**Detailed description of the research program**

**Can overqualification hurt your health?**

**A diary study examining work stress and unhealthy behaviors in Arab Israelis**

**Scientific background**

An unfortunate feature of the modern workplace is that increasing numbers of people are employed in jobs that fail to make full use of their capabilities. Being underutilized can lead to career stagnation and a failure to experience personal growth through work. Perceived overqualification (POQ) is the perception that one possesses more education, experience, and/or knowledge, skills, and abilities, than what one’s job requires. This is a common and important problem, especially in vulnerable populations where the rates of overqualification can exceed 50% of employees (e.g., the case of Canadian immigrants; Chen et al., 2010). Among vulnerable populations such as minorities or immigrants, POQ is a more widespread issue for several reasons including lower language fluency, cultural knowledge and social contacts as well as discrimination (Wassermann et al., 2017). Regardless of the reason, POQ is a serious problem across populations that can degrade employees’ general mental well-being (Harari et al., 2017).

POQ can be considered a work stressor, and it is well established that work stressors lead to adverse emotional, physiological, and behavioral outcomes (Bowling et al., 2015; Eatough et al., 2011; Nixon et al., 2011; Pindek, Arvan, et al., 2019), which can all be considered indicators of degraded mental well-being. Indeed, in their Meta-analysis, Harari et al. (2017) found that POQ is associated with poorer mental well-being, including psychological strain and worse mood. Nevertheless, these prior investigations have not examined the effects of POQ on health behaviors (behaviors that have a negative effect on health such as smoking, alcohol drinking and unhealthy eating, to name a few). Moreover, POQ may not only lead to more unhealthy behaviors directly, but also increase employees’ sensitivity and vulnerability to other negative work events (stressors), particularly those that are theoretically relevant to the perception of overqualification. Examining these aspects can extend what is already know on the effects of POQ on mental health so that we may begin to explain the effects of POQ on employees’ physical health.

Recognizing that overqualification is an important predictor of mental well-being in vulnerable populations such as minorities and immigrants (e.g., Chen et al., 2010; Wassermann & Hoppe, 2019), as well as the higher rates of unhealthy behaviors in these populations, I focus on the effects of POQ on the daily work stress process in an important vulnerable population within Israel, the Arab minority group. Furthermore, the proposed research uses a quantitative daily diary design which provides a detailed picture of participants’ day-to-day experiences leading to unhealthy behaviors, while comparing the patterns of daily experiences and behaviors between employees who perceived themselves to be overqualified and those who do not. This design is optimal for uncovering behavioral trends and will provide an invaluable theoretical basis for interventions.

**Perceived overqualification and work stress**

The most commonly referenced theoretical framework explaining how POQ affects employee well-being is relative deprivation theory (Crosby, 1984; Erdogan & Bauer, 2021; Erdogan et al., 2018). According to this theory, POQ generates a feeling of being deprived from the job one deserves, including the expected opportunities, status and pay, and interpersonal relationship that would have come with the hypothetical better job. Feeling that their job is beneath them, individuals experience a whole host of negative outcomes, including dissatisfaction and decreased well-being (Erdogan & Bauer, 2021; Harari et al., 2017). Relative deprivation theory is tightly linked to anger and resentment (Smith & Pettigrew, 2015), positioning anger as a mediator that leads to additional negative outcomes. In a recent study, my colleagues and I show that in addition to anger, boredom is an important pathway linking POQ with behavioral outcomes (Andel et al., 2021). Therefore, employees with POQ experience more anger and boredom (reflecting emotional distress, which over time degrades mental health), with both emotions uniquely contributing to negative outcomes.

I propose that in addition to the established effects that POQ has on individuals’ average levels of boredom and anger, POQ will also lead to higher average levels of unhealthy behaviors. Additionally, POQ might exacerbate the effects of other work stressors that are encountered daily, particularly those stressors that signal the deprivation in the employee’s work situation. Specifically, when a person who perceived themselves to be overqualified is faced with a work situation that highlights that they are overqualified for the job (such as having to do unchallenging work, or being assigned illegitimate or demeaning tasks) the negative outcomes may be more severe than if that person did not perceived themselves to be overqualified, in line with the principles of situation trait relevance (Tett & Guterman, 2000). Therefore, in the current proposal, I focus on those negative work events (stressors) that are most likely to elicit feelings of relative deprivation, their effects on anger and boredom, and the consequent unhealthy behaviors (moderated by personal tendencies for those behaviors). I further propose that POQ exacerbates the effects of those stressors on anger and boredom. The overall proposed research model is depicted in Figure 1.

Figure 1: Study Model

Behavior specific personal tendencies

Overqualification

Between person level

Within person level

Illegitimate tasks

Negative emotions (anger & boredom)

Unhealthy behaviors

Unchallenging work

**Why do negative work events lead to unhealthy behaviors?**

Affective events theory (Weiss & Beal, 2005; Weiss & Cropanzano, 1996) emphasizes the emotional experience of workplace events. When employees encounter negative work events (i.e., stressors), they immediately experience emotions that lead to short-term attitudes and affective-driven behaviors. The link between negative work events and the immediate affective and attitudinal responses of employees is well established. In a recent meta-analysis of daily diary studies (i.e., studies that use repeated daily measures of variables in order to separate within person fluctuations from more stable, between person effects), my colleagues and I found that a variety of work stressors had a significant association with affective strain outcomes (Pindek, Arvan, et al., 2019). Conversely, the link between work stressors and health behaviors has not received adequate attention, with only a handful of studies examining each type of unhealthy behavior.

The association between work stress and ***unhealthy eating*** was shown in several previous diary studies that examined work stressors such as self-control demands (Sonnentag et al., 2017), and job demands and mistreatment (Liu et al., 2017). The link between negative work events and ***alcohol consumption*** was shown using a between-person design (Frone, 2015), and more recently examined in a diary study that focused on emotional demands (Sayre et al., 2020). One notable study (Jones et al., 2007) that examined ***smoking*** in addition to unhealthy eating and alcohol consumption found that daily negative affect predicted higher levels of all of these unhealthy behaviors. This is a particularly impressive finding considering that the sub-sample of smokers was much smaller than the sample used for the other behaviors, further demonstrating the importance of this health outcome as a consequence of negative work events.

The dearth of research examining health behaviors as a response to negative work events and the very limited scope of those events is surprising, considering that unhealthy behaviors such as poor eating, alcohol drinking, and smoking, are a crucial link between work stress and maintaining health and well-being in the modern world. This is because on the one hand these short-term responses to stress are under the control of the individual, and on the other hand they contribute to cumulative health problems over time (Geurts & Sonnentag, 2006). Therefore, unpacking how work stress affects poor behavioral choices has a tremendous potential for impact on the long-term health and well-being of all employees, and particularly for those employees from vulnerable populations where unhealthy behaviors may be more common (e.g., smoking rates are substantially higher in the Arabic versus Jewish populations in Israel and reach 26%; Ministry of Health Israel, 2021; obesity rates are substantially higher in older Arab women; Keinan-Boker et al., 2005).

**Which negative work events are more likely to elicit stronger negative emotions for overqualified employees?**

As mentioned above, POQ likely results in negative outcomes because of the deprivation that individuals feel. Therefore, the focus of the current study is on daily stressors that are closely linked to feelings of deprivation, and that are expected to result in either anger or boredom. An important distinction between these two negative emotions is their level or arousal (Russell, 1980): High arousal emotions, such as anger and anxiety, are expected to result more from stressful events such as illegitimate tasks (Basch & Fisher, 1998; Pindek, Demircioğlu, et al., 2019), while low arousal emotions such as boredom are expected to arise more in response to unchallenging work (e.g., underload; Pindek, Krajcevska, & Spector, 2018). Thus, the focus of the current proposal is on specific daily work stressors that signal the deprivation associated with POQ, and that elicit anger or boredom, in line with the typical emotional responses to POQ.

The first stressor, ***illegitimate tasks***, is defined as assigned tasks that violate the normative expectations from the employee, because they are unnecessary to do at all, or they are unreasonable for that employee (Semmer et al., 2010). The main affective response to illegitimate tasks is anger (Pindek, Demircioğlu, et al., 2019). Illegitimate tasks signal disrespect or inadequacy (Meier et al., 2012; Semmer et al., 2007) and therefore can make the deprivation more salient. For example, if an employee feels unvalued on a specific day because they were assigned an unreasonable task, they may consequently ponder on deserving a better job. Moreover, employees with high POQ may find illegitimate tasks particularly disrespectful because they feel their qualifications exceed even the legitimate requirements of the job, making those daily illegitimate requirements even worse.

The second stressor, ***unchallenging work***, is work that does not provide an opportunity to meet the basic psychological need for competence (Deci & Ryan, 2000). When the demands of the job are too low, there is too little to do or the tasks themselves present a low mental demand, employees experience boredom (Fisherl, 1993; Pindek, Krajcevska, & Spector, 2018). For those employees who perceive themselves to be overqualified, and who typically feel the job is beneath them, days when the work in unchallenging may be particularly boring, as the tasks are even farther than what they feel they can handle.

Both stressors, leading to anger and boredom, are likely to lead to an increase in unhealthy behaviors, particularly in vulnerable populations that have higher rates of these behaviors and their associated long-term health problems. Furthermore, both stressors signal the deprivation associated with POQ and I therefore expect them to have a greater negative effect on employees who perceive themselves to be overqualified.

**Domain specific personal characteristics as moderators of the effects of negative work events on unhealthy behavioral choices**

The proposed research focuses on several prominent health behaviors simultaneously, assuming that individuals vary in their tendencies to respond to stress with specific behaviors: some “eat their feeling” (Liu et al., 2017), others turn to alcohol (Frone, 2015; Sayre et al., 2020). Smokers likely smoke more cigarettes (Jones et al., 2007). The advantage of examining several health behaviors simultaneously is that a clearer picture of the behavioral patterns for different individuals can be drawn. Following the same logic, I propose that person level moderators that capture the individual tendencies to engage in each type of behavior (e.g., emotional eating style, habitual/affective alcohol use, being a smoker) would exacerbate the effects (in the case of smoking, the effect will only be seen in employees who smoke).

Unhealthy eating in response to affective events is more likely in individuals with an ***emotional eating style***, defined as the tendency to eat in response to negative emotions. This is a prevalent eating style and it is associated with weight gain over time (Koenders & van Strien, 2011). Emotional eating is particularly relevant for the study of work stress because employees can face stressful situations at work on a frequent basis, which typically result in negative emotions (Pindek, Arvan, et al., 2019). Individuals with a stronger emotional eating style often react to such negative emotions with excessive eating or with choosing unhealthy foods (Keller & Siegrist, 2015; van Strien et al., 1986). Therefore, the effects of work stressors on unhealthy eating via negative emotions are expected to be stronger for those with a stronger emotional eating style.

Similarly, not all individuals are equally likely to consume more alcohol in response to experiencing stress. ***Habitual/affective alcohol use*** is the tendency to consume alcohol out of habit, in response to negative emotions (e.g., drinking when feeling bad), or as a way to generate positive emotions (e.g., drinking to feel good). It is a way to describe the patterned nature of drinking rather than the severity of the drinking disorder (Ferreira et al., 2020), and as such is suitable for the proposed research. Specifically, the tendency to consume alcohol in response to negative emotions is likely to exacerbate the relationship between negative affective events and alcohol consumption.

Finally, only those individuals who smoke can increase the number of cigarettes they smoke on more stressful days. Therefore, to complement the included personal level characteristics that assess tendencies to eat poorly or consume alcohol, ***being a smoker*** will serve as a person-level boundary condition: The analyses on smoking will only include smokers (e.g., Jones et al., 2007).

**Research objectives & expected significance**

The main objective of the proposed study is to understand how overqualification can affect the mental health of a vulnerable working population. It will explore how negative work events associated with overqualification and that signal deprivation (i.e., illegitimate tasks and unchallenging work) relate to mental health (emotional distress and maladaptive health behaviors). This expected pattern is likely true for the general population but likely more pronounced in vulnerable populations where overqualification is a more prevalent problem and unhealthy behaviors have a higher base rate. Therefore, I focus on the Arab minority group in Israel, which indeed has higher rates unemployment and overqualification as well as unhealthy behaviors than in the general population (e.g., Keinan-Boker et al., 2005; Lawental et al., 2014).

The proposed research is expected to provide invaluable insights into the negative impact of overqualification on mental health, including emotional distress and unhealthy behaviors. Therefore, this research is of interest to the academic community in both the occupational domain and the public health domain, and likely published in a top-tier scientific journal. Moreover, insights gained from this research can be used by practitioners in terms of career counseling to assist this vulnerable population in finding a better match of their qualifications to their jobs. The results can also be used by individuals trying to make a positive change in their eating, drinking, and smoking habits, because implementation of changes works best when tailored to the reasons for unhealthy behaviors (Adriaanse et al., 2009). In this context, knowing what elements in the work environment trigger unhealthy behaviors is an important step in changing eating, drinking, and smoking habits. Ultimately, this line of research ties work stress to important health issue that are not well understood but have implications not only for vulnerable populations but for all individuals, and for society as a whole.

The results from the current study examine an array of interconnected stressors, emotions and unhealthy behaviors, and are thus likely to be of broad interest to researchers. Therefore, this study has the potential to ignite additional research in different domains. For example, researchers interested in the spillover of work stress into the home domain may build on the current study and examine the effects of unhealthy eating, alcohol consumption, and smoking on the spouse. Specifically, if one partner eats an unhealthy dinner while at home, or drinks alcohol, will it increase the likelihood that the other partner will join? This is just one potential avenue for future research. There are many ways to build upon the findings from the proposed research, which will likely increase its impact substantially.

**Detailed description of the proposed research**

The model depicted in Figure 1 proposes that POQ is associated with higher average levels of anger and boredom, as well as higher levels of unhealthy behaviors. At the daily level, stressors that signal the individual’s overqualification (illegitimate tasks and unchallenging work) will be related to unhealthy behaviors during and after working hours (unhealthy eating, alcohol consumption, and smoking), via negative emotions. Person level characteristics will moderate these relationships such that the events-emotions relationships will be stronger for those with high levels of POQ. Furthermore, the emotions-unhealthy behaviors relationships will be stronger for individuals with tendencies to respond to negative emotions with each specific unhealthy behavior (e.g., those with an emotional eating style are more likely to respond to work stress by eating more and making poorer food choices). Accordingly, I propose the following hypotheses.

**Working hypotheses**

1. POQ is associated with higher average levels of anger and boredom
2. POQ is associated with higher average levels of unhealthy behaviors (unhealthy eating, alcohol consumption, and smoking)
3. Day level negative work events (illegitimate tasks and unchallenging work) are positively related to unhealthy behaviors (unhealthy eating, alcohol consumption, and smoking).
4. The relationships between day level illegitimate tasks and unhealthy behaviors are mediated by anger.
5. The relationships between day level unchallenging work and unhealthy behaviors after work are mediated by boredom.
6. POQ moderates the relationships between day level negative work events (illegitimate tasks and unchallenging work) and negative emotions (anger and boredom), such that the relationships are stronger for those with high levels of POQ.
7. Personal tendencies to engage in specific unhealthy behaviors (emotional eating style, habitual/affective alcohol use) moderate the direct and indirect relationship between day level negative work event (job demands and mistreatment) and the corresponding unhealthy behaviors (unhealthy eating and alcohol consumption, respectively), such that the relationships are stronger for those high on those personal tendencies.

**Research design and methods**

Sample and procedure

The main sample will include 300 full time Arab Israeli office employees, who work the normal working schedule and have a mobile phone. A power analysis (Spybrook et al., 2011) indicated that with a sample size of about 200, there is a power of 0.8 to detect within-level betas of .0.15 with 8 days of data per person (thus accounting for some attrition and missing data), and therefore this sample size is big enough even when considering some participants who do not drink alcohol at all. The effects on smoking will be tested with a sub-sample (estimated N= 80), which is sufficient (power of 0.8) to detect the larger expected effect size of about β = .20 (Jones et al., 2007). Participants will be recruited via email invitations, using the department’s pool of students who have graduated, as my colleagues and I have done in the past (Arvan et al., 2019). Approximately half of the students in my department’s B.A. program are Arab Israelis. Furthermore, graduates from our program are mostly office employees and are mostly employed in non-licensed occupations. This is important for the study of POQ, because in licensed occupations (e.g., doctors, lawyers, electricians), the education level often matches the job title perfectly, thus limiting the variance in overqualification.

After agreeing to partake in the study, participants will meet with an Arab speaking research assistant via Zoom. During this meeting, the research assistant will train the participant on the data collection procedure, including how reminders for the daily surveys will be sent, and what is required from them in each survey. Participants will then be directed to complete an initial questionnaire consisting of the person-level measures. In addition, participants will enter their email address in a separate survey. The email addresses will be used by the Qualtrics software to automatically send the 3 daily surveys for 10 consecutive workdays. Email addresses will be kept separate from participants’ responses and will be deleted after participants receive the gift-cards, thus ensuring participant anonymity. Each workday will feature a mid-day survey (sent at 12:00), an after-work survey (sent at 17:00), and an evening survey (sent at 21:00).

The mid-workday and after-work surveys will include self-reported measures of the negative work events (illegitimate tasks and unchallenging work), negative emotions, unhealthy eating and smoking, referring to the first half and second half of the workday, respectively. Measuring the stressors and emotions at two time points in the day will allow more confidence in establishing the direction of effects. The evening survey will include self-reports referring to the participants’ time after work and capturing their eating, and smoking as well as their alcohol consumption (alcohol consumption will only be assessed after work hours). In addition to the self-reported measures, all surveys will include a reminder for the participants to take pictures using their phone of everything they eat. Participants will be asked to upload their food pictures in a designated part of the survey (or provide a written description if a photo was not taken), as part of their surveys. I will refer to these pictures as the photo-food diary (explained below), an exploratory measure in this study.

After the two-week diary portion of the study, participants will be compensated and debriefed via Zoom. This debriefing will include providing them with a detailed report of their unhealthy behaviors, which is likely to attract participants to take part in the study beyond the monetary compensation for their time. Compensation will be given based on the proportion of surveys each participant completes (the maximal compensation will be the equivalent of approximately 75 USD). I have recruited participants (e.g., university staff employees, nurses) for diary studies using email invitations in the past, and considering the adequate monetary incentive and personalized feedback that participants will receive, recruiting the required sample should not be difficult.

Statistical analyses

The structure of the data is multilevel, with daily measurements nested within each participant in the study. Therefore, Multilevel Structural Equation Modeling (MSEM) will be used with the Mplus software (Muthén & Muthén, 1998-2012) to examine the fit of the proposed model to the data as well as the individual paths. The robust full-information maximum likelihood (MLR) estimator will be used to obtain robust standard errors while using all available data without imputations. With regard to alcohol consumption and smoking, those who completely abstain from drinking/smoking will be excluded only from the specific paths in the model leading to daily alcohol consumption/smoking. I will model random effects (intercepts and slopes) and test all hypotheses as part of a single model, in line with current best practices.

Measures

Response options range from 1 (strongly disagree) to 5 (strongly agree) for all variables except the demographics, unless stated otherwise. I rely on established self-report measures that have been validated in previous research. They have all exhibited good internal-consistency reliabilities. All measures will be back-translated to Arabic by two Arab speaking research assistants (including the Ph.D. student). In addition to the self-reported measures, some objective data will be collected, including the exploratory photo-food diary as well as an objective measure of overqualification. This is an important part of the study design, because supporting at least some hypotheses with cross-source data would resolve many common method concerns (Podsakoff et al., 2003) and increase the validity of the results.

*Person-level measures*

1. Demographic variables: Age, gender, marriage status, job tenure, average weekly work hours, religion and religiosity.
2. Negative affectivity: This is a common control variable in research on work stress and will be measured using the 10-item PANAS (Watson, Clark, & Tellegen, 1988).
3. Perceived overqualification (POQ): Assessed with the 9-item Scale of Perceived Overqualification (Maynard et al., 2006). A sample item is “I have more abilities than I need in order to do my job”.
4. Objective overqualification: Assessed according to the method in Arvan et al. (2019) by comparing the self-reported education, skill and cognitive ability (using the Israeli Psychometric Test instead of SAT scores) with the required levels of education, skill and cognitive ability for each job. The required levels for each job will be extracted directly from O\*NET, as and additionally assessed (using the O\*NET questionnaires) by the participants themselves for validity purposes.
5. Emotional eating style: Assessed with the 13-item emotional-eating scale of the Dutch Eating Behavior Questionnaire (van Strien et al., 1986). A sample item is “I have a desire to eat when I am irritated”. One subsection of this scale tackles high arousal emotions (e.g., anger, anxiety) as a cause for eating, and another tackles low arousal emotions (boredom).
6. Habitual/affective alcohol use: Assessed with the 16 item scale (Ferreira et al., 2020). This scale consists of three factors. A sample item for the habit factor is “I drink alcohol without thinking”, a sample item for the negative emotions factor (named “fear” originally) is “I drink alcohol when I am feeling bad (with fear, guilt, disgust, concern, anxiety, shame, …)”, and a sample item for the positive emotions (named reward originally) is “Drinking alcohol makes me happier”.
7. Smoking: current smoking level assessed according to CDC guidelines (having smoked at least 100 cigarettes during their lifetime and that currently smoke every day or some days; CDC, 2020), by self-reported number of cigarettes the participant smokes on an average day.

*Day-level measures*

1. Illegitimate tasks: The eight-item Bern illegitimate task scale (Semmer et al., 2015), adapted for daily use and referring to that morning/afternoon, will be used. A sample item is “This morning, I had work tasks to take care of, which kept me wondering if they should be done by someone else”
2. Unchallenging work: The five-item qualitative workload scale (Schmidt, 2007), adapted for daily use and referring to that morning/afternoon will be used in reverse, to reflect low qualitative workload. An example item is “This morning, I engaged in high complexity tasks”.
3. Boredom: Three items from the boredom as strain scale (Pindek, Krajcevska, & Spector, 2018), adapted for daily use, will be used. A sample item is “I felt bored at my job this morning”.
4. Anger: Three items from the JAWS (Van Katwyk et al., 2000) will be used. Participants will indicate whether they are experiencing the following emotions about work at the relevant time frame: angry, anxious, and furious.
5. Unhealthy eating: Assessed with the four-item scale developed by Liu et al. (2017). All items refer to types of unhealthy eating behaviors during/after work. A sample item is “This morning I had too many unhealthy snacks.”
6. Alcohol consumption: Assessed with the item “how many standard alcoholic drinks (1/3 liter of beer, one glass (120ml) of wine, or one serving (30ml) of liquor) have you consumed today after work?” (Sayre et al., 2020), with measurement units converted from imperial to metric.
7. Smoking: Assessed by directly asking how many cigarettes they had smoked during the relevant part of that day (Jones et al., 2007).
8. Photo-food diary: As part of their training, participants will be instructed to take pictures of what they eat after work. The afternoon and evening Qualtrics surveys will include a designated file upload page where participants will upload these pictures. These pictures will later be coded by the research assistants to create an objective score of unhealthy eating. This is an exploratory and untested assessment method for unhealthy eating, which, if found reliable, would increase the contribution of this research. Nevertheless, the study model can also be tested without this measure.

**Preliminary results**

Preliminary results from a pretest study support the feasibility of the proposed research, as well the part of the hypothesized model that was tested. Results are based on 131 employees recruited via an online company in Israel (Panelview.co.il) to partake in a 5-day diary study. A multilevel, random-effects model was estimated using the Mplus software (Muthén & Muthén, 1998-2012). The model is shown in Figure 2. The results indicated that underload (a form of unchallenging work) resulted in boredom, which then led to the consumption of more unhealthy snacks, for employees with a high (+1SD) emotional eating style (slope = 0.25, p < .05). This effect was not apparent for those with a low (-1SD) emotional eating style, who actually consumed less unhealthy snacks (slope = -0.26, p < .05), see Figure 3. As evident from these preliminary results, the proposed research is feasible and the idea that the choice of unhealthy behaviors is not constant across individuals is promising. Nevertheless, the proposed research is much broader and more comprehensive, making it very appropriate for top tier publication outlets.

Figure 2: Daily underload predicts unhealthy snacking indirectly via boredom, moderated by emotional eating style (\* p < .05, \*\* p < .01. Within level N = 538, between level N = 131)

Emotional eating style

Between-person level

Within-person level

Underload

Boredom

.29\*

Unhealthy snacking

.20\*\*

.00

Figure 3: Within-person daily boredom predicts unhealthy snacking for employees with high and low emotional eating style (Within level N = 538, between level N = 131)

**Conditions for performing the research**

The conditions for performing this research are favorable. I have now gathered ample experience in conducting diary studies (e.g., Pindek et al., 2020), including complicated designs that require additional training for the participants (such as wearable trackers; Pindek et al., 2018). Therefore, I have the necessary experience to conduct this type of research. I will recruit a Ph.D. student and two additional B.A. or M.A. students as research assistants, all Arab speaking, from the pool of undergraduate and graduate students in my department. For example, one of my current M.A. students is writing a thesis on overqualification among Arab Israelis. This student will likely be starting his Ph.D. around the time the proposed study will commence.

**Expected results & potential pitfalls**

While the preliminary results seem promising, it is possible that not all direct paths from events to behaviors will be supported. For example, the research by Sayre et al. (2020) that focused exclusively on alcohol consumption found support for only one of their two stress variables. If indeed only one of the two types of negative work events, or only some of the unhealthy behaviors are supported by the results, theoretical explanations for this pattern can be discussed in the paper. An advantage of examining several types of behaviors simultaneously is that post-hoc analyses that are replicated across the three behaviors will be more trustworthy. For example, Jones et al. (2007) who examined several unhealthy behaviors (snacking, smoking, exercise, alcohol, caffeine consumption) found consistent differences between men and women in what predicted these unhealthy behaviors. Furthermore, results based only on the self-reported measures may not replicate with objective data. This is a known problem (for example, objective and subjective assessments of sleep often do not converge), which is typically dealt with by treating the two measures as theoretically distinct, each leading to potentially different outcomes (Mullan, 2014). In this study, objective and perceived overqualification may not have the same effect, with perceived overqualification likely having a stronger effect as my colleagues and I showed in the past (Arvan et al., 2019). The photo-food diary is an exploratory measure and is not required for testing the model. Therefore, it has the potential to increase but not to diminish the contribution of the study.

A second potential problem is that the current COVID-19 pandemic and the related restrictions might influence data collection. If the pandemic is still ongoing at the time of data collection, I will only collect data during low-restriction periods and when morbidity rates are low. Holidays will also be avoided. I will also allow and statistically account for remote-working days. On days when employees are working from home, they have increased autonomy and ability to engage in the unhealthy behaviors that are included in the current study. Nevertheless, they may experience fewer negative work events resulting from that same autonomy. Therefore, this variability will likely enrich the results.

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