surveys at minimum to be included in the analysis and missed zero attention checks. There were a total of two attention checks at each time point, "Please select 'Twice a Year'" and "Please select 'Strongly Disagree'." A total of 16 participants were removed due to not passing attention checks, nine at Time 1 (3% of total participants), four at Time 2 (2% of total participants), and three at Time 3 (1% of total participants).

Table 1

Survey Statistics

Number of Responses Per survey	N	%
Time 1	358	--
Time 2	250	0.70
Time 3	235	0.66
Number of Attention Checks Failed per Survey	N	%
Time 1	25	0.07
Time 2	5	0.02
Time 3	6	0.02
Number of Survey's Participants Engaged In [273]	N	%
2 Surveys	93	0.34
3 Surveys	180	0.66

Note. N = number of participants in each survey. % = percentage of participants compared to the total for time point.

Of the total 349 respondents, 55.9% were female (39.9% male, 4.2% transgender), 72.1% were white, 37% were of first-generation college graduate status, and the mean age of 33.27 (SD = 10.11).

Table 2

<i>Participant Demographics</i>		
	M	SD
Age	33.27	10.11
Gender [336]	N	%
Female	191	0.57
Male	137	0.41
Non-Binary	8	0.02
Racial Identity [337]	N	%
Black African American	36	0.11
Indigenous-Native American	4	0.01
Asian American	45	0.13
Multiracial	9	0.03
White	243	0.72
Ethnic Identity [334]	N	%
Hispanx/Latinx/Chicanx	34	0.10
Non-Hispanx/Latinx/Chicanx	300	0.90
First Generation College Graduate Status [344]	N	%
Yes	127	0.37
No	217	0.63

Note. Demographic information was only conducted on the first time point. Therefore, N = number of participants at Time 1. % = percentage of participants compared to the total for Time 1.

Measures

All surveys will incorporate the Future Self Continuity Questionnaire, Covid-19 Strain Single Item Question, Intent to Leave Scale, Quantitative Workload Inventory, Interpersonal Conflict at Work Scale, Organizational Constraint Scale, Goal Progression, and Workplace Deviance Scale. The first time point also includes demographic details, such as gender, race, year in career, and first-generation college graduate status.

Future Self Continuity Questionnaire. The Future Self Continuity Questionnaire (Sokol & Serper, 2019) is an eleven-item questionnaire that assesses an individual's similarity, vividness, and positive affect towards their future self. All questions are rated with a Likert scale

of 1-6, with anchors for similarity being 1 (*completely different*) to 6 (*exactly the same*) and vividness and positive affect anchoring with 1 (*not at all*) and 6 (*perfectly*). This questionnaire is a recent development on FSC literature and assess the similarity of personal characteristics (Bartels & Urminsky, 2011; Hershfield, 2011; Sokol & Serper, 2019). Overall consistency was reported at $\alpha = .85$, and each subcomponent reported at $\alpha = .82$ for similarity, $\alpha = .79$ for vividness, and $\alpha = .90$ for positive affect.

Covid Strain. Covid strain was measured using a single item that asked participants “How stressful has COVID-19 personally been for you in the last month?” The anchors were as following: 0 (not at all stressful), and 10 (extremely stressful).

Intent to Leave Scale. The Intent to Leave Scale (MAO, 1975) is a 3-item questionnaire that focuses on whether participants think about leaving, for example “I often think about quitting,” and intent to quit, for example “How likely is it that you will actively look for a new job/program in the next year?” Anchors for contemplating leaving are: 1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = strongly agree. Anchors for intent to leave are: 1 = highly unlikely, 2 = somewhat unlikely, 3 = neither likely nor unlikely, 4 = somewhat likely, 5 = highly likely.

Quantitative Workload Inventory. The Quantitative Workload Inventory (QWI; Spector & Jex, 1998a) is a five-item scale that aims to quantify the amount of work in a job, rather than the perceived difficulty of the workload. Example items include, “How often does your job require you to work very fast?” and “How often do you have to do more work than you can do well?” All questions are rated with a Likert scale of 1-5, with anchors being 1 = less than once per month or never, 2 = once or twice per month, 3 = once or twice per week, 4 = once or

twice per day, 5 = several times a day. Internal consistency was reported to be .82 across 15 studies.

Organizational Constraint Scale. The Organizational Constraint Scale (OCS; Spector & Jex, 1998b) is an 11-item scale created to measure situations or objects that interfere with one's ability to perform at work. This scale was theoretically derived from the eight areas of constraint described by Peter and O'Connor (1980). Example items include, "Poor equipment or supplies" and "Lack of necessary information about what to do or how to do it." All questions were rated with a Likert scale that measured the frequency of the event, with anchors being 1 = less than once per month or never, 2 = once or twice per month, 3 = once or twice per week, 4 = once or twice per day, 5 = several times a day.

Interpersonal Conflict at Work Scale. The Interpersonal Conflict at Work Scale (ICAWS; Spector & Jex, 1998b) is a four-item scale to measure one of the most frequently reported workplace stressors, interpersonal conflict. Example items include, "How often do you get into arguments with others at work?" and "How often are people rude to you at work?" All questions were rated with a Likert scale that measured the frequency of the event, with anchors being 1 = less than once per month or never, 2 = once or twice per month, 3 = once or twice per week, 4 = once or twice per day, 5 = several times a day.

Goal Progress Survey. The Goal Progress Survey is a 6-item questionnaire that was adapted from Wanberg et al.'s (2010) Perceived Progress survey. Example items include "I had a productive month this month in relation to my work responsibilities" and reverse-coded "I got a lot less done with my graduate program responsibilities than I had hoped." All questions were rated with a Likert scale that measured the extent to which the participant agreed with the

statement, with anchors being 1 = strongly disagreed, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, and 5 = strongly agree.

Workplace Deviance Scale. The Workplace Deviance Scale is a 19-item questionnaire that focuses on two main factors of deviance, interpersonal and organizational deviance (Bennett & Robinson, 2000). Example items for interpersonal deviance include “made fun of someone at work” and “acted rudely towards someone at work.” Example items for organizational deviance include “come in late to work without permission” and “spent too much time fantasizing or daydreaming instead of working.” Respondents were asked how often they performed these behaviors on a seven-point Likert scale. The anchors were as following: 1 (never), 2 (once a year), 3 (twice a year), 4 (several times a year), 5 (monthly), 6 (weekly), and 7 (daily). Cronbach’s alpha was .81 for Organizational Deviance and .78 for Interpersonal Deviance. The correlation between the two factors was moderate ($r = .46, p < .01$), indicating the necessity for separate factors.

First-Generation College Graduate Status. Participants were given the following definition for first-generation college status: “The term “first generation student” refers to students who are the first member of their immediate family to complete a bachelor’s degree. Therefore, students whose parent(s)/legal guardian(s) attended college but did not complete their degree, or did not attend college at all, are considered first-generation status.” Participants then responded yes or no to whether or not this definition described them.

ANALYSES

In this section, I will describe the process in which I analyzed my data and model. Only participants who completed two or more time points were included in the analyses. In addition, all analyses, except ICC's, were conducted using wide format. As certain criteria for the model were not met or errors occurred, I was forced to adjust my overall model. The justification for these decisions will also be provided.

Confirmatory Factor Analyses

Confirmatory factor analyses (CFA) were conducted for all measures to assess the factor structure of each latent variable. Acknowledging the multiple groups in my study, I conducted these CFAs with only non-first-generation college graduates (I describe measurement equivalence analyses further below). Additionally, CFAs to establish the factor structure of each scale were conducted on all time points. Adequacy of model fit will be evaluated using the following relaxed cutoff criteria: standardized root mean square residual (SRMR) < 0.10, Comparative Fit Indices (CFI) > 0.90, Tucker Lewis Indices (TLI) > 0.90, and root mean square error of approximation (RMSEA) < 0.10 (Hu & Bentler, 1999). In addition, I evaluated the chi-square (χ^2) test of model fit, in which non-significant results indicate a perfect fit of the model to the data. However, the chi-square test is commonly subjected to sample size, in which large samples often result in significant χ^2 values.

In the initial CFA, future self-continuity, intent to leave, interpersonal conflict at work, and quantitative workload exhibited an acceptable fit. While ICAWS did not meet the RMSEA cut-off in time 2 and QWI did not meet the RMSEA cut-off in any time point, I ultimately considered the factor structure of these scales acceptable based on the other fit statistics. It is

possible to encounter scenarios where a given fit statistic signals misfit, thus it is recommend to evaluate model fit holistically (Schermelleh-Engle, Moosbrugger & Müller, 2003). For example, RMSEA is often inflated when used to assess model fit with non-normal data, which appeared to be the case with responses to ICAWS and QWI (Chou, Bentler, & Satorra, 1991). However, goal progress, organizational constraint, and workplace deviance did not exhibit an acceptable fit.

Adjustments were made to goal progress, organizational constraint, and workplace deviance to achieve an acceptable level of fit. Goal progress was assessed as a two-factor model, having reverse coded items being their own factor; this improved to excellent fit. Organizational constraints scale (OCS) was analyzed as a 3-factor model, with factor 1 representing limitations due to equipment (OCS-Equipment), factor 2 representing limitations due to interacting with other people (OCS-People), and factor 3 representing limitations due to rules and information available (OCS-Information); this improved to acceptable fit. Workplace deviance was already assessed as a 2-factor model: interpersonal deviance and organizational deviance. Interpersonal deviance items repeatedly did not exhibit acceptable fit despite removing poorly loaded items or covarying items. Due to this, I decided to remove the interpersonal deviant items as it was likely that these items were not endorsed by my sample because these are considered more egregious deviances (i.e. publicly embarrassed someone at work). The organizational deviance variables that were endorsed represented time and effort deviance and presented an acceptable fit. Table 1 displays the fit indices for each latent variable at each timepoint.

Measurement Equivalence

Next, measurement equivalence was assessed across traditional graduate status and first-generation graduate status to ensure that all latent variables were interpreted by both populations in the same manner (Schmitt & Kuljanin, 2008). Achieving measurement equivalence would

indicate that changes in scores are due to true meaningful differences or variance of a construct rather than measurement change. All latent variables, except goal progress, exhibited excellent model fit. This means that only goal progress was interpreted differently by the two populations. When two items were removed from goal progress and it was reduced back to one factor, excellent model fit was achieved. Table 1 displays the measurement equivalence fit indices for each latent variable at each timepoint.

Table 3

Measurement Equivalence Across Sample Population

Variable	χ^2	RMSEA	CFI	TLI	SRMR
FSC T1	201.92*	0.10	0.92	0.90	0.12
FSC T2	136.40*	0.09	0.95	0.93	0.09
FSC T3	132.83*	0.09	0.95	0.93	0.08
ICAWS T1	11.45	0.03	1.00	1.00	0.03
ICAWS T2	36.68*	0.15	0.96	0.95	0.05
ICAWS T3	2.97	0.00	1.00	1.00	0.02
OCS T1	313.78*	0.11	0.92	0.92	0.06
OCS T2	258.16*	0.12	0.92	0.91	0.10
OCS T3	237.38*	0.11	0.93	0.92	0.09
QWI T1	76.20*	0.14	0.94	0.93	0.06
QWI T2	70.30*	0.16	0.92	0.91	0.07
QWI T3	71.60*	0.16	0.93	0.92	0.06
GOAL T1	19.75*	0.11	0.98	0.98	0.12
GOAL T2	35.59*	0.15	0.97	0.96	0.08
GOAL T3	14.55*	0.06	0.99	0.99	0.09
IL T1	0.818*	0.00	1.00	1.00	0.01
IL T2	1.415*	0.00	1.00	1.00	0.02
IL T3	1.822*	0.00	1.00	1.00	0.01
WDS T1	49.79*	0.11	0.95	0.94	0.06
WDS T2	30.25*	0.09	0.97	0.96	0.05
WDS T2	47.37*	0.13	0.93	0.91	0.08

Note. * $p < .05$. FSC = Future Self-Continuity, ICAWS = Interpersonal Conflict at Work Scale, OCS = Organizational Constraint Scale, QWI = Quantitative Workload Inventory, WDS = Workplace Deviance Scale, GOAL = Goal Progress, and IL = Intentions to Leave.

Similarly, measurement equivalent across time was also assessed to ensure that variables were interpreted the same at each timepoint, i.e. longitudinal measurement equivalence (Little, Preacher, Selig, & Card, 2007). All measures, except intent to leave, achieved strict invariance, meaning that model fit was excellent as factor loadings, intercepts, and residual variances were held constant. Intent to leave achieved weak invariance, meaning that it had excellent model fit when factor loadings were held constant. Table 2 displays the fit indices for measurement equivalence across time for each latent variable.

Table 4
Measurement Equivalence Across Time

Variable	Invariance	χ^2	RMSEA	CFI	TLI	SRMR
FSC	Strict	668.79*	0.04	0.94	0.94	0.07
ICAWS	Strict	98.82*	0.04	0.99	0.99	0.06
OCS	Strict	992.11*	0.05	0.94	0.93	0.05
QWI	Strict	272.51*	0.07	0.95	0.94	0.06
GOAL	Strict	142.75*	0.06	0.96	0.96	0.08
IL	Weak	72.54*	0.08	0.98	0.97	0.05
WDS	Strict	253.43*	0.07	0.94	0.94	0.06

Note. * $p < .05$. FSC = Future Self-Continuity, ICAWS = Interpersonal Conflict at Work Scale, OCS = Organizational Constraint Scale, QWI = Quantitative Workload Inventory, WDS = Workplace Deviance Scale, GOAL = Goal Progress, and IL = Intentions to Leave.

Intraclass Correlation Coefficients

Due to multiple time points, each participant was measured on multiple occasions resulting in measurement nesting within participants. Per the recommendation of Heck & Thomas (2015), I calculated ICCs for all repeated measures to evaluate whether multi-level analyses were justifiable. The ICC value indicates how much variance is accounted for at the within and between levels for each measured variable. All variables had a sizeable amount of variance accounted for at the within-level, meaning it is appropriate to continue with multilevel analyses (Table 3).

Table 5*Means, standard deviations, and intraclass correlations*

Variable	<i>M</i>	<i>SD</i>	ICC
1. FSC	3.82	0.64	0.38
2. ICAW	1.43	0.67	0.27
3. OC - Equipment	1.71	0.89	0.42
4. OC - People	1.95	0.85	0.85
5. OC - Information	1.94	0.88	0.41
6. QW	3.09	1.01	0.51
7. WD	2.56	1.37	0.23
8. GOAL	3.87	0.84	0.47
9. IL	2.81	0.52	0.33
10. COVID-19	4.13	2.70	--

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Intraclass correlations are reported as the amount of variance accounted for at the within-level (Zhang et al., 2010). FSC = Future Self-Continuity, ICAW = Interpersonal Conflict at Work, OC = Organizational Constraint, QW = Quantitative Workload, WD = Workplace Deviance, GOAL = Goal Progress, and IL = Intentions to Leave.

Table 6*Correlations of overall aggregates*

Variable	1	2	3	4	5	6	7	8	9
1. FSC									
2. ICAW	.03								
3. OCS -E	-.03	.66**							
4. OCS -P	-.04	.69**	.74**						
5. OCS -I	-.06	.63**	.73**	.84**					
6. QW	-.11*	.35**	.44**	.52**	.49**				
7. WD	-.11*	.34**	.35**	.41**	.40**	.21**			
8. GOAL	.28**	-.34**	-.31**	-.36**	-.44**	-.09	-.32**		
9. IL	-.21**	.27**	.36**	.43**	.46**	.35**	.33**	-.37**	
10. COVID	-.10	.39**	.33**	.37**	.38**	.32**	.12*	-.10	.19**

Note. * indicates $p < .05$. ** indicates $p < .01$. FSC = Future Self-Continuity, ICAW = Interpersonal Conflict at Work, OC - E = Organizational Constraints due to Equipment, OC - P = Organizational Constraints due to People, OC - I = Organizational Constraints due to Information, QW = Quantitative Workload, WD = Workplace Deviance, GOAL = Goal Progress, IL = Intentions to Leave, COVID = COVID-19.

Table 7*Correlations at each time point*

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. FSC T1												
2. FSC T2	.61**											
3. FSC T3	.60**	.64**										
4. ICAW T1	.11*	-.03	-.12									
5. ICAW T2	-.07	-.05	-.18*	.77**								
6. ICAW T3	-.00	.01	-.08	.66**	.73**							
7. OC-E T1	.02	-.06	-.16*	.61**	.58**	.59**						
8. OC-E T2	-.12	.02	-.18*	.56**	.62**	.54**	.70**					
9. OC-E T3	-.10	-.06	-.13	.54**	.51**	.57**	.74**	.76**				
10. OC-P T1	-.03	-.12	-.25**	.63**	.61**	.60**	.70**	.63**	.64**			
11. OC-P T2	-.02	-.01	-.19*	.58**	.70**	.58**	.59**	.66**	.59**	.77**		
12. OC-P T3	-.02	-.01	-.12	.54**	.57**	.64**	.64**	.60**	.72**	.77**	.78**	
13. OC-I T1	-.02	-.13	-.21**	.58**	.56**	.54**	.69**	.60**	.61**	.87**	.76**	.73**
14. OC-I T2	-.08	-.06	-.21**	.56**	.62**	.51**	.51**	.63**	.57**	.71**	.86**	.72**
15. OC-I T3	-.00	-.08	-.14*	.52**	.50**	.59**	.61**	.59**	.70**	.73**	.76**	.86**
16. QW T1	-.03	-.15*	-.14*	.33**	.35**	.26**	.39**	.36**	.38**	.47**	.43**	.41**
17. QW T2	-.04	-.09	-.24**	.33**	.38**	.33**	.41**	.43**	.38**	.47**	.54**	.45**
18. QW T3	-.03	-.09	-.17*	.30**	.30**	.30**	.40**	.35**	.44**	.45**	.41**	.47**
19. WD T1	-.01	-.07	-.10	.37**	.28**	.30**	.34**	.31**	.32**	.40**	.33**	.33**
20. WD T2	-.19**	-.15*	-.27**	.32**	.34**	.34**	.28**	.35**	.40**	.37**	.40**	.37**
21. WD T3	-.13	-.17*	-.18**	.22**	.30**	.29**	.25**	.33**	.37**	.35**	.38**	.40**
22. Goal T1	.17*	.24*	.24*	-.17*	-.05	-.15	-.13	-.16	-.10	-.12	-.19	-.06
23. Goal T2	.18**	.27**	.31**	-.26**	-.33**	-.32**	-.27**	-.24**	-.24**	-.34**	-.38**	-.36**
24. Goal T3	.25**	.20**	.28**	-.30**	-.37**	-.33**	-.36**	-.41**	-.36**	-.37**	-.45**	-.40**
25. Stay T1	-.12*	-.20**	-.20**	.27**	.29**	.28**	.36**	.34**	.37**	.43**	.38**	.41**
26. Stay T2	-.21**	-.14*	-.22**	.15*	.23**	.13	.24**	.26**	.24**	.29**	.35**	.30**
27. Stay T3	-.15*	-.12	-.16*	.22**	.23**	.18**	.29**	.27**	.27**	.35**	.34**	.37**

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

Table 7 Cont.

Variable	13	14	15	16	17	18	19	20	21	22	23	24
1. FSC T1												
2. FSC T2												
3. FSC T3												
4. ICAW T1												
5. ICAW T2												
6. ICAW T3												
7. OC-E T1												
8. OC-E T2												
9. OC-E T3												
10. OC-P T1												
11. OC-P T2												
12. OC-P T3												
13. OC-I T1												
14. OC-I T2	.84**											
15. OC-I T3	.81**	.83**										
16. QW T1	.45**	.39**	.42**									
17. QW T2	.46**	.51**	.47**	.76**								
18. QW T3	.42**	.39**	.47**	.76**	.77**							
19. WD T1	.41**	.33**	.35**	.21**	.14*	.17**						
20. WD T2	.37**	.40**	.35**	.18**	.19**	.23**	.78**					
21. WD T3	.34**	.33**	.35**	.13*	.11	.21**	.72**	.82**				
22. Goal T1	-.22**	-.33**	-.17	.04	-.06	.09	-.21**	-.19	-.12			
23. Goal T2	-.45**	-.46**	-.48**	-.11	-.14*	-.12	-.19**	-.30**	-.36**	.48**		
24. Goal T3	-.41**	-.44**	-.43**	-.05	-.12	-.03	-.31**	-.41**	-.44**	.28**	.65**	
25. Stay T1	.45**	.45**	-.47**	.30**	.31**	.24**	.31**	.25**	.32**	-.20*	-.35**	-.34**
26. Stay T2	.37**	.45**	.39**	.22**	.24**	.22**	.16*	.29**	.30**	-.23**	-.39**	-.33**
27. Stay T3	.40**	.44*	.42**	.35**	.30**	.32**	.17*	.19*	.27**	-.14**	-.46**	-.35**

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

Table 7 Cont.

Variable	25	26
1. FSC T1		
2. FSC T2		
3. FSC T3		
4. ICAW T1		
5. ICAW T2		
6. ICAW T3		
7. OC-E T1		
8. OC-E T2		
9. OC-E T3		
10. OC-P T1		
11. OC-P T2		
12. OC-P T3		
13. OC-I T1		
14. OC-I T2		
15. OC-I T3		
16. QW T1		
17. QW T2		
18. QW T3		
19. WD T1		
20. WD T2		
21. WD T3		
22. Goal T1		
23. Goal T2		
24. Goal T3		
25. Stay T1		
26. Stay T2	.62**	
27. Stay T3	.67**	.74**

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

Table 8*Means, standard deviations, and alphas*

Variable	<i>M</i>	<i>SD</i>	α
FSC T1	3.81	0.71	0.83
FSC T2	3.84	0.69	0.85
FSC T3	3.84	0.66	0.84
ICAW T1	1.39	0.65	0.88
ICAW T2	1.40	0.68	0.90
ICAW T3	1.41	0.71	0.90
OC-E T1	1.65	0.91	0.87
OC-E T2	1.71	0.90	0.90
OC-E T3	1.72	0.98	0.90
OC-P T1	1.91	0.89	0.84
OC-P T2	1.94	0.92	0.86
OC-P T3	1.96	0.90	0.85
OC-I T1	1.90	0.91	0.91
OC-I T2	1.94	0.90	0.91
OC-I T3	1.94	0.92	0.92
QW T1	3.08	1.08	0.89
QW T2	3.01	1.06	0.90
QW T3	3.02	1.08	0.90
WD T1	2.40	1.35	0.84
WD T2	2.39	1.33	0.82
WD T3	2.37	1.32	0.83
Goal T1	3.80	0.91	0.86
Goal T2	3.93	0.96	0.90
Goal T3	3.87	0.94	0.83
Stay T1	2.81	0.58	0.90
Stay T2	2.79	0.57	0.93
Stay T3	2.80	0.54	0.93

Note. *M*, *SD*, α are used to represent mean, standard deviation, and alpha, respectively.

Latent Growth Curve Evaluation

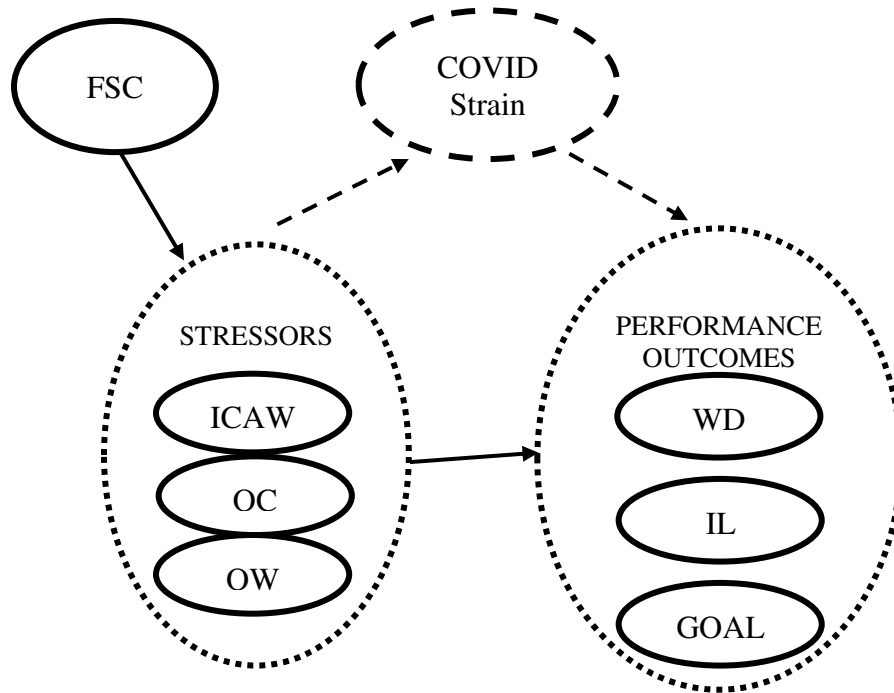
Before analyzing the entire model, I tested whether variables achieved acceptable model fit as a linear slope to determine whether they could be treated as a latent factor in a growth curve model (McArdle & Nesselroade, 2003). While I found that all variables; future self-continuity, organizational constraint, interpersonal conflict at work, quantitative workload, intent to leave, progress towards goals, and workplace deviance; achieved acceptable model fit for

linear slope, some did not exhibit significant variance. Future self-continuity, organizational constraint, quantitative workload, and intent to leave did not exhibit enough variance to investigate as a latent slope and were thereafter analyzed by their mean and standard deviation given these scales still exhibited a meaningful ICC value suggesting within-person variation.

Hypotheses Testing

A path analysis was conducted using the Growth Curve Modeling (GCM) method in Mplus version 8.3 (Muthén & Muthén, 2017). This approach allows for analyses at both a single time point and further investigates the trajectory of change in variable measurement over time. With this method, I was able to analyze both the static and dynamic relationships between variables that interact with each other.

However, as I tested for the overall model fit of my entire model, I was not able to achieve an acceptable fit with workplace deviance, progress towards goals, and interpersonal conflict at work being treated as latent variables. Therefore, due to these three latent variables being a consistent source of error, I further treated all variables as means and standard deviations (Figure 2). Standard deviations are being used as an alternative operationalization of within-person variance. Due to this change in operationalization, I am no longer looking at change over time, but rather the variability of the constructs. Mathematically, variability of a construct can be captured with a minimum of three-time points.



Note. This model analyzes the mean (M) and variability (SD) of each variable. Stressors and Performance Outcomes are depicted as dotted circles to convey that the constructs contained within were considered similarly as indicators of a domain of constructs represented by each circle (e.g. Organizational Constraint being a specific Stressor). The dashed arrows and circle containing COVID Strain depict that COVID strain was assessed as a mediator in an exploratory analysis. FSC = Future Self-Continuity, ICAW = Interpersonal Conflict at Work, OC = Organizational Constraint, QW = Quantitative Workload, WD = Workplace Deviance, GOAL = Goal Progress, and IL = Intentions to Leave.

Figure 2.

Revised Conceptual Model Analyzed.

RESULTS

An initial model was estimated to evaluate hypotheses related to first-generation college graduation status (FGCGS) predicting study variables (hypotheses 6 and 7). Nothing appeared to be predicted by FGCGS. However, including those regressions made several predictors endogenous in the model resulting in poor model fit. Therefore, after concluding that hypotheses related to FGCGS were not supported, I re-estimated the model without FGCGS. The model described hereafter does not include FGCGS.

Model Fit. The path analysis in which all variables were treated as means and standard deviations resulted in excellent model fit. The Chi-Square test of model fit was not significant ($\chi^2 = 18.24$, $p = .44$). Overall fit indices were all in the excellent range (RMSEA = .01 [.00, .05]; CFI = 1.00; TLI = .99; SRMR = .02).

Evaluation of Hypotheses

H1 suggested that if static representations of stressors relate to outcomes, these relationships would be beneficially buffered when FSC is high, in general (referred to here as FSC-M to denote the mean of FSC over time). FSC significantly interacted with organizational constraints due to equipment ($b = .31$, $SE = .12$, $p < .01$) to predict workplace deviance mean, as well as interpersonal conflict at work ($b = .27$, $SE = .11$, $p < .01$) and organizational constraints due to equipment ($b = -.28$, $SE = .12$, $p < .05$) to predict goal progress mean. However, all other interactions relevant to this hypothesis were non-significant. As such, H1 was considered not supported.

H2 suggested that the dynamic relationship between stressors and outcomes may also be buffered by a longitudinal representation of FSC. As mentioned previously, the standard

deviation of FSC (FSC-SD) over time was incorporated as a latent growth curve was not found to fit the FSC measures over time. As such, H2 is already lacking support given the lack of anticipated growth in FSC. Further, the only interaction effect relevant to this hypothesis that was found to be significant was organizational constraints due to equipment predicted variance in goal progress ($b = -.22$, $SE = .11$, $p < .05$). Given these results, H2 was considered unsupported.

H3 posed that growth in stressors would relate to growth in outcomes. However, as described previously, growth was not readily observed among any variable in the present study. As such, H3 was not supported. Further, only the SD operationalizations of Organizational constraint due to information significantly predicted the variability of workplace deviance ($b = -.16$, $SE = .06$, $p < .01$) and variability in goal progression ($b = -.16$, $SE = .08$, $p < .05$).

H4 suggested that the relationship between growth in stressors and growth in outcomes would be buffered by a general representation of FSC (i.e. FSC-M). Similar to above, given the lack of observable growth in constructs, H4 was unsupported. Further, there were no significant interaction terms between FSC-M and a given SD operationalization of a stressor in predicting outcomes.

H5 was that the relationship between growth in stressors and growth in outcomes would be buffered by a growth operationalization of FSC. However, FSC did not exhibit growth over the study period, nor did any stressor or outcome, and as such H5 was not supported. Further, there were significant interaction terms between FSC-SD and a given SD operationalization of a stressor in predicting outcomes. Both interpersonal conflict at work ($b = -.01$, $SE = .08$, $p < .01$) and organizational constraint due to information ($b = -.21$, $SE = .08$, $p < .01$) predicted variability in goal progress.

H6 and H7 suggested that FGCGS would predict growth in FSC and Stressors, respectively. FGCGS was not found to predict any hypothesized construct in a precursory model, as described above. As such H6 and H7 were considered unsupported.

Exploratory Indirect Effects

The indirect relationship of strain (Covid strain) between stressors and performance outcomes was evaluated in an exploratory analysis. Measures of covid strain were incorporated as a mean and standard deviation, following the approach applied to previous scales. While a model with Covid strain variables did have good model fit ($\chi^2 = 40.47$, $p = .06$; RMSEA = .04 [.00, .06]; CFI = .98; TLI = .91; SRMR = .03), Covid strain mean only predicted one outcome, WD variability, and weakly at that (WD-SD: $b = -.04$, $SE = .03$, $p < .05$). Therefore, I opted not to conduct follow-up indirect effect tests and concluded that I did not have an adequate measure of strain to investigate the full stressor-strain-outcome model (Hakanen & Bakker, 2017).

Direct Effects

Significant direct effects varied across stressors and performance outcomes. Table 5 presents all standardized estimates, standard error, and significance for all direct effects amongst variables for the model without COVID-19 as a mediator. Results were compared with and without strain included and were largely the same. Therefore, I am solely presenting the results from the model without strain as it ultimately became my final model. Significant findings that have not yet been reported include Goal progress (Goal) mean was predicted by interpersonal conflict at work (ICAW) mean, organizational constraints due to information (OC-I) mean and quantitative workload (QW) mean (ICAW-M: $b = -.14$, $SE = .07$, $p < .05$; OC-I-M: $b = -.43$, $SE = .09$, $p < .001$; QW-M: $b = .19$, $SE = .06$, $p < .01$). Goal progress SD was only predicted by OC-I SD ($b = .16$, $.08$, $p < .05$). Intent to leave (IL) mean was predicted by OC-I mean and QW mean

(OC-I-M: $b = .30$, $SE = .09$, $p < .001$; QW-M: $b = .13$, $SE = .05$, $p < .05$). Lastly, intent to leave SD was predicted by ICAW mean ($b = -.29$, $SE = .08$, $p < .001$).

Table 9*Direct, Indirect, and Interaction Effects*

<i>Variable</i>	<i>Outcomes</i>				<i>Goal M</i>		<i>Goal SD</i>	
	<i>WD M</i>		<i>WD SD</i>		<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
<i>Direct w/o Strain</i>								
ICAW M	0.10	0.07	-0.12	0.08	-0.14*	0.07	0.08	0.09
ICAW SD	--	--	0.01	0.06	--	--	-0.09	0.07
OC -E M	0.05	0.08	0.04	0.09	0.05	0.08	0.19	0.10
OC -E SD	--	--	0.07	0.07	--	--	-0.06	0.06
OC -P M	0.18	0.10	0.12	0.12	-0.02	0.1	-0.06	0.12
OC -P SD	--	--	0.04	0.04	--	--	0.13	0.07
OC -I M	0.15	0.09	-0.03	0.11	-0.43***	0.09	0.07	0.12
OC -I SD	--	--	0.16**	0.06	--	--	0.16*	0.08
QW M	-0.02	0.06	-0.02	0.06	0.19**	0.06	-0.05	0.06
QW SD	--	--	0.00	0.05	--	--	0.04	0.05
FSC M	-0.10*	0.05	-0.04	0.05	0.27***	0.05	-0.05	0.06
FSC SD	--	--	0.13**	0.05	--	--	0.09	0.05
<i>W/ Strain Mediator</i>								
COVID-19 M	-0.04	0.03	*-0.036	0.02	0.09	0.05	0.04	0.06
COVID-19 SD	--	--	0.00	0.03	--	--	0.08	0.06
<i>Interactions</i>								
ICAWm X FSCm	0.07	0.10	-0.08	0.14	0.27**	0.11	-0.17	0.15
OC-Em X FSCm	0.31**	0.12	0.12	0.14	-0.28*	0.12	0.05	0.15
OC-Pm X FSCm	-0.25	0.15	0.04	0.18	0.20	0.15	0.03	0.18
OC-Im X FSCm	-0.04	0.14	-0.14	0.16	-0.25	0.14	0.10	0.17
QWm X FSCm	0.07	0.06	0.07	0.07	0.07	0.06	0.05	0.07
ICAWsd X FSCsd	--	--	0.07	0.08	--	--	-0.01**	0.08
OC-Esd X FSCsd	--	--	-0.02	0.06	--	--	0.19	0.06
OC-Psd X FSCsd	--	--	0.00	0.08	--	--	0.01	0.08
OC-Isd X FSCsd	--	--	0.08	0.08	--	--	-0.21**	0.08
QWsd X FSCsd	--	--	-0.05	0.06	--	--	0.05	0.06
ICAWm X FSCsd	--	--	-0.09	0.11	--	--	-0.04	0.12
OC-Em X FSCsd	--	--	-0.02	0.10	--	--	-0.22*	0.11
OC-Pm X FSCsd	--	--	-0.01	0.12	--	--	0.12	0.12
OC-Im X FSCsd	--	--	-0.04	0.12	--	--	-0.03	0.12
QWm X FSCsd	--	--	-0.03	0.06	--	--	0.04	0.06
ICAWsd X FSCm	--	--	0.02	0.06	--	--	-0.03	0.07
OC-Esd X FSCm	--	--	0.00	0.06	--	--	0.08	0.07
OC-Psd X FSCm	--	--	-0.01	0.07	--	--	-0.06	0.08
OC-Isd X FSCm	--	--	0.02	0.07	--	--	-0.08	0.09
QWsd X FSCm	--	--	-0.06	0.06	--	--	-0.07	0.06

Table 9 Cont.*Direct, Indirect, and Interaction Effects*

<i>Variable</i>	<i>Outcomes</i>		<i>Intent to Leave SD</i>	
	<i>Intent to Leave M</i>		<i>Intent to Leave SD</i>	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
<i>Direct w/o Strain</i>				
ICAW M	-0.08	0.07	-0.29***	0.08
ICAW SD	--	--	0.03	0.07
OC -E M	0.04	0.07	0.16	0.09
OC -E SD	--	--	-0.09	0.06
OC -P M	0.131	0.10	0.05	0.12
OC -P SD	--	--	0.01	0.07
OC -I M	0.30***	0.09	0.05	0.11
OC -I SD	--	--	-0.08	0.07
QW M	0.13*	0.05	0.08	0.06
QW SD	--	--	0.05	0.05
FSC M	-0.17***	0.05	0.18***	0.05
FSC SD	--	--	0.20***	0.05
<i>W/ Strain Mediator</i>				
COVID-19 M	-0.01	0.05	-0.06	0.06
COVID-19 SD	--	--	-0.02	0.07
<i>Interactions</i>				
ICAWm X FSCm	0.08	0.10	0.49***	0.14
OC-Em X FSCm	0.09	0.12	-0.25	0.14
OC-Pm X FSCm	-0.04	0.14	-0.04	0.18
OC-Im X FSCm	0.02	0.13	-0.05	0.16
QWm X FSCm	0.00	0.06	0.01	0.07
ICAWsd X FSCsd	--	--	0.02	0.08
OC-Esd X FSCsd	--	--	0.07	0.07
OC-Psd X FSCsd	--	--	-0.12	0.08
OC-Isd X FSCsd	--	--	-0.11	0.08
QWsd X FSCsd	--	--	0.12	0.06
ICAWm X FSCsd	--	--	-0.05	0.12
OC-Em X FSCsd	--	--	0.02	0.11
OC-Pm X FSCsd	--	--	0.12	0.12
OC-Im X FSCsd	--	--	0.06	0.13
QWm X FSCsd	--	--	0.02	0.06
ICAWsd X FSCm	--	--	0.01	0.07
OC-Esd X FSCm	--	--	0.01	0.07
OC-Psd X FSCm	--	--	-0.04	0.08
OC-Isd X FSCm	--	--	0.00	0.08
QWsd X FSCm	--	--	-0.04	0.06

Note. Direct effects are reported for both the mean (M) and standard deviation (SD) of variables and outcomes without the strain moderator. Interpersonal Conflict at Work = ICAW, Organizational Constraint - E(Equipment), P (People), and I (Information) = OC E, OC P, and

OC I respectively, Quantitative Workload = QW, Future Self-Continuity = FSC, Workplace Deviance = WD, Goal Progression = Goal, Intent to Leave = IL. Indirect effects are reported for Covid-19 M and SD onto WD, Goal, and IL (M and SD). Interactions are reported for FSC (M and SD) with all stressors (M and SD) onto WD, Goal, and IL (M and SD).

DISCUSSION

Occupational Future Time Perspective (OFTP) has been used by I/O psychologists to primarily assess the remaining time and remaining opportunities of the aging workforce (Zacher & Frese, 2009). However, the literature has yet to assess the benefits that future time perspectives may have on younger workers just entering their careers. In this study, I examined how an employee's average future self-continuity and variability in FSC over the course of three months moderated the relationship between workplace stressors and performance outcomes. I further investigated the impact that first-generation college graduate status had on workplace stressors and average FSC levels. Finally, I evaluated an exploratory model whereby strain associated with Covid might mediate the relationship between stressors and outcomes evaluated here.

Past literature has highlighted the benefit of FSC in future planning for students in high school and college (Adelman et al., 2017), retirement planning, and overall health and well-being (Hershfield, 2011). The more that an individual thought about their future self, the more likely they were to engage in current behaviors that supported the lifestyle they perceived was coming. For example, if a student perceived their future self to have a good job after graduating high school or college, they would be more likely to invest more time into their studies (Chishima and Wilson, 2020). In addition, college students were more likely to overcome obstacles throughout their training and obtain their degree (Adelman et al., 2017). As prior research has emphasized the benefits FSC has in forming better patterns of behavior and overcoming stressful obstacles, I aimed to also establish that it may also relate to benefits in the workplace.

Future Self-Continuity in the Workplace

My initial goal was to establish the impact that FSC has on the relationship between workplace stressors (quantitative workload, interpersonal conflict at work, and organizational constraints) and performance outcomes (intention to leave, workplace deviance, and progression towards goal) and the trajectory of these changes over the course of three months. However, I was not able to establish these constructs as having a discernible trajectory over time. I then chose to look at each variable as the mean and variability, or standard deviation, throughout the three months. The mean would indicate the individual's average level of the construct at a specific time point. The standard deviation would indicate how much change occurred from the mean over the course of the three months. Although many of the original slopes that I investigated showed to have no growth, when I looked at the standard deviation from the mean, I found that many constructs had variability. This could indicate that some participants' scores fluctuate more than others in the measured variables.

While I was not able to fully test my original hypotheses due to these necessary changes, I was able to estimate the relationships between FSC and performance outcomes. Those who possessed higher levels of FSC reported lower levels of workplace deviance and intent to leave scores, and higher levels of goal progress scores and intent to leave variability. As it is crucial for the workplace to have lower levels of deviant behaviors and turnover, FSC could help mitigate these unwanted behaviors. One explanation for this is that individuals who have higher FSC tend to behave in a manner that is consistent with whom they want to become. In addition, as is consistent with past literature (Hershfield, 2011), higher levels of FSC could also help increase goal progression within the workplace. Lastly, those with higher levels of FSC had greater variability in intentions to leave. This would indicate that these individuals may be swayed more easily in their decisions on whether to consider leaving the organization and should be further

investigated. If it is true that these individuals vary more in their intentions to leave, this may be a target of intervention for organizations to be mindful of.

Next, those who possessed higher levels FSC variability reported greater workplace deviance variability and intent to leave variability. This means for individuals whose FSC scores were less stable, their engagement in workplace deviant behaviors and consideration of leaving the organization were more likely to fluctuate as well. Increased variability may make it harder to predict future outcomes of employees due to the inconsistent nature of FSC perceptions. Likewise, those who are more stable in their future perspectives of themselves may be more stable in their performance behaviors as well. Overall, there is an established relationship between FSC and performance behaviors in the workplace and further research should be conducted to investigate whether it could be considered a personal resource in which organizations could develop.

First-Generation College Graduate Status

First-generation college graduate status (FGCGS) was proposed to introduce to the literature the unique experiences that individuals who are the first of their family to receive a formal education may have when entering the workforce. Due to the lack of research in the occupational studies, this model explored how this unique experience may impact the number of stressors experienced overall levels of FSC. However, upon further investigation, clarification amongst the comparison group, traditional students, was deemed to be less clear as it could not be said with certainty that they had graduated from college. When referencing occupations that were listed in conjunction with non-first generation status, 41% had occupations that required a formal education according to O*Net (National Center for O*NET Development). Results indicated that there were no significant differences between first-generation college graduates

and the comparison group when it came to the number of stressors experienced and FSC obtained. While it is always worth further investigating relationships in multiple contexts, it is reassuring to recognize that in this sample, FGCGS did not appear to be an additional barrier to employees by creating more stressors or mitigating FSC levels as has been seen in past work with undergraduate samples (Tate et al, 2015; Ma & Shea, 2021). However,

Strain Model

An exploratory model was produced to test strain as a mediator between stressors and performance outcomes. The stressor-strain relationship is common for testing in the workplace because strain is the outcome of acute or prolonged stressors and can have a significant impact on the well-being of an individual, whether it is mental or physical health (Hakanen & Bakker, 2017). A single-item COVID-19 strain measure was used to gauge individuals' perceptions of how stressful the pandemic had personally been for them within the last month. Single-item measures are acceptable in situations when the construct is narrow and can often be less contaminating than a measure with multiple items of a similar type (Matthews et al., 2022; Fisher et al., 2016).

While the model with strain as a mediator did fit the data, strain only predicted one outcome and very weakly at that. Follow-up indirect effect tests were not tested because strain did not appear to have a significant impact on the outcomes.

Theoretical Implications

In the current study, future self-continuity was applied to the workplace context as a potential personal resource that could mitigate workplace stressors and enhance performance outcomes. The future time perspective (FTP) literature recognizes four main subsets in which someone can engage with their future: extension, density, directionality, and continuity (Kooij et

al., 2018). However, these four factors have not yet transferred to the workplace context in the occupational future time perspective (OFTP) literature. The OFTP literature has significantly focused on the extension aspect of FTP and largely focuses on the aging workforce (Zacher and Frese, 2009). This study contributes to the OFTP literature by expanding the use of the FTP factor “continuity” to younger workers who are at the beginning of their careers. By expanding to younger workers, OFTP can better understand the long-term mindset of those entering their careers and what factors are most important to help improve personal growth and commitment to an organization.

Additionally, in the Job-Demands Resource model (Bakker & Demerouti, 2014), personal resources can be used to mitigate the demands of the job and act as a buffer against long-term stressors. With this model in mind, I argue that while FSC may not be a resource, *per se*, it may still be relevant to the study of JDR. For example, FSC may be an indicator of engagement (or otherwise along the motivational pathway of JDR) and not a resource, which would explain why it still predicts outcomes but does not necessarily serve as a buffer. Further research should be conducted to better understand the impact of FSC over longer periods of time and to establish whether a trajectory might exist and how it could impact different stressors that occur, especially those that are unique to young professionals. In addition, due to not finding any outcomes that were significantly different for those with first-generation college graduate status, it may be helpful to further analyze whether experiences are ameliorated by the time they leave undergrad.

Practical Implications

With preliminary evidence arguing towards FSC as a personal resource that has direct effects on performance outcomes, it would be beneficial for practitioners to be mindful of how

young workers view their future in an organization as an indication of a healthy workplace. Future research that aims to investigate how younger workers feel and perceive their future in a certain industry should use FSC as a gauge. By doing so, research could potentially identify industries that have lower FSC and aim to create interventions to help young workers better navigate the unique stressors of those industries to preserve the field as a whole over time.

It also appears that workers are considering their future through evaluating their current job circumstances and whether they are conducive to their overall goals. Usually, when employees are asked to think about their future in the workplace, it is used to make decisions about where to guide that individual next, such as which department to transfer to or which opportunities to take advantage of. However, it may be worth thinking about how workers see their future to evaluate their current circumstances as well as whether their needs are being met. If management is able to identify early that needs conducive to one's goals are not being met, they can better job craft opportunities that meet the intrinsic needs of that individual and potentially create greater satisfaction in the organization.

LIMITATIONS AND FUTURE RESEARCH

Overall study length. I chose to limit my data collection to three months, in hopes that a month gap between time points would be enough to capture the change in the constructs. However, with the lack of a meaningful trajectory found across nearly all constructs I assessed, I would now argue that this study would greatly benefit from including more time points, with potentially longer periods of time in between, to capture what is potentially a slower change than had been originally anticipated. A study that could capture FSC over the course of a year may also be able to shed insight into whether a certain time of the year may be more difficult for individuals to engage in FSC due to increasing stress levels, such as when quarterly reports are due, tax season for certified public accountants (CPAs), or finals season for instructors. In addition, an increase in time and survey points may be beneficial to better understand the overall trajectory of FSC. It is possible that my study was too short of a time period to detect meaningful change.

First Generation College Graduate Status. As mentioned before, the comparison group for first-generation college graduate status was not clear on whether all participants had graduated from college. According to O*Net, at least 41% of occupations listed in the comparison group required a formal education. Due to being unsure of the education status of 59% of the comparison group, this may explain why there were no statistical differences between groups as the comparison group was not solely college graduates.

Strain Mediator. There are many ways to assess the strain experienced by individuals in the workplace. Researchers are recommended to collect physical health measurements, such as heart rate, cortisol, or actigraphy samples, to better understand the physiological responses that

subconsciously occur (Ganster & Rosen, 2013; Lewis et al., 2020). This method is more objective as it does not rely on personal perception or understanding of the questions in the survey. Some industries may view strain as a sign of weakness which may pressure employees to underreport their strain levels, akin to socially desirable responding (Nederhof, 1985). With this in mind, I would recommend that future research also include a form of physical health measurement to assess how the body reacts to stressors throughout the workday. For example, actigraphy watches, such as Fitbit or Apple watches, have sensors that can measure movement, heart rate, sleep rate, and other physiological responses throughout the day. This in conjunction with perceived strain may be more telling of the impacts that strain has as a mediator in workplace stressors and performance outcomes, as well as the physical impact that FSC as a personal resource may have on mitigating these long-term effects. Together, an objective strain measure may be both of greater research utility as well as produce more compelling results.

Standard Deviation Operationalization. Due to not being able to establish growth trajectories of the constructs, I operationalized change as the standard deviation, or variability, of constructs. However, this method works improves as the number of time points increases. Due to conducting the minimum number of time points to detect change so as not to overburden the sample, I, at most, have three-time points to assess change and two-time points for those who did not complete all three surveys. Due to the small number of time points, there is the possibility that meaningful variability is being conflated with unreliability. Conceptually, this is a suboptimal alternative to trajectories to detect meaningful change.

As mentioned before, I would recommend future researchers to increase the amount of time between time points, as well as the number of time points overall, to help better detect a

change. This design change should help avoid the need to use standardized deviation operationalization as there will be enough time to capture a change should one exist.

Lastly, alternative statistical methods could inform better design of future studies. For example, the Autoregressive Latent Trajectory (ARLT) model in which a prior value, from an earlier time point, is used to determine the current value of the same variable (Bollen & Curran, 2016). This model allows testing of time-specific lagged effects and individual random effects at simultaneously. When applied to multiple constructs, the value of this method is that it permits evaluation of growth (i.e. random effects) along with potential cross-lagged effects among multiple constructs. Thus, such a modelling strategy would capture relationships among growth in constructs if it existed, along with the opportunity to also model and consider relationships between constructs from measurement occasion to measurement occasion. Another method may be Ram's Lability in which one calculates the intraindividual standard deviation across multiple time points (Ram et al., 2011). This method is similar to the method that I used in the current study; however, Ram et al. emphasize the importance of multiple time points. Because this method uses sample statistics, a key difference in the statistical method is subtracting one from the total number of time points (e.g. $1/n-1$). Therefore, this would severely hamper the estimation of a person's mean and standard deviation if they only completed two-time points. While completing three-time points is better, capturing true variability is still difficult with such limited time points. This once again supports the argument to have an increased number of time points in future studies. In addition, Marceau et al. (2015) demonstrates that, in better conditions, one would be able to compute both a trajectory and a lability score around that trajectory. This ultimately means that one would be able to capture the fluctuation around one's mean (variability) versus the fluctuation around one's trajectory (lability of trajectory).

Covid-19 Pandemic. Lastly, this study was conducted throughout the Covid-19 pandemic which likely was a more stressor inducive period of time for many individuals, especially essential workers. Essential workers and front-line workers were individuals who worked in industries that were deemed critical to the function of society, such as transportation or medical support. However, the impacts of Covid-19 affected all industries as workplaces were forced to adjust their day-to-day operations to better protect workers and customers from the virus and mitigate its spread (Kaushik, 2020). With the added stressors in both work and personal contexts, Covid-19 may impact participants' perceptions of stressors and resources available to them. This study would benefit from being redone in a time period that is more stable economically and from a public health perspective.

CONCLUSION

As young workers enter into their careers, they must contemplate whom they want to become in the future and what opportunities will lead them to that future success. As I/O psychologists, it is critical for us to better understand how the perceptions of these employees impact their experience in the workplace. This study provided preliminary evidence to suggest that future self-continuity from the Future Time Perspective literature has a direct impact on performance outcomes that have severe implications for organizations, such as workplace deviant behaviors or ultimately leaving the organization. It is critical for Organizational Future Time Perspective literature to expand beyond the aging workforce and focus on the unique experiences of young workers and how organizations can better support employees who are in this stage of their careers. Doing so, may lead to an increase in the personal well-being of workers and create healthier organizations that are able to keep their talent longer.

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APPENDIX A: INITIAL SCREENING SURVEY

Adult

Are you 18 years of age or older?

1 = Yes

2 = No

Employed

Are you currently employed?

1 = Yes

2 = No

Years Employed

How many years have you worked at your current employment?

1 = 1 year, 2 = 2 years, 3 = 3 years, 4 = 4 years, 5 = 5 years, 6 = 6+ years

MTurk Email Account

Please enter your MTurk account ID number

APPENDIX B: DEMOGRAPHICS

Gender

The term, gender, refers to the “socially constructed characteristics of women and men –such as norms, roles, and relationships of and between groups of women and men.” Cisgender means that your gender corresponds to your sex assigned at birth, while transgender means that your gender does not correspond to your assigned sex. What do you consider your gender to be?

1 = Cisgender Woman, 2 = Transgender Woman, 3 = Gender Queer, 4 = Transgender Man, 5 = Cisgender Man, 6 = Prefer not to answer

Age

What is your age in years?

Race

What is your race?

1 = Indigenous, 2 = Black or African American, 3 = Asian American, 4 = White, 5 = Prefer not to answer

Follow up question: 1 = Inuit, 2 = Native American, 3 = Native Hawaiian, 4 = Pacific Islander, 5 = Prefer not to answer

Indigenous Follow Up

You selected "Indigenous" in the previous page. Please select the race you most closely identify with:

1 = Intuit, 2 = Native American, 3 = Native Hawaiian, 4 = Pacific Islander, 5 = Prefer not to answer

Ethnicity

What is your ethnicity?

1 = Hispanic, 2 = Latinx, 3 = Chicanx, 4 = Non-hispanic/Latinx/Chianx, 5 = Prefer not to answer

First Generation Student Status

The term first generation student refers to students who are the first member of their immediate family to complete a bachelor's degree. Therefore, students whose parent(s)/legal guardian(s) attended college but did not complete their degree, or did not attend college at all, are considered first-generation status. Would you consider yourself a first-generation status student?

0 = No, 1 = Yes

Professional Field

What is your field of work?

APPENDIX C: FUTURE SELF CONTINUITY QUESTIONNAIRE

(Sokol & Serper, 2019)

Similarity

1. How similar are you now to what you will be like 10 years from now?
2. How similar are your beliefs now to what they will be like 10 years from now?
3. How similar is your personality now to what it will be like 10 years from now?
4. How similar are your values now to what they will be like 10 years from now?

1 = Completely Different, 2 = Somewhat Different, 3 = A Little Different, 4 = Similar, 5 = Very Similar, 6 = Exactly the Same

Vividness

5. How vividly can you imagine what you will be like 10 years from now?
6. How vividly can you imagine what you will look like in 10 years from now?
7. How vividly can you imagine what your family relationships will be like in 10 years from now?

Positive Affect

8. Do you like what you will be like 10 years from now?
9. Do you like what your personality will probably be like 10 years from now?
10. Do you like what your actions will probably be like 10 years from now?

1 = Not at All, 2 = Not Very Well, 3 = Somewhat, 4 = Pretty Well, 5 = Very Strongly, 6 = Perfectly

APPENDIX D: STRESSORS & COVID IMPACT

Included on all 3 surveys

(Spector & Jex, 1997)

Interpersonal Conflict at Work Scale, ICAWS

Please rate how often the following events occur:

1. How often do you get into arguments with others at work?
2. How often do other people yell at you at work?
3. How often are people rude to you at work?
4. How often do other people do nasty things to you at work?

Organizational Constraints Scale, OCS

How often do you find it difficult or impossible to do your responsibilities because of ... ?

1. Poor equipment or supplies.
2. Organizational rules and procedures.
3. Other employees.
4. Your supervisor.
5. Lack of equipment or supplies.
6. Inadequate training.
7. Interruptions by other people.
8. Lack of necessary information about what to do or how to do it.
9. Conflicting job demands.
10. Inadequate help from others.

11. Incorrect instructions.

Quantitative Workload Inventory, QWI

Please rate how often the following events occur:

1. How often does your job require you to work very fast?
2. How often does your job require you to work very hard?
3. How often does your job leave you with little time to get things done?
4. How often is there a great deal to be done?
5. How often do you have to do more work than you can do well?

1 = less than once per month or never, 2 = once or twice per month, 3 = once or twice per week,
4 = once or twice per day, 5 = several times a day

COVID Impact

How stressful has COVID-19 personally been for you in the last month?

0 = not at all stressful, 1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 = 5, 6 = 6, 7 = 7, 8 = 8, 9 = 9, 10 =
extremely stressful

APPENDIX E: WORKPLACE DEVIANCE SCALE

Included on all 3 surveys

(Bennett & Robinson, 2000)

Please rate how frequently you have participated in each activity described below:

Interpersonal Deviance

1. Made fun of someone at work
2. Said something hurtful to someone at work
3. Made an ethnic, religious, or racial remark at work
4. Cursed at someone at work
5. Played a mean prank at someone at work
6. Acted rudely toward someone at work
7. Publicly embarrassed someone at work

Organizational Deviance

8. Taken property from work without permission
9. Spent too much time fantasizing or daydreaming instead of working
10. Falsified a receipt to get reimbursed for more money than you spent on business expenses
11. Taken an additional or longer break than is acceptable at your workplace
12. Come in late to work without permission
13. Littered your work environment
14. Neglected to follow your boss's instructions
15. Intentionally worked slower than you could have worked
16. Discussed confidential company information with an unauthorized person

17. Please select "Twice A Year" (ATTENTION CHECK)

18. Used an illegal drug or consumed alcohol on the job

19. Put little effort into your work

20. Dragged out work in order to get overtime

1 = never, 2 = once a year, 3 = twice a year, 4 = several times a year, 5 = monthly, 6 = weekly, 7

= daily

1. Taken property from work without permission

2. Spent too much time fantasizing or daydreaming instead of working

3. Falsified a receipt to get reimbursed for more money than you spent on business expenses

4. Taken an additional or longer break than is acceptable at your workplace

5. Come in late to work without permission

6. Littered your work environment

7. Neglected to follow your boss's instructions

8. Intentionally worked slower than you could have worked

9. Discussed confidential company information with an unauthorized person

10. Used an illegal drug or consumed alcohol on the job

11. Put little effort into your work

12. Dragged out work in order to get overtime

APPENDIX F: GOAL PROGRESS

Included on all 3 surveys

(Adapted from Wanberg, Zhu, & Van Hooft, 2010)

Please rate the degree to which you agree with the following statements:

1. I had a productive month this month in relation to my work responsibilities
 2. I made good progress on my work responsibilities this month
 3. I moved forward with my work responsibilities this month
 4. Things did not go well with my work responsibilities this month R
 5. Please select “Strongly Disagree” (ATTENTION CHECK)
 6. I got a lot less done with my work responsibilities than I had hoped R
 7. I hardly made any progress in my work responsibilities this month R
-

1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = strongly agree

APPENDIX G: INTENT TO LEAVE

Included on all 3 surveys

(MAO, 1975)

Please rate the degree to which you agree with the following statements:

1. I often think about quitting.
2. I will probably look for a new job/program (outside of my program requirements) in the next year.

1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = strongly agree

3. How likely is it that you will actively look for a new job/program in the next year?

1 = highly unlikely, 2 = somewhat unlikely, 3 = neither likely nor unlikely, 4 = somewhat likely, 5 = highly likely