

UNDERSTANDING PERCEIVED OVERQUALIFICATION AT WORK: A SCALE  
DEVELOPMENT AND LATENT PROFILE ANALYSIS

by

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## ABSTRACT

WENDY C. LONG. Understanding perceived overqualification at work: A scale development and latent profile analysis. (Under the direction of DR. DAVID WOEHR)

Employee overqualification is becoming increasingly relevant in a post-pandemic world. While there have been theoretical advancements in the overqualification literature, several methodological issues remain unresolved. Specifically, the conceptualization and operationalization of perceived overqualification (POQ) are often not aligned. To date, the perception of overqualification is not yet fully understood. Thus, the main goal of this dissertation is to address these methodological limitations. In Study 1, I refined the scope of POQ by offering an explicit construct conceptualization grounded in person-job fit theory and developed a new scale to measure the multidimensional construct. In Study 2, I tested the psychometric properties of the Perceived Overqualification at Work Scale (POQWS) and explored the relationship of POQ with various work-related outcomes. Taking a person-centric approach, I used latent profile analyses (LPA) to identify different profiles of overqualified employees in Study 3 based on the POQWS dimensions. This study is the first to examine the process by which patterns of variables are identified in POQ profiles and how these combinations differentially relate to outcomes. Results from a series of exploratory and confirmatory factor analyses clearly supported a four-factor model. In the subsequent study, four distinct profiles emerged from the latent profile analyses. One-way analyses of variance (ANOVA) provided further criterion-related validity evidence for these four profiles. Taken together, the findings from this dissertation lay the grounds for future person-centered research.

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## CHAPTER 1: INTRODUCTION

The COVID-19 pandemic has presented a devastating socioeconomic crisis to the world, leaving a rippling effect in all regions of the globe. Approximately 3.3 billion employees are affected by business lockdowns, layoffs, and reduced wages (Verma & Gustafsson, 2020). Now more than ever, many people find themselves in less-than-ideal jobs or without a job entirely. While the popular media has largely focused on unemployment, recent events call for organizational and management scholars to unpack the impact of underemployment. Employee overqualification is a form of underemployment, an undesirable and inadequate employment situation (Feldman, 1996). Overqualification occurs when the employee's qualifications, such as education, experience, KSA (knowledge, skills, and abilities), exceed the job requirements (Erdogan & Bauer, 2021).

While sociologists, labor economists, and community scholars have studied underemployment and its larger societal impact in the past (Kalleberg, 2008), overqualification is still a relatively new topic of interest in the organizational literature. Organizational researchers mainly conceptualized overqualification as a form of mismatch in terms of misfit between an individual's characteristics and the corresponding characteristics of the job (Kalleberg, 2008). Unlike economists and sociologists, organizational psychologists are more interested in understanding the individual perception and differences of overqualification from a micro-level approach. In a recent review, Erdogan and Bauer (2021) found that overqualification predicts work-related outcomes such as job attitudes, individual well-being, turnover behaviors, job

performance, organizational citizenship behaviors (OCB), counterproductive behaviors (CWB), and many more. Thus, it is critical to examine the consequences of overqualification for organizations to maximize their human capital advantage with this unique group of employees. In the early 2000s, the overqualification literature was largely criticized for being atheoretical (Luksyte & Spitzmueller, 2011). Since then, the field has advanced to integrate multidisciplinary theories to study this phenomenon. Despite the growing interest and burgeoning recent publications, overqualification research is still in an early stage. Several limitations must be addressed before we can draw robust conclusions from existing literature.

The first major limitation in the literature is the conceptual understanding of employee overqualification. Whereas defining objective overqualification is relatively straightforward, perceived overqualification (POQ) is loosely defined as an employment situation where “employees *believe* that their skills, education, and experience are neither required by nor utilized on the job” (Erdogan & Bauer, 2021, p. 13). Although later chapters will elaborate on the distinction between objective and subjective overqualification, POQ is the focal construct of interest here because it is often the perception that bears implications for the responses to overqualification (Harari et al., 2017).

While the literature mainly recognizes overqualification as a type of misfit between the job and the person, Liu and Wang (2012) proposed an alternative definition in that perceived overqualification is also an assessment of fairness in terms of the opportunity to perform on the job. In other words, limited opportunities to utilize one’s skills and abilities engender the feeling of injustice, which leads to feelings of

overqualification. Other overqualification scholars have expanded this definition further, suggesting POQ may also stem from “a lack of promotional opportunities associated with the job, which leads to dead ends” (Johnson et al., 2002, p. 427). In summary, POQ has been labeled using different conceptual terms and is often defined interchangeably with underemployment (Feldman, 1996), overeducation (Kalleberg, 2008), lack of opportunity to perform (Liu & Wang, 2012), lack of opportunity for growth (Johnson et al., 2002), and excess qualifications in terms of education, skills, and experience (Maynard et al., 2006).

Using inconsistent terminology is problematic in that there will be discrepancies not only in the way it is conceptualized but also in the way it is operationalized. Thus, it is not uncommon for researchers to use inappropriate measurements of POQ without providing adequate construct explication (Anderson & Winefield, 2011). Poor construct measure alignment has been an area of serious concern for overqualification researchers (Liu & Wang, 2012). To further complicate matters, POQ is usually defined relative to some referent others. The referent points the employee uses to make such comparisons are often ambiguous in the literature. For example, the referent could be one’s colleagues, the job itself, others with similar educational backgrounds, others with similar job titles, or even one’s ideal self or expectations. Given the disciplinary differences, the conceptualization of POQ first needs to be clearly established in organizational science.

The second key limitation in the overqualification literature focuses on the operationalization of POQ. Although overqualification researchers have known and largely accepted POQ as a multidimensional construct, the field continues to use scales that treat it as unidimensional. Two of the most widely used scales to measure POQ are

the Johnson and Johnson's (1996) Perceived Overqualification (POQ) Scale and Maynard et al.'s (2006) Scale of Perceived Overqualification (SPOQ). The POQ Scale by Johnson and Johnson has two factors: *Perceived Mismatch* and *Perceived No Growth*. *Perceived Mismatch* measures person-job mismatch via surplus education and lack of opportunities to utilize one's skills while *Perceived No Growth* captures the lack of opportunities to grow and change on the job. Although Johnson et al. (2002) found that results of confirmatory factor analyses supported the two-dimension model, overqualification scholars have mostly ignored the *Perceived Mismatch* factor in later studies. Thus, the focal problem persists: POQ as a multidimensional construct is consistently measured using a unidimensional approach in the literature.

To illustrate this problem further, Maynard et al.'s (2006) unidimensional 9-item SPOQ captures solely the person-job qualification mismatch. The SPOQ is supported by one factor explaining most of the variance in principal component analysis (PCA). However, a confirmatory factor analysis (CFA) in later analysis demonstrated a three-factor model (in which education, skills, KSAs are classified under three distinct factors) provided superior fit indices over a one-factor model (Maynard et al., 2006). Although overqualification researchers continue to use the scale at large, the dimensionality of the SPOQ remains controversial.

From the existing measures of POQ, perceived overqualification is only one specific form of objective overqualification (i.e., demands-abilities misfit). However, from past research and meta-analytic findings, it is clear that objective overqualification does not predict outcome variables nearly as strong when compared to POQ. For example, Arvan et al. (2019) found a nonsignificant correlation between objective

qualification and job satisfaction ( $r = -0.11$ , *n.s.*) yet a significant correlation between POQ and job satisfaction ( $r = -0.38$ ,  $p < .01$ ). Furthermore, Harari et al.'s (2017) meta-analytic review found that objective overqualification and POQ correlate at about .40. These findings suggest objective overqualification and POQ are two distinct constructs that differentially predict workplace outcomes. However, we continue to measure POQ the same way we measure objective overqualification (mainly in the form of job demands and qualification mismatch). Thus, there is an inherent disconnect in the literature.

Simply put, there are other factors driving POQ that are unaccounted for and cannot be captured using the existing scales. It is then critical to expand the operationalization of POQ to explore dimensions outside of what was traditionally defined as objective overqualification. For example, Johnson and Johnson's *Perceived No Growth* component of POQ should be revisited and reassessed. Other forms of mismatch should be explored as well. In short, both the POQ Scale and SPOQ are inadequate in capturing the comprehensive POQ construct. Despite their limitations, both scales remain dominant in the literature because there are no better alternatives.

Meta-analytic evidence points to a consistent finding: POQ produces a host of negative outcomes for both the individual and the organization, including lower job satisfaction, lower organizational commitment, higher turnover, and lower psychological well-being (Harari et al., 2017). In sum, overqualification is a highly undesirable state of employment. However, the measurement issues described above may challenge the existing assumption that overqualification is entirely negative. There may be potential positive outcomes of POQ upon refining the scope of POQ. In other words, the relationship of POQ with some of the outcome variables may not be as negative as those

found in extant literature. Limitations in measurement hinder both theory advancement and practical implications. Resolving these issues can help future researchers and practitioners to explore the possibility of managing overqualification in a more positive light. Erdogan and Bauer's (2021) review suggests that while there are many areas in the POQ literature where we know more than we did a decade ago, there are still many areas that need further research. With a flawed measurement system, the overqualification literature continues to emphasize its deleterious effects and reinforce it as a barrier to employment in today's labor market. Contrary to the noticeable theoretical advancements in POQ literature, its measurement has been stagnant. Study of its psychometric properties has not made new progress since the early 2000s. This remains a critical gap that needs to be resolved.

A third limitation in the literature is the lack of a configural approach to studying employee overqualification. The configural approach examines a bundle of variables together and explores the interactions among these variables in depth. It allows for examining multiple dimensions of a construct simultaneously as a system as well as distinguishing the effect each dimension plays in the system. Because the overqualification literature lags in its methodological advancement, we are limited in understanding how different dimensions of POQ can interact and lead to differential outcomes.

To the best of my knowledge, there is little, if any research on overqualification utilizing a configural approach. For example, latent class cluster analysis or latent profile analysis (LPA) is one such method that helps researchers to identify latent subpopulations on a certain set of variables (Collins & Lanza, 2009). LPA assumes that "people can be

typed with varying degrees of probabilities into categories that have different configural profiles of personal and/or environmental attributes” (Spurk et al., 2020, p. 2). The existence of different configurations of profiles helps us understand the full spectrum of POQ rather than assume an artificial dichotomization of POQ. In fact, most of the studies do not examine the degree of overqualification and its effect on outcomes (Erdogan et al., 2011). Profiles further help us explore the nuance of the POQ construct in that not all dimensions equally contribute to the negative outcomes we see in existing research.

Although still in its methodological infancy, LPA has proven to be helpful in numerous lines of organizational and vocational research. For example, LPA has been used to identify subgroups found in profiles that reflect different combinations of organizational commitment (Stanley et al., 2013). There have been recent calls to utilize LPA in overqualification research as subpopulations could exist among employees who are overqualified (Liu & Wang, 2012). For example, Maltarich et al. (2010) specifically noted a group of overqualified employees who voluntarily enter employment fully aware they are overqualified for the job. This is in stark contrast to Feldman’s (1996) definition that assumes any type of underemployment, including overqualification, is involuntarily and forced by external circumstances. The term “*intentional mismatch*” is used to describe a condition of overqualification motivated by the fit between employees’ nonwork values and what their jobs can provide (Maltarich et al., 2010). With this idea, van Dijk et al. (2020) suggest that the negative consequences of overqualification can be mitigated when overqualified employees willingly enter employment on a voluntary basis, given their needs or desires are met by the job. The configural approach takes needs-supplies fit into account, allowing researchers to use different individual, job,

and/or environmental variables to profile various types of overqualified employees. Different profiles could then predict critical outcome variables, providing researchers with a finer-grained view of the influence of POQ.

Notably, these methodological issues in the overqualification literature present a serious challenge for the field. The lack of discussion on the advancement of POQ measures needs to be addressed. My dissertation seeks to bridge the gap in extant literature by drawing upon multidisciplinary theoretical frameworks to present a new conceptualization of POQ. Specifically, this dissertation makes three important contributions to the literature. The first contribution is the reconceptualization of POQ as a multidimensional construct, integrating previous definitions of overqualification. In Study 1, I offered an explicit definition of POQ grounded in theory and developed a new scale of POQ by incorporating the latest research. The second contribution of this research is to challenge the existing “*multidimensional construct, unidimensional measure*” fallacy in the overqualification literature. In Study 2, I validated the psychometric properties of the new scale and explored the relationship of POQ with various work-related outcomes. Lastly, the final contribution of the study is to answer recent calls in the overqualification literature to explore the possibility of using a configural approach. In Study 3, I used latent profile analysis (LPA) to identify different profiles of overqualified employees based on the dimensions proposed in Study 1 and 2. Using LPA, this study is the first to examine the process by which patterns of variables are identified in POQ profiles, how it compares with other profiles as well as how these combinations differentially relate to outcomes. By confronting the existing

methodological limitations through a series of studies, my dissertation provides valuable information to move the overqualification literature forward.

In the next chapter, I begin with a broad overview of employee overqualification. Specifically, I distinguish different disciplinary approaches, differentiated objective and perceived overqualification as well as clarify objective and perceived measures. Next, I review the dominant theoretical frameworks used in the extant literature and integrate them as the foundation of my proposed scale. The following section provides a brief review of similar constructs in the nomological network, two existing POQ measures, and their limitations. To address these research gaps, I then propose a series of hypotheses by outlining the scale development process, the psychometric validation of the new scale, and an exploratory latent profile analysis based on the validated dimensions. I discuss the procedures and the results of the three proposed studies. Lastly, I conclude the paper with both theoretical and practical implications of this research.

## CHAPTER 2: LITERATURE REVIEW

### **A Multidisciplinary Perspective**

In the organizational science literature, perceived overqualification (POQ) is a relatively recent topic of interest that has gained traction in the early 2000s. POQ is a form of underemployment, which describes a type of employment situation that is inferior, less-than-ideal, and lower quality. It is undesirable employment defined relative to some standard. In his seminal paper explaining the nature, antecedents, and consequences of underemployment, Feldman (1996) presented a multidimensional conceptualization of the construct. Underemployment consists of excess of education, excess of skills and experience, earnings of at least 20% lower than previous employment, involuntarily engage in intermittent employment, and involuntarily employed outside of a focal individual's education area. Sociologists have used many of the same indicators as have economists in identifying underemployment in terms of educational level needed for the job, loss of income, and continuity/permanence of employment. Among social psychologists and organizational researchers, greater emphasis has been given to self-report data and individuals' perceptions of their underemployment status.

Underemployment is determined both by the objective characteristics of the employment situation and the subjective interpretations by the individual. Different disciplines emphasize different aspects of underemployment. For example, management scholars' interest centers on the individual and organizational outcomes while economists typically examine the underutilization of the labor force and its effects on the labor

market and wages. Sociologists are motivated to study the impact of underemployment on society and social structures. However, community psychologists are more interested to investigate the health outcomes and community effects of underemployment (McKee & Harvey, 2011). Despite the variety of definitions, both between and within disciplines, the literature marks a distinction between objective and subjective (perceived) underemployment. Similarly, overqualification (a form of underemployment) is not only objectively but also subjectively determined.

### **Objective and Perceived Overqualification (POQ)**

Under the larger umbrella of underemployment, overqualification is broadly defined as an employee's excess qualifications (i.e., education, experience, knowledge, skills, and abilities) that are not required nor being utilized on the job (Maynard et al., 2006). There is an inherent distinction between objective overqualification and perceived overqualification (POQ). Objective overqualification is the level of qualifications an employee possesses relative to the job requirement, with a surplus in qualifications denoting overqualification. To be consistent with its objective nature, this is usually measured by an outside observer or measurement scale that is not directly reported by the employee him/herself. Perceived overqualification is the extent to which employees view themselves as having excess qualifications relative to their jobs. POQ is a self-perception of one's overqualification status regardless of the objective metrics. In other words, one can perceive him/herself as subjectively qualified but not objectively qualified based on their actual education, experience, and/or skills.

Although objective overqualification and POQ are highly similar constructs, they are not so highly correlated that they would be considered redundant constructs in the

literature. For example, Harari et al.'s (2017) meta-analytic review found that objective overqualification and POQ correlate around .40. Similarly, in Arvan et al.'s (2019) paper, objective overqualification (i.e., overeducation, skills overqualification, and cognitive overqualification) correlates .54 with POQ. The extent to which objective overqualification and POQ can differentially predict work-related outcomes is limited partly because POQ is still the dominant construct of interest examined in the current literature. This phenomenon is not surprising as POQ is considered a more proximal predictor of job attitudes than objective overqualification (Maynard & Parfyonova, 2013). In contrast, objective overqualification may better predict job behaviors. For example, POQ may predict an employee's intention to quit whereas objective overqualification may predict the employee's actual turnover behavior. Overall, the hypothesized relationships for both constructs with outcomes variables are relatively similar in direction yet equivocal in strength.

#### *Objective and Subjective Measures*

Objective and perceived overqualification constructs are not to be confused with objective and subjective overqualification measures. For example, Arvan et al. (2019) measured objective overqualification using three different measures: overeducation, skill overqualification, and cognitive ability overqualification. Overeducation is measured by asking the employees to report their education level and comparing it with the required level of education by their respective occupations based on the information available on O-NET. Similarly, for skill overqualification, the authors derived the scores of the skills that are most relevant for the job on O-NET and compared the ratings to employees' self-report ratings of each skill. Cognitive ability overqualification is measured by the

difference between the participants' SAT scores and O-NET ratings of the cognitive demands of the job.

To elaborate the distinction further, Verhaest and Omeij (2006) measured overeducation (one dimension of objective overqualification) with four methods. Overeducation can be assessed with direct self-report, indirect assessment, realized match, and job analysis. Direct self-report and indirect assessment are subjective measures while realized match and job analysis are considered objective measures. Direct self-report involves asking the employees directly whether they feel like they are over-, under-, or adequately qualified for their job. Indirect assessment is conducted by asking the employee the level of education required for their job and compare their responses to their actual education level. Realized match is the comparison of the focal employee's education to the distribution of education level by his/her peers in a similar occupation. Lastly, job analysis is the systematic analysis for collecting information on the focal job requirements. As objective overeducation (and objective overqualification) can be measured using either subjective or objective data, it is important to ensure the measurement approach is aligned with the study's intended purpose.

### **Theoretical Framework**

Since Feldman's (1996) paper, the underemployment literature has made progress in both conceptual and theoretical development. Because overqualification is a type of underemployment, many theories used in the overqualification research are similar. In the following section, I review various theoretical approaches in studying overqualification in the organizational science literature. There are four major theoretical frameworks that

are commonly used: person-job fit theory, relative deprivation theory, equity theory, and motivation-based versus capability-based approach.

### *Person-Job (P-J) Fit Theory*

Person-job fit theory falls under the larger umbrella of person-environment (P-E) fit theory, which states that the congruence between the characteristics of the individuals and the attributes of their work environment positively influences how the person experiences the environment (Kristof-Brown et al., 2005). Incongruence, on the other hand, causes strain. Person-job fit is particularly relevant in explaining overqualification because it refers to the match between the person and the job. From this perspective, overqualification constitutes a type of misfit with one's job, which yields negative outcomes for both the individual and the organization.

Cable and Edwards (2004) differentiated between two types of P-J fit in the literature: demands-abilities fit (alignment between the job demand and the employee's ability) and needs-supplies fit (alignment between what the employee values/needs and what the job can provide). In the current literature, overqualification often reflects a poor demands-abilities fit, given that the employees often have surplus qualifications relative to the demands of the job. In other instances, overqualification also constitutes poor needs-supplies fit in that there is a discrepancy between what employees expect from the job (i.e., personal needs) and what the job can provide in return. Research to date has shown that poor needs-supplies fit may have a stronger influence on work outcomes compared to poor demands-abilities fit (Luksyte et al., 2011; Cable & DeRue, 2002). However, the application of needs-supplies fit is underexplored in the overqualification literature.

### *Relative Deprivation Theory (RDT)*

The overqualification literature has also applied relative deprivation theory to explain the negative consequences associated with POQ. Relative deprivation theory (RDT) states that overqualification engenders a sense of deprivation (relative to one's own expectation and relative to others who are working in jobs that match their qualifications). Thus, relative deprivation is a social psychological concept that postulates a subjective state of emotion and cognition. Broadly speaking, RDT has three major components: cognitive comparison, cognitive appraisal, and justice-related affect (Smith et al, 2012). For a person to experience relative deprivation, one must first make a comparison relative to some referent others. Next, there must be a cognitive appraisal that he/she is at a disadvantage in comparison and perceived that disadvantage as unfair. Finally, it leads to the individual feeling angry or resentful. A critical component of RDT is the negative justice-related affect. Both P-J fit theory and RDT predicts similar work-related outcomes. Because RDT is concerned with affect, it may be more useful in understanding the emotional reactions of overqualified employees. Indeed, RDT is often used to explain the negative emotions in the literature caused by POQ such as work alienation and emotional exhaustion (Yu et al., 2019).

### *Equity Theory*

An alternative framework to understand POQ is through organizational justice theory. Specifically, distributive justice is the fairness of distribution of outcomes. Procedural justice, the fairness of processes used to distribute outcomes, is less commonly used in the overqualification literature. POQ can be characterized as a distributive justice through equity theory (Adams, 1965). Distributive injustice occurs

when the individual believes there is a discrepancy between the ratio of his/her inputs to outputs and the perceived ratio of input to output of others. In the case of POQ, inputs are often intangible qualifications such as education, experience, and KSAs. Outputs are the opportunities to use one's education, experience, and KSAs. Compared to workers in positions who match their qualifications, overqualified employees will likely perceive their employment as inadequate and unfair because they cannot utilize their skills.

Because of the negative assessment, employees will likely hold less favorable work attitudes such as lower job satisfaction, lower organizational commitment, and lower work engagement. Furthermore, employees may seek action to restore the justice balance, such as withholding effort at work and engaging in counterproductive work behaviors (Harari et al., 2017). In summary, P-J fit theory, RDT, and equity theory all predict negative outcomes of POQ through a series of cognitive and emotional comparison relative to some referent standard or others.

#### *Motivation-Based and Capability-Based Approach*

Although one of the most consistent findings in the overqualification literature is its association with negative consequences, there may still be some positive effects of overqualification. As mentioned in the previous section, minimizing threats to construct validity can help clarify the existing relationships in the literature. In other words, the relationship between overqualification and work-related outcomes may not be as negative as previously observed when there is good measurement of POQ. Thus, another framework that can explain the potential positive outcomes of overqualification is differentiating between the motivation and capability-based approach (Wu et al., 2017).

From a motivational perspective, POQ is a possible demotivator because it signals to the employee, both cognitively and emotionally, that his/her job is deficient and inadequate. However, from a capability perspective, the overqualified employee possesses a surplus of qualifications and skills relative to what the job requires. Thus, he/she is more than capable to perform the tasks of the job. Using the capability approach, overqualified employees may have enhanced self-efficacy and self-esteem compared to those who are adequately qualified. Depending on contextual situations, the two approaches may yield different outcomes because the mechanism through which overqualification is processed affects subsequent attitudes, behaviors, and well-being. To date, research supporting the dual pathway of overqualification is rather limited. Future study is still needed to explicitly test the competing models of motivation and capability to sharpen our theoretical understanding. From an organization's perspective, part of the challenge is hiring and managing overqualified employees. Thus, it may be important to explore the different situations that activate the different mechanisms to maximize human capital advantages.

### **Similar Constructs**

#### *Perceived Employability*

Like perceived overqualification (POQ), perceived employability is a concept that has been examined since the 1990s. However, no consistent definition has been established both within and across disciplines. The meaning of employability has changed drastically over the last decades based on external labor market conditions and internal individual differences (Sanders & de Grip, 2004). In the organizational psychology literature, the interpretation of employability is mainly concerned with

subjectivity and perceptions. Broadly speaking, perceived employability is “the individual’s perception of his or her possibilities of obtaining and maintaining employment” (Vanhercke et al., 2014, p. 593). Employability research has changed and developed over time (McQuaid & Lindsay, 2005), with recent shifts from macro-level approach to micro-level approach. Indeed, organizational researchers have shifted the focus of employability to the individual’s perspective, highlighting the importance of individuals’ perceptions rather than the objective reality.

Other scholars have also included objective measures such as socio-demographics like education or tenure in assessing employability (Groot & Maassen Van den Brink, 2000). Previously, I marked the distinction between subjective and objective overqualification as well as subjective and objective measure of its operationalization. Employability shares similar characteristics in that different disciplines emphasize either subjective or objective point of view. In line with the organizational psychology literature, the definition of perceived employability in this paper aligns with individual level subjective approach. Although perceived employability and POQ are similar constructs, they are not redundant concepts in the literature. POQ may influence perceived employability as one’s surplus qualifications can enhance one’s perceived employment opportunities. This remains a proposition as limited studies exist that have tested the relationship between the two.

In the theoretical framework section of perceived overqualification, there are two dominant approaches to explain the consequences of POQ: motivation-based and capability-based. It is through the activation of these different mechanisms that lead to positive or negative outcome such as job performance. Similarly, there are the

competence-based and the dispositional-based approach to studying employability. The competence-based model focuses on the individual's perception of his/her qualifications (abilities, skills, capacities) that enhance employment opportunities. Meanwhile, the dispositional-based model focuses on the perception of the individual's attitudes related to work or career. In short, competence-based approach focuses on the individual's employability abilities and the dispositional approach emphasizes motivational attitudes to one's employability. Because the theoretical frameworks for both POQ and perceived employability include a motivational component, it may be important to build this approach as a core component of the construct. In the subsequent scale development section, I incorporated individual motivation through the concept of needs-supplies fit from P-J fit theory.

#### *Perceived Fit*

The concept of perceived fit is derived from the person-environment (P-E) fit theory. P-E fit is broadly defined as “the compatibility between an individual and a work environment that occurs when their characteristics are well matched” (Kristof-Brown et al., 2005, p. 281). Research on P-E fit suggests that positive outcomes are influenced by how well the characteristic of the individual fits the environment. Similarly, negative outcomes occur as a consequence of mismatch or incongruence. One of the challenges to studying P-E fit is the proliferation of conceptualizations and measures that make “fit” difficult to explicate (Judge & Ferris, 1992). To an extent, perceived overqualification shares the same struggle in the extant literature. Fit has been operationalized in terms of skills, needs, preferences, values, attitudes, and goals. Four popular domains of P-E fit are the following: person-job fit, person-organization fit, person-group fit, and person-

supervisor fit (Kristof-Brown et al., 2005). Specifically, POQ is conceptualized as a type of P-J misfit in the literature operationalized mainly as demands-abilities misfit. Thus, understanding perceived fit is critical to understanding POQ.

Given that POQ is partially derived from the fit literature, the measure of fit also has a direct and an indirect measure. For example, perceived fit is defined by a direct assessment of compatibility with the environment, organization, job, or supervisor. Actual fit or objective fit is an indirect assessment of fit through explicit comparisons of independently rated person variables and environmental variables (Kristof, 1996). Thus, perceived overqualification is a type of perceived fit in which the individual makes a direct assessment of the compatibility between their qualifications and the requirements by the job, with a surplus in qualifications denoting overqualification. Some of the criticism of perceived fit is that self-perceptions can depart from objective reality, making it a less-than-true measure of fit. However, since individuals often act upon their perception rather than objective reality, perceived fit bears more implications to attitudinal and behavioral outcomes. Perceived fit and POQ are similar constructs in the literature partly because POQ is conceptualized as a form of perceived misfit. In the later scale development process, I incorporated the fit literature in selecting and refining specific items to ensure the proposed scale has a strong theoretical foundation.

### **POQ Measurement**

In this section, I reviewed the two dominant measures of perceived overqualification in the literature. Specifically, they are the Perceived Overqualification (POQ) Scale by Johnson and Johnson (1996) and the Scale of Perceived Overqualification (SPOQ) by Maynard and colleagues (2006). Both scales capture the

degree to which employees feel that their qualifications exceed job demands. Next, I discussed the limitations of these two existing measures.

### *Existing Scales*

The POQ Scale by Johnson and Johnson (1996) has two dimensions: *Perceived Mismatch* and *Perceived No Growth*. It is a ten-item measure adapted from Khan and Morrow's (1991) subjective underemployment scale. Khan and Morrow (1991) proposed two subjective measures of underemployment: *Perceived Overqualification* and *Perceived No Growth*. *Perceived Overqualification* included four items (i.e., "My formal education overqualifies me for my present job," "My talents are not fully utilized on my job," "My work experience is more than necessary to do my present job," and "I have mastered nearly every aspect of my job"). *Perceived No Growth* also included four items (i.e., "My job frequently provides me with new challenges," "My job provides me with the opportunity to learn new things," "The day-to-day content of my job seldom changes," and "My job has a lot of potential for change and growth"). The subjective underemployment scale was calculated as the average of the summed scores for *Perceived Overqualification* and *Perceived No Growth*. Later, Johnson and Johnson (1996) expanded the 8-item subjective underemployment by adding two additional items (i.e., "Based on my skills, I am overqualified for the job I hold," and "Continuing education related to my job has improved my job performance") to form the Perceived Overqualification (POQ) Scale.

The Johnson and Johnson's (1996) POQ Scale has a total of 10 items. Under the *Perceived Mismatch* dimension, six items ask the respondents to rate the extent to which they have an excess education, experience, and KSAs for their job. Under the *Perceived*

*No Growth* dimension, four items ask the respondents to rate the extent to which their job offers growth and learning opportunities. Response scale ranges from 1 (*strongly disagree*) to 5 (*strongly agree*). Although a commonly noted weakness of the POQ Scale is its relatively low average alpha coefficients across different samples, heavier criticism is placed on its conceptual domain. Researchers like Maynard and colleagues (2006) argued that only the *Perceived Mismatch* dimension from the Johnson and Johnson (1996) POQ Scale is consistent with the literature's conceptualization of POQ. Thus, Maynard et al. (2006) developed the Scale of Perceived Overqualification (SPOQ) in which there are nine items that ask the extent to which respondents have more education, experience, and KSAs than required by their jobs. The 9 items are as the following: "My job requires less education than I have," "The work experience that I have is not necessary to be successful on this job," "I have job skills that are not required for this job," "Someone with less education than myself could perform well on my job," "My previous training is not being fully utilized on this job," "I have a lot of knowledge that I do not need in order to do my job," "My education level is above the education level required by my job," "Someone with less work experience than myself could do my job just as well," and "I have more abilities than I need in order to do my job." Response scale ranges from 1 (*strongly disagree*) to 7 (*strongly agree*).

Both the POQ Scale and SPOQ have been commonly used in the overqualification literature. Because most of the overqualification research in management and organizational science flourished after Maynard et al.'s (2006) scale development paper, research since 2010 have adopted the SPOQ. Sample studies that measured employees' POQ using Maynard et al.'s (2006) 9-item SPOQ include Alfes et

al. (2016), Erdogan et al. (2020), Andel et al. (2021), Li et al. (2021), and Luksyte et al. (2011). In the early 2000s, studies that utilized the Johnson and Johnson's (1996) POQ Scale mainly came from Johnson and Johnson (1997, 1999, 2000) and Johnson et al. (2002). Other studies that used the POQ Scale include, but not limited to, Erdogan and Bauer (2009), Lobene and Meade (2013), Hu et al. (2015), and Yang et al. (2015). Interestingly, only the papers that included the original authors in the POQ scale development (i.e., Johnson and Johnson) utilized both the *Perceived Mismatch* and *Perceived No Growth* subscales. The remaining aforementioned papers only adapted the 4-item *Perceived Mismatch* scale from Johnson and Johnson (1996) to measure POQ. This suggests that while both the SPOQ and POQ Scale are popular measures of overqualification, perceived mismatch is a more consistent operationalization of POQ in the literature compared to perceived no growth.

Although the overqualification literature has burgeoned in recent years, a limited number of studies have assessed and provided validation evidence for the two popular measures of POQ. The dimensionality of POQ remains controversial, with confirmatory factor analyses of prior measures reporting inconsistent factor structures. For example, previous studies that have examined the structures of the POQ Scale and the SPOQ indicated two identifiable dimensions: *Perceived Mismatch* and *Perceived No Growth*. Johnson and Johnson's (2006) POQ Scale yielded a two-factor solution while Maynard et al.'s (2006) SPOQ produced a one-factor solution explaining most of the variance in principal component analysis. In a later study, Johnson et al. (2002) acknowledged that the POQ Scale needs to be further developed and validated across samples.

While the more popular SPOQ is a scale that encapsulates POQ purely as a form of mismatch, research is needed to examine whether perceived no growth or other dimensions constitute overqualification. The previous literature review suggests the existing scales mainly capture one specific component of P-J fit (i.e., misfit in terms of demands-abilities). However, overqualification measures using P-J fit theory need further refinement to enhance the linkage between theory and measurement. Despite the heavy emphasis on demands-abilities fit, future research need to incorporate needs-supplies fit in P-J fit theory to measure overqualification. Many inconsistencies in the literature are at least partly due to the omission of theoretically relevant POQ variables outside of perceived mismatch. Thus, using the existing scales to draw inferences is problematic for accumulating knowledge.

In summary, a thorough review of both the POQ Scale and SPOQ revealed that they are both inadequate in capturing the exhaustive nature of the POQ construct. Although the POQ Scale did contain more than one dimension, no other subscales existed to explore needs-supplies misfit in P-J fit. Defining POQ as a type of P-J misfit but measuring it using only demands-abilities misfit is a severe conceptual deficiency. At this time, a more holistic and comprehensive measure of POQ is needed to move the literature forward.

### **The Current Study**

A major limitation in the literature is the concern regarding both the conceptual understanding and operationalization of employee perceived overqualification. Second, the dimensionality of POQ needs further clarification. Is perceived overqualification unidimensional or multidimensional? Do other dimensions outside of perceived

mismatch and perceive no growth represent POQ? Answers to these questions will address some of the possible threats to its construct validity. Third, previous studies in overqualification research point to a host of negative consequences. However, the relationships of POQ and many organizational outcomes are largely equivocal. It becomes difficult to determine if the differential findings are due to the different measures used by researchers that conceptualize different components of POQ or to other moderating variables. In short, the measurement issues related to construct validity may challenge the existing findings in current literature. This limits both theoretical advancement and practical application of overqualification research. Lastly, the lack of a configural approach to studying employee overqualification severely hampers its methodological advancement. Without a full understanding of POQ, we are limited in understanding how different dimensions of POQ can interact and lead to differential outcomes. Although some overqualification researchers have acknowledged these problems, viable solutions have not been implemented.

Given the literature gap, my dissertation will shed some light on the existing methodological issues in a series of three studies. The first goal of my dissertation is to refine the concept and design a new comprehensive measure of POQ. The second goal is to provide initial validity evidence for the new POQ measure. In the following section, I present the conceptual basis for a new measure, the Perceived Overqualification at Work Scale (POQWS). Next, I propose several hypotheses to assess the validity of the POQWS.

### **Step 1: Development of the Perceived Overqualification at Work Scale (POQWS)**

#### *Construct Definition*

One of the greatest challenges in conducting research in organizations is ensuring the accuracy of the measurement for the constructs of interest (Hinkin, 1998). The foundation of scale development is construct clarity, which is established when a construct's conceptual domain and boundaries are evident (Suddaby, 2010). In the example of POQ, the construct needs further clarification as the existing conceptual domain seems too narrow in scope. To date, only Johnson and Johnson's (1996) POQ Scale represented POQ as a construct more than a form of person-job mismatch in terms of qualifications.

The traditional definition of POQ in the literature describes the construct as “a form of underemployment in which employees believe that their skills, education, and experience are neither required by nor utilized on the job” (Erdogan & Bauer, 2021, p. 13). This definition is grounded in P-J fit theory, specifically concerning a mismatch between job demands and the employee's excess abilities available to meet those demands. However, the overqualification literature has largely ignored another critical component of P-J fit theory (i.e., needs-supplies fit), which involves employee desires and job supplies available to meet those needs. Employee desires have been described in terms of psychological needs, goals, values, interests, and even preferences (Edwards, 1991). From a needs-supplies fit perspective, a surplus of the employee needs and a deficiency in job supplies to meet those needs constitutes overqualification in the same way that the employee's abilities exceed the demands of the job. Thus, a more comprehensive definition of POQ is needed to incorporate not only demands-abilities fit but also needs-supplies fit. Being overqualified for a job means an individual can have

excess qualifications relative to job demands and/or excess needs/values not being met.

In both scenarios, being overqualified indicates one is “*too good*” for the job.

Limiting POQ to a simple form of mismatch in terms of person-job qualification is a dated and narrow approach. Feldman (1996) assumes any type of underemployment, including overqualification, is involuntary and forced by external circumstances. Taking the involuntariness into account, it is not surprising the overqualification literature largely finds negative consequences for both the organization and the overqualified individual. In short, overqualification is highly undesirable. However, recent publications have called this long-standing assumption into question. Research in the last decade proposed a new concept of “*intentional mismatch*,” a condition of overqualification motivated by the fit between employees’ nonwork values and what their jobs can provide (Maltarich et al., 2010). Calls to attention on this concept have provided initial evidence that needs-supplies fit should not be ignored when conceptualizing the domain of perceived overqualification. In the following section, I explain how the concept of intentional mismatch can be captured by the extent to which employees’ needs/desires are met or not met by the supplies of the job.

A critical first step for scale construction is to “develop a precise and detailed conception of the target construct and its theoretical context” (Clark & Watson, 1995, p. 310). Given the definition of POQ in the literature has changed since Feldman’s (1996) seminal paper, it is important to establish a firm conceptual definition. Suddaby (2010) proposed that a rigorous construct definition has four elements: 1. a descriptive definition elaborating the construct’s meaning, 2. a lexical definition articulating how the proposed definition builds upon and/or departs from previous definitions, 3. a connotative

definition identifying the necessary and sufficient conditions, and 4. a semantic definition specifying the nomological network of the construct. Next, I describe my proposed construct definition of POQ by incorporating these four elements.

Building on both theoretical ground and the latest research, perceived overqualification (POQ) is “*a state of employment, either voluntary or involuntary, that reflects one’s perception of the individual’s qualifications (education, knowledge, skills, and abilities) exceeding job requirements and/or the individual’s needs exceeding job supplies. These conditions form perception of mismatch, no growth, and needs incongruence.*” In a descriptive fashion, this new definition of POQ is clear.

Involuntariness is not assumed; furthermore, it is a condition of mismatch between either demands-abilities or needs-supplies or both. To explicate the lexical definition, I further propose that overqualification is a continuum state of employment rather than a dichotomous state (i.e., overqualified vs. not overqualified). Employees can vary on the demands-abilities continuum as well as the needs-supplies continuum. The various status of overqualification may lead to differential outcomes. With this conceptualization, POQ is viewed as multidimensional. Connotatively, a necessary and sufficient condition of overqualification is that it must constitute either demands-abilities mismatch or needs-supplies mismatch, with excess demands or surplus needs denoting overqualification. Lastly, from a semantic perspective, I provided justification in the prior review section that POQ, although similar, is not the same construct as either perceived fit or perceived employability.

### *Incorporating P-J Fit Framework*

In the process of scale development, a threat to construct validity is content validity. Without adequate content validity, a measure may include extraneous and irrelevant variance or underrepresent the construct. Thus, to establish evidence for content validity, I first reviewed the overqualification literature to ensure the scope and content of POQ are grounded in theoretical framework (specifically P-J fit theory). Broadly speaking, I propose that POQ as a multidimensional construct can be conceptualized in three ways: perceived mismatch, perceived no growth, and perceived needs incongruence. A fundamental tenet of P-J fit theory is that high congruence between the demands of a job and the individual's ability leads to better workplace outcomes. In alignment with demands-abilities fit, perceived mismatch occurs when there is a perceived discrepancy between what the job requires and what the employee has in terms of qualifications. Mismatch mainly focuses on individual characteristics such as abilities, experience, skills, and education. By far, qualification mismatch or misfit is the most popular conceptualization of POQ in extant literature. Both the POQ Scale by Johnson and Johnson (1996) and the SPOQ by Maynard et al. (2006) have a mismatch component. Consistent with the literature, perceived mismatch in this study is characterized as an overall mismatch perception and not so much the individual mismatch differentiation among education, experience, and KSAs. To explore the dimensionality of perceived mismatch, the following research question is explored.

*Research Question 1:* Is perceived mismatch unidimensional or multidimensional?

Like demands-abilities fit, people form perceptions about their fit with what the job can supply in return for their service (i.e., needs-supplies fit). For example, younger workers may perceive a better fit with jobs that match their values whereas more senior workers may perceive better match with jobs that offer a good work-life balance. Other benefits that a job can supply to meet employee needs include meaningful and challenging work, promotion opportunities, rewards, recognition, and flexible work arrangements (Cable & DeRue, 2002). A second core component of POQ, perceived no growth, specifically focuses on the state of deprivation from the job that engenders overqualification. Consistent with previous literature, perceived no growth suggests when there are no growing or learning opportunities on the job, employees may feel overqualified. This also includes not feeling challenged and/or a lack of career development in the organization. Drawing on needs-supplies fit, overqualified employees are likely to experience incongruence because their current job conditions, such as lack of challenges, opportunities, or responsibilities, are beneath what they had expected (Liu & Wang, 2012). In short, the characteristics of their job in the current state can no longer fulfill their needs. Needs-supplies misfit further suggests that POQ is associated with a violation of expectations regarding opportunities to perform that results in negative consequences. Perceived no growth therefore captures needs-supplies misfit specifically in terms of development and growth opportunities on the job, with deficiencies in meeting employee's growth needs denoting overqualification.

The last key component of POQ is perceived needs incongruence. Expanding on needs-supplies fit, I incorporated the concept of needs incongruence to capture the idea of *intentional mismatch* (Maltarich et al., 2011), a form of overqualification motivated by a

fit between the employees' nonwork values/interests and their working conditions. In essence, employees seek not only demands-abilities fit but also needs-supplies fit. Needs-supplies fit occurs when the employee's needs or goals are met by the jobs they perform. In addition to growth and learning opportunities on the job, needs can be a desire for better work-life balance, a match in values/interests, and other social or psychological preferences. Thus, perceived needs incongruence captures other various types of desires the employee has outside of growth and career development. Grounded in P-J fit theory, the three components outlined above expand the boundary of POQ to capture a more comprehensive construct.

A measurement problem in the fit literature is still evident: the inadequate distinction between needs-supplies fit and demands-abilities fit (Edwards, 1991). For example, Blau (1981) defined misfit in terms of abilities and demands but measured misfit using needs and supplies. Failure to distinguish between needs-supplies fit and demands-abilities fit makes it difficult to draw robust conclusions for practical implication. In other words, it is impossible to determine whether the relationship between the scores and outcome variables reflects demands-abilities fit, needs-supplies fit, or both. As conceptual distinctions between these forms of fit tangle, differential relationships with outcomes are concealed (Edwards, 1991). Thus, another important goal of this dissertation is to clearly mark the distinction between these two types of fit. Demands-abilities misfit is the perception of mismatch between the person's qualifications and job demands. Meanwhile, needs-supplies misfit consists of job-centric development/growth mismatch (perceived no growth) and job-centric needs mismatch (perceived needs incongruence).

In this section, I establish clear definitions for each dimension. Perceived mismatch is the extent to which employees believe that their knowledge, skills, abilities, education, and experience are neither required by nor utilized on the job. Perceived no growth is the extent to which employees perceive a lack of opportunity to grow on the job, including lack of learning, lack of promotional opportunities, and lack of developmental opportunities. Lastly, perceived needs incongruence is the extent to which employees believe there is a misalignment between their needs/values and what the job can supply, specifically in terms of excess job needs or standards relative to their current job. In short, perceived mismatch occurs when employees have excess qualifications whereas perceived needs incongruence occurs when employees have excess needs not being met by the job. Because the two types of fits are distinct in three measurements, the interaction of different form of misfits can be explored. Contrary to the traditional view that POQ constitutes both poor demands-abilities and needs-supplies fit, there exists a condition of overqualification where one may have sufficient fit in one and insufficient fit in another (e.g., high demands-abilities misfit with low needs-supplies misfit or vice versa). By clarifying and expanding the scope of the POQ construct, future studies can draw more meaningful conclusions on both the antecedents and consequences of POQ.

## **Step 2: Psychometric Validation of the POQWS**

### *Confirmatory Test of the Factor Structure*

In this section, I provide further validity and reliability evidence to evaluate the psychometric properties of the POQWS. The following hypothesis is tested:

*Hypothesis 1: A three-factor structure (Perceived Mismatch, Perceived No Growth, and Perceived Needs Incongruence) in confirmatory factor analysis (CFA) will provide adequate fit for The Perceived Overqualification at Work Scale (POQWS).*

### *Convergent/Discriminant Validity*

Next, to establish convergent and discriminant validity for the POQWS, I examine the POQWS in relation to prior measures of POQ (i.e., POQ Scale and SPOQ). Because the conceptual definitions that underlie the POQWS are inherently different from the previous measures, distinctiveness is expected. Depending on conceptual overlap, the components of POQWS are related to one scale or one specific dimension more strongly than others. For example, the Scale of Perceived Overqualification (SPOQ) by Maynard and colleagues (2006) is a unidimensional measure that conceptualizes POQ mainly as a form of mismatch. I expect the *Perceived Mismatch* dimension of the POQWS to be positively related to the SPOQ since both capture demands-abilities misfit. Meanwhile, the Perceived Overqualification (POQ) Scale by Johnson and Johnson (1996) includes two dimensions, namely *Perceived Mismatch* and *Perceived No Growth*. Because of the conceptual overlap, I expect the *Perceived Mismatch* and *Perceived No Growth* dimensions of the POQWS to be positively related to the same dimensions of the POQ Scale, respectively. Given the current POQWS has an additional dimension that was not captured in the previous scales, I expect *Perceived Needs Incongruence* to be largely unrelated to the SPOQ and each of the dimensions in the POQ Scale. The correlations of the POQWS with prior measures constitute both convergent and discriminant validity evidence. The following hypotheses are examined:

*Hypothesis 2a: Perceived Mismatch* scores on the POQWS will correlate above .50 with scores on the SPOQ.

*Hypothesis 2b: Perceived Mismatch* scores on the POQWS will correlate above .50 with *Perceived Mismatch* scores on the POQ Scale.

*Hypothesis 2c: Perceived Mismatch* scores on the POQWS will correlate below .50 with *Perceived No Growth* scores on the POQ Scale.

*Hypothesis 3a: Perceived No Growth* scores on the POQWS will correlate below .50 with scores on the SPOQ.

*Hypothesis 3b: Perceived No Growth* scores on the POQWS will correlate below .50 with *Perceived Mismatch* scores on the POQ Scale.

*Hypothesis 3c: Perceived No Growth* scores on the POQWS will correlate above .50 with *Perceived No Growth* scores on the POQ Scale.

*Hypothesis 4: Perceived Needs Incongruence* scores on the POQWS will correlate below .50 with (a) scores on the SPOQ, (b) *Perceived Mismatch* scores on the POQ Scale, and (c) *Perceived No Growth* scores on the POQ Scale.

Because the concept of relative deprivation is closely related to perceived overqualification in the literature, it is measured in Study 2 as an exploratory analysis. Although no specific hypotheses are made at this time, the relationships between relative deprivation and the dimensions of POQWS are tested.

Another way to provide validating evidence for the POQWS is to test if the three proposed dimensions (i.e., *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence*) are differentially related to outcomes. Next, I examine the nomological network presented in the overqualification literature. I plan to assess the correlations between the three dimensions with four important work-related outcomes: job satisfaction, organizational commitment, work engagement, and turnover intention.

Meta-analytic findings from Harari et al. (2017) suggest the correlation between POQ and job satisfaction as well as the correlation between POQ and organizational commitment are negative. Consistent with previous literature, I expect the scores from *Perceived Mismatch* and *Perceived No Growth* to demonstrate significant negative correlations with both job satisfaction and organizational commitment. To the extent that employees perceive a match between their needs and the supplies of the job, their job

satisfaction should be positive. Furthermore, from a social exchange perspective, employees whose needs are fulfilled by the job are more likely to stay with the organization. Because *Perceived Needs Incongruence* implies inadequate needs-supplies fit from the employee perspective, I expect the scores from *Perceived Needs Incongruence* to have significant negative correlations with both job satisfaction and organizational commitment.

While job satisfaction and organizational commitment have been studied frequently in the overqualification literature, there seems to be little research examining the effect of POQ on work engagement. To the best of my knowledge, one study by Lou and Ye (2019) found a significant negative relationship between POQ and work engagement. Furthermore, P-J fit theory posits that perceived mismatch captures the incongruence between the person and the job, leading to stress and strain. From the findings of previous research as well as existing theoretical framework, I expect the scores from *Perceived Mismatch* and *Perceived No Growth* to demonstrate significant negative correlations with work engagement. The underlying assumption of the *Perceived Needs Incongruence* dimension is inadequate needs-supplies fit and therefore predicts similar negative consequences of POQ. Thus, I expect the scores from *Perceived Needs Incongruence* to have a significant negative correlation with work engagement.

There is also clear support from the literature that POQ is associated with turnover intention, with a meta-analytic corrected correlation of .37. Thus, I expect the scores from *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence* to demonstrate significant positive correlations with turnover intention.

In sum, the following hypotheses are tested:

*Hypothesis 5: Perceived Mismatch* of the POQWS will be negatively related to (a) job satisfaction, (b) organizational commitment, (c) work engagement and positively related to (d) turnover intention.

*Hypothesis 6: Perceived No Growth* of the POQWS will be negatively related to (a) job satisfaction, (b) organizational commitment, (c) work engagement and positively related to (d) turnover intention.

*Hypothesis 7: Perceived Needs Incongruence* of the POQWS will be negatively related to (a) job satisfaction, (b) organizational commitment, (c) work engagement and positively related to (d) turnover intention.

### **Step 3: Latent Profile Analysis (LPA)**

The overqualification literature has struggled with its methodological advancement in recent decades. Specifically, the current measures of POQ lack a comprehensive view of the construct. To date, there is little research that differentiates the types of overqualification. Most of the studies do not examine the degree of overqualification and its effect on outcomes (Erdogan et al., 2011). Thus, a critical research gap exists in that there is no way to meaningfully establish subgroups among overqualified employees or to explore the differences between these individuals. My dissertation plans to use latent profile analysis (LPA) to address this issue.

LPA is a technique used to identify subgroups from multivariate data. It is a way to categorize people or groups into construct-based profiles (Woo et al., 2018). Unlike a variable-centered approach that examines variables in isolation, LPA takes a configural approach that allows researchers to examine a set of variables with more nuance. Given a recent review only identified 37 studies that adopted LPA in the psychology and management journal (Woo et al., 2018), this method is still very much in its infancy. Because LPA identifies complex configuration of variables, it is ideal to address research questions that often cannot be answered with a variable-centered approach. For example,

Stanley et al. (2013) used LPA to identify five profiles that reflect different combinations of organizational commitment and demonstrated these profiles differentially relate to outcomes such as turnover intention and performance. LPA is well-suited in addressing the complexity of the POQ construct, allowing researchers to explore the different combinations of overqualification. To the best of my knowledge, this is the first study to examine a potential typology of overqualification and its implications. The first key objective is to test whether these profiles exist based on the newly established POQWS.

*Research Question 2: Are there distinct profiles of perceived overqualification?*

#### *Latent Profiles and Outcomes*

LPA answers calls in the overqualification literature to utilize a configural approach and to consider variables as a system of interdependent variables (Liu & Wang, 2012). Using a person-centered method, researchers will gain a more comprehensive understanding of how variables combine to influence outcomes. For example, Maltarich and colleagues (2010) distinguished a group of overqualified employees who voluntarily enter employment fully aware they are overqualified for the job from a group of overqualified employees who accepted the job reluctantly due to external circumstances such as a tight labor market. The term “*intentional mismatch*” is used to describe a condition of overqualification motivated by the fit between employees’ nonwork values and what their jobs can provide (Maltarich et al., 2010). LPA will take this concept into account, marking the difference between an individual with mismatched skills/matched needs and an individual with mismatched skills/mismatched needs. A major limitation exists because overqualification researchers have been treating the two profiles as the same (i.e., they are both considered equally “bad” overqualified employees).

Consequently, the extant literature does not make differential predictions based on these two types of employees with variables of interest.

In organizational research, using LPA approach varies from purely exploratory to fully confirmatory. In a recent review, almost 40% of the studies investigated at least one objective in an exploratory capacity and 63% in a confirmatory manner (Spurk et al., 2020). Because there are no prior studies conducted on overqualification profiles, I cannot build on previous findings. In short, I am unable to make assumptions on how many and what kind of profiles should be expected.

Although explicit hypotheses cannot be made at this stage, I offer some speculations on how different potential profiles will lead to various outcomes. First, I propose that profiles with high levels of *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence* are associated with the most detrimental outcomes. Consistent with current literature, this group of overqualified employees is in a highly undesirable employment situation. Thus, it will lead to a host of negative job attitudes such as lower levels of job satisfaction, organizational commitment, work engagement, and higher level of turnover intention. Second, profiles with low levels of *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence* are associated with the most beneficial outcomes. When employees engage in intentional mismatch to their jobs motivated by needs-supplies fit, they may not hold negative work attitudes because their needs and desires are met by the job. Lastly, I posit that profiles with low levels of *Perceived Needs Incongruence* combined with high levels of *Perceived Mismatch* and *Perceived No Growth* are associated with less detrimental outcomes compared to the first profile. Nonetheless, negative consequences are expected. Although there is low needs-

supplies misfit in this group of employees, high levels of mismatch and no growth may not be compensated entirely and ultimately cause strain for the employees.

Based on these propositions, it is possible that various profiles may predict critical outcome variables differentially. Thus, the second key objective is to validate the overqualification profiles and empirically test how overqualification profiles relate to work outcomes.

*Research Question 3:* How do profiles of perceived overqualification differentially relate to outcomes such as job satisfaction, organizational commitment, work engagement, and turnover intention?

## CHAPTER 3: METHODOLOGY

To test the proposed hypotheses and research questions outlined in Chapter 2, I conducted three studies using two Qualtrics online surveys. In the first study, I developed the initial items for the POQWS. Next, I performed psychometric testing to validate the properties of the POQWS in Study 2. Finally, I tested for different profiles of POQ in Study 3.

### **Study 1: Development of the Perceived Overqualification at Work Scale (POQWS)**

#### **Item Generation**

First, I generated an initial measure of 44 item statements based on the proposed construct definition. Next, I refined the items using an iterative process until full construct representation is achieved. The initial item pool for the Perceived Overqualification at Work Scale (POQWS) was constructed by generating items for each dimension from both literature review and informal conversations with HR leaders working in a large Fortune 100 corporation. Items on the previous POQ scales and fit measures were reviewed and compared with the proposed definition for inclusion. Other items were deductively generated from demands-abilities fit and needs-supplies fit under P-J fit theory. Each item was written to represent one specific dimension of POQ. Overall, the goal was to develop a pool of items to capture the full conceptual domain of POQ while carefully avoiding confounding constructs. In sum, a total of 44 items were created: 12 items for *Perceived Mismatch*, 13 items for *Perceived No Growth*, and 19 items for *Perceived Needs Incongruence*. The list of all initial items of the POQWS is presented in Table 1.

## **Pilot Study**

To establish content validity for the POQWS, I conducted a pilot study with five late-stage Ph.D. students who are subject matter experts (SMEs) in the field of Organizational Science. Each student rated the 44 initial items and assigned the specific item to one dimension of the construct (i.e., *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence*). A content validity index is calculated by examining the proportion of agreement among the SMEs on each dimension assignment. The result of the pilot study revealed that 24 items had 100% agreement, 13 items had 80% agreement, and 7 items had 60% agreement. Following the guidelines of Newman et al. (2013), an agreement rate greater than or equal to 80% indicates an item measures the intended dimension of perceived overqualification. Thus, 7 items were eliminated from the initial item pool of POQWS due to low agreement (60%). In Study 1, I used the remaining 37 items for exploratory factor analysis (EFA).

## **Participants and Procedures**

Participants were recruited using Amazon's Mechanical Turk (MTurk), a platform that allows researchers to collect data from a pool of global workers in exchange for monetary compensation. One of the key benefits of using MTurk is the availability of a large sample through crowdsourcing. However, using MTurk is not without controversy. For example, Buhrmester et al. (2018) raised concerns on the potential dishonesty of MTurkers to affirm qualifications to participate in studies that they are not qualified for and the reliability of data across the platform. Recent research has provided evidence to address the psychometric soundness of MTurk responses, with meta-analytic findings demonstrating online data sourcing and traditional sampling have comparable effect sizes

and reliability (Walter et al., 2019). Goodman and Paolacci (2017) noted other strengths of MTurk data for research, including a flexible compensation rate set by the researchers, a diverse sample compared to traditional methods, and a relatively good data quality because of the incentive structure (i.e., respondents who submit poor quality work can be rejected or given low approval ratings).

To be eligible for Study 1, participants must have been at least 18 years of age, working in a full-time position (i.e., at least 30 hours per week), and have worked in the organization for at least 6 months. Because MTurk sources from workers globally, I included two additional requirements: participants must speak English fluently and live in the United States. First, I created a Human Intelligence Task (HIT) that links to an online Qualtrics survey. I used participant qualifications to filter workers in the United States with MTurk HIT approval rate of at least 98 percent (i.e., workers who have completed previous HITs with attentiveness and effort) to ensure data quality. If a participant met the above eligibility screening and completed the survey, he/she was compensated \$0.50. Because Qualtrics provided an estimated survey completion time of 10 minutes, this compensation amount constituted a fair wage compared to MTurk standard.

The survey first asked the participants five short screener questions outlined above. If eligibility is met, participants then proceeded with the rest of the survey that included the 37 items for the POQWS, two previous measures of POQ (i.e., SPOQ and POQ Scale) as well as demographic information. Upon completion of the survey, participants were linked to enter the Qualtrics randomly generated ID on MTurk to receive their compensation.

Although the recommended minimum sample size for conducting exploratory factor analysis varies in the literature, many researchers suggest that  $N > 200$  gives adequate statistical power for data analysis (see Singh et al., 2016; Hoe, 2008 for reviews). The same rule of thumb is also proposed by Comrey (1998) as adequate measure for a scale containing 40 items. Furthermore, based on a study review of SEM studies, the median sample used is  $N = 200$  (MacCallum & Austin, 2000). Recent papers also call to consider the ratio of the number of people ( $N$ ) to the number of variables ( $p$ ). For example, Dimitrov (2012) recommended the following: a. sample size should be great than the number of variables ( $N > p$ ) and b. the  $N:p$  ratios should be at least 5 with a minimum  $N > 100$ .

To be consistent with existing guidelines, the sample size for Study 1 consisted of 272 participants. Of the total sample, 19 participants completed the survey in under 3 minutes and failed to complete the survey in full. Thus, a final sample of 253 was retained. Participants were 58% male and 42% female, with a mean age of 37.07 years. Among the participants who completed the race category, 87% were White, 4% were Black, 5% were American Indian/Alaskan Native, 0.4% were Asian, and 3.6% were others. Furthermore, 75% identified as non-Hispanic and 25% as Hispanic. Approximately 85% were married, 14% were single or never married, and 1% were divorced.

## Measures

*Initial Items for the POQWS.* POQ was measured by three subscales (i.e., *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence*) using

37 items. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Initial items for the POQWS are available in Table 1.

*SPOQ*. Maynard et al.'s (2006) 9-item Scale of Perceived Overqualification (SPOQ) was used. This is a unidimensional measure that assessed one's perception of excess qualifications relative to one's job. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items for the SPOQ are available in Appendix A.

*POQ Scale*. Johnson and Johnson's (1996) Perceived Overqualification (POQ) Scale was used. The POQ Scale included two subscales: *Perceived Mismatch* and *Perceived No Growth*. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items for the POQ Scale are available in Appendix B.

*Demographics*. Demographic variables such as age, gender, ethnicity, marital status, and education level were collected at the end of the survey. All the demographic measures are available in Appendix C.

### **Analytical Strategy**

First, I conducted an exploratory factor analysis (EFA) in *R*. To decide how many factors to retain, I used multiple methods to triangulate the results. A scree test was used to plot the eigenvalues and the drop-off point on the plot indicated the number of factors. Using the Kaiser rule, I also extracted the number of eigenvalues greater than 1.

Once I decided on the factor structure, I conducted an oblique rotation. Orthogonal rotations produce factors that are not correlated with one another whereas oblique rotations allow the factors to correlate. Costello and Osborne (2005) suggested

that in the social sciences, we should expect some correlation among factors since it is rare to partition behaviors into units that function entirely independent of one another. Furthermore, “using orthogonal rotation results in a loss of valuable information if the factors are correlated, and oblique rotation should theoretically render a more accurate and more reproducible solution. If the factors are truly uncorrelated, orthogonal and oblique rotation produce nearly identical results” (Costello & Osborne, 2005, p. 3).

Next, I reviewed the communalities, the proportion of variance in each item accounted for by each factor. Costello and Osborne (2005) noted the communalities in social science are between .40 (low) to .70 (moderate). A low communality score ( $< .40$ ) indicates the item may not represent the construct well and should be considered for revision or removal.

Item-level analysis was explored in depth. I examined the descriptive statistics of all items under each dimension, specifically the means and standard deviations. Each item must have the ability to differentiate responses, meaning it should have reasonable variability. Next, I examined inter-item correlations to assess item redundancy. I also calculated the corrected item-total correlation. A small item-total correlation indicates that the individual item does not relate to all the other items on the scale and therefore is probably not very relevant to the construct. I then examined item-level factor analysis within each dimension and reviewed the factor loadings. Tabachnick and Fidell (2001) cited .32 as a good cutoff for the minimum loading of an item. Based on quantitative results and theoretical evaluation, the initial 37 items were further refined for Study 2.

*Statistical Analysis for Testing RQ1*

To determine the factor structure for *Perceived Mismatch*, item-level analysis was conducted, and results were carefully reviewed.

## **Study 2: Psychometric Validation of the POQWS**

### **Participants and Procedures**

Given Study 2 is a validation study, the target sample size is larger. Similar to Study 1, I recruited participants using Amazon's Mechanical Turk (MTurk). To be eligible for Study 2, participants must have been least 18 years of age, working in a full-time position (i.e., at least 30 hours per week), and have worked in the organization for at least 6 months. Because MTurk sources from workers globally, I included two additional requirements: participants must speak English fluently and live in the United States. First, I created a Human Intelligence Task (HIT) that links to an online Qualtrics survey. I used participant qualifications to filter workers in the United States with MTurk HIT approval rate of at least 98 percent (i.e., workers who have completed previous HITs with attentiveness and effort) to ensure data quality. If a participant met the above eligibility screening and completed the survey, he/she was compensated \$0.50.

The survey asked the participants five short screener questions outlined above. If eligibility is met, participants then proceeded with the rest of the survey that included measures of the refined items for the POQWS, job satisfaction, organizational commitment, work engagement, turnover intention, relative deprivation, and two prior POQ measures (i.e., POQ Scale and SPOQ). Finally, participants entered their demographic information. Upon completion of the survey, participants were linked to enter the Qualtrics randomly generated ID on MTurk to receive their compensation.

The sample size for Study 2 consisted of 364 participants. Of the total sample, 17 participants completed the survey in under 3 minutes and failed to complete the survey in full. In addition, 4 participants failed the manipulation check question. Thus, a final sample of 343 was retained. Participants were 55% male and 45% female, with a mean age of 38.88 years. Among the participants who completed the race category, 84% were White, 6% were Black, 4% were American Indian/Alaskan Native, 1% were Asian, and 5% were others. Furthermore, 82% identified as non-Hispanic and 18% as Hispanic. Approximately 85% were married, 12% were single or never married, 2.6% were divorced, and 0.3% were widowed.

## Measures

*Revised Items for the POQWS.* POQ was measured by three subscales (i.e., *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence*) using the refined items from Study 1. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Job Satisfaction.* Job satisfaction was measured with three-item from the Michigan Organizational Assess Questionnaire (MOAQ; Cammann et al., 1983). Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items for the job satisfaction measure are available in Appendix D.

*Organizational Commitment.* Organizational commitment was measured using Allen and Meyer's (1990) 8-item affective commitment scale. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items for the organizational commitment measure are available in Appendix E.

*Work Engagement.* Work engagement was measured using the 9-item Utrecht Work Engagement Scale (UWES-9) by Schaufeli et al. (2006). Respondents rated each item using a 6-point Likert-type scale from 0 (*never*) to 6 (*always - everyday*). Items for the work engagement measure are available in Appendix F.

*Turnover Intention.* Turnover intention was measured using an adapted 2-item scale from Hom and Griffeth (1991) as well as Jaros (1997). Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items for the organizational commitment measure are available in Appendix G.

*Relative Deprivation.* Relative deprivation was measured using an adapted 5-item scale from Callan and colleagues (2011). Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items for the relative deprivation measure are available in Appendix H.

*SPOQ.* Maynard et al.'s (2006) 9-item Scale of Perceived Overqualification (SPOQ) was used. This is a unidimensional measure that assessed one's perception of excess qualifications relative to one's job. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*POQ Scale.* Johnson and Johnson's (1996) Perceived Overqualification (POQ) Scale was used. The POQ Scale included two subscales: *Perceived Mismatch* and *Perceived No Growth*. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Demographics.* Demographic variables such as age, gender, ethnicity, marital status, and education level were collected at the end of the survey.

## Analytical Strategy

### *Statistical Analyses for Testing H1*

First, I calculated the descriptive statistics, reliabilities, and intercorrelations of all the measures. Next, I conducted a confirmatory factor analysis (CFA) in *R*. Using maximum likelihood estimate, I compared the fit of three models: 1. a one-factor model with all items merged from *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence*; 2. a two-factor model with *Perceived Mismatch* as one factor and *Perceived No Growth* merged with *Perceived Needs Incongruence* as a second factor; and 3. a three-factor model distinguishing *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence*. From these results, I assessed model fit based on the recommended standards in that comparative fit index (CFI) and Tucker-Lewis index (TLI) should be at least .90 and root mean square error of approximation (RMSEA) should be lower than .08 (Vandenberg & Lance, 2000). Adequate fit indices for the three models were examined relative to the standards in the literature. Furthermore, I reviewed the chi-square differences to determine which factor structure best represented the data.

### *Statistical Analyses for Testing H2a, H2b, H2c, H3a, H3b, H3c, H4a, H4b, H4c*

I conducted a CFA in *R* to examine both the convergent and discriminant validity of the POQWS. The correlations between the POQWS dimensions and previous measures of POQ were investigated. While I expected specific dimension such as *Perceived Mismatch* from the POQWS to be positively correlated with SPOQ and *Perceived Mismatch* from the POQ Scale, I expected other dimensions to be unrelated.

### *Statistical Analyses for Testing H5(a-d), H6(a-d), and H7(a-d)*

To test hypotheses 5-7, I examined the correlations between each dimension of the POQWS and job satisfaction, organizational commitment, work engagement as well as turnover intention.

### **Study 3: Latent Profile Analysis**

#### **Participants and Procedures**

Participants for this study consisted of the sample from Study 2. The sample size for Study 3 included of 364 participants. Of the total sample, 17 participants completed the survey in under 3 minutes and failed to complete the survey in full. In addition, 4 participants failed the manipulation check question. Thus, a final sample of 343 was retained. Participants were 55% male and 45% female, with a mean age of 38.88 years. Among the participants who completed the race category, 84% were White, 6% were Black, 4% were American Indian/Alaskan Native, 1% were Asian, and 5% were others. Furthermore, 82% identified as non-Hispanic and 18% as Hispanic. Approximately 85% were married, 12% were single or never married, 2.6% were divorced, and 0.3% were widowed.

To determine whether the sample size ( $N = 343$ ) is adequate, I reviewed past research for guidance. For example, Spurk et al. (2020) identified a median sample size of 494 in a recent review of latent profile analysis studies. A simulation study by Nylund et al. (2007) substantiated this number, concluding that a sample size around 500 is sufficient to identify the correct number of latent profiles. Although the sample size for Study 3 did not exceed 500, 343 was not far off. Data for Study 3 included measures of the POQWS, job satisfaction, organizational commitment, work engagement, turnover

intention, relative deprivation, two prior POQ measures (i.e., POQ Scale and SPOQ), and demographic variables.

## Measures

*The POQWS.* POQ was measured by three subscales (i.e., *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Incongruence*) using the refined items from Study 1. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Job Satisfaction.* Job satisfaction was measured with three-item from the Michigan Organizational Assess Questionnaire (MOAQ; Cammann et al., 1983). Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Organizational Commitment.* Organizational commitment was measured using Allen and Meyer's (1990) 8-item affective commitment scale. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Work Engagement.* Work engagement was measured using the 9-item Utrecht Work Engagement Scale (UWES-9) by Schaufeli et al. (2006). Respondents rated each item using a 6-point Likert-type scale from 0 (*never*) to 6 (*always - everyday*).

*Turnover Intention.* Turnover intention was measured using an adapted 2-item scale from Hom and Griffeth (1991) as well as Jaros (1997). Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Relative Deprivation.* Relative deprivation was measured using an adapted 5-item scale from Callan and colleagues (2011). Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*SPOQ*. Maynard et al.'s (2006) 9-item Scale of Perceived Overqualification (SPOQ) was used. This is a unidimensional measure that assessed one's perception of excess qualifications relative to one's job. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*POQ Scale*. Johnson and Johnson's (1996) Perceived Overqualification (POQ) Scale was used. The POQ Scale included two subscales: *Perceived Mismatch* and *Perceived No Growth*. Respondents rated each item using a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Demographics*. Demographic variables such as age, gender, ethnicity, marital status, and education level were collected at the end of the survey.

### **Analytical Strategy**

#### *Statistical Analyses for Testing RQ2*

To explore RQ2, I used latent profile analysis (LPA) in *R* to determine the number of profiles. Past research recommended using both the statistical fit values and theoretical justifications when deciding on the number of profiles. Consistent with previous literature, I used the bootstrapped likelihood ratio test (BLRT), Akaike information criterion (AIC), Bayesian information criterion (BIC) as well as entropy (e.g., a composite that indicates the overall ability of a mixture model to return independent profiles) to assess fit. The model with non-significant BLRT and the lowest AIC and BIC values offers the best fit. Higher entropy (ranging from 0 to 1) indicates a better fit. The recommended entropy cutoff value is between .60 and .80 (Jung & Wickrama, 2008; Muthén, 2004). After reviewing the fit indices, I assessed the content relevance and theoretically best-fitting solution was determined. It is not uncommon for

fit values to be overruled by theoretical decisions. I also tested the differences in the levels of each form of POQ within each profile. One-way analyses of variance (ANOVAs) were conducted using profile membership as the independent variable and three dimensions of POQ (e.g., *Perceived Mismatch*, *Perceived No Growth*, and *Perceived Needs Congruence*) as the dependent variables.

#### *Statistical Analyses for Testing RQ3*

To establish criterion-related validity, I conducted ANOVAs using profile membership as the independent variable and job satisfaction, organizational commitment, work engagement and turnover intention as the dependent variables to test for significant differences in these outcomes between the profiles.

## CHAPTER 4: RESULTS

### Study 1

To explore the factor structure of the POQWS measured by the initial 37 items, I conducted a scree test and a parallel analysis. A scree test plots the eigenvalues, and the point of significant drop indicates the number of factors to retain. Results indicated there are three eigenvalues greater than one and the scree plot had a sharp drop in eigenvalues from the third to fourth factor. The parallel analysis further supported a three-factor solution, where the fourth eigenvalue became indiscernible from the eigenvalue on random data. Thus, a three-factor structure was retained for the POQWS.

Next, I performed item-level analyses on each of the three factors. Specifically, I examined the descriptive statistics for each item, the item-total correlations, factor loadings as well as factor intercorrelations. If two items within the same factor have a correlation above .60, the items were further reviewed for content similarity. Item-total correlations and coefficient alphas were analyzed. Specifically, I carefully reviewed the item with an item-total correlation of less than .40 and compared it with other items in the same factor. If the item did not fit well with what the other items are measuring, it was removed. Furthermore, items with factor loadings less than .40 were closely examined using the same iterative process. Cross-loadings were also examined to determine the item is measuring only one factor. A summary of the factor loadings and factor intercorrelations is presented in Table 2.

Defined primarily by loadings from the second set of items, the second factor clearly appears to reflect *Perceived No Growth*. The third factor is *Perceived Needs*

*Incongruence*, and the first factor is *Perceived Mismatch*. Upon examining the factor intercorrelations, the factors appeared to be largely uncorrelated ( $r < .50$ ). The Cronbach's alpha reliability coefficients were as follows: *Perceived Mismatch* ( $\alpha = .79$ ), *Perceived No Growth* ( $\alpha = .94$ ), and *Perceived Needs Incongruence* ( $\alpha = .92$ ).

All the items in *Perceived No Growth* and *Perceived Needs Incongruence* largely loaded correctly onto the primary factor, with no cross-loading issues. However, item-level analysis in *Perceived Mismatch* revealed noteworthy findings. The items that measured qualifications exceeding job demands (i.e., Q1, Q2, Q3, Q4, Q5, and Q10) did not load clearly on the primary factor. Instead, items that measured skills, knowledge, and experience underutilization (i.e., Q6, Q7, Q8) loaded above .60 on the primary factor. This is interesting because when the overqualification literature refers to perceived overqualification (POQ), qualifications exceeding job requirements and skills underutilization are often used interchangeably. In short, based on the extant literature, there is no inherent distinction between overqualification and underutilization in terms of perceived mismatch. The results from exploratory factor analysis in Study 1 suggest otherwise. There are two potential explanations for this. First, it is possible that the items of underutilization solely drive the perception of mismatch rather than items of overqualification. Second, the perception of mismatch is formed by either perception of overqualification or underutilization, and the two concepts should not be measured under the same factor. In other words, a fourth factor may emerge (perceived mismatch in terms of overqualification and perceived mismatch in terms of underutilization) and provide a better model fit than the proposed three-factor model. To explore the perception of mismatch in more nuance, I added three additional items in Study 2.

Based on the EFA results, the revised POQWS included 13 items in *Perceived Mismatch*, 5 items in *Perceived No Growth*, and 6 items in *Perceived Needs Incongruence*. A summary of the revised scale is presented in Table 3.

## Study 2

Descriptive statistics and correlations of the study variables are shown in Table 4. Study 2 assessed the psychometric properties of the revised POQWS. I conducted a confirmatory factor analysis (CFA). Using maximum likelihood estimation, I compared the fit of the following models: A one-factor model (all items merged from the *Perceived Mismatch (PM)*, *Perceived No Growth (PNG)*, and *Perceived Needs Incongruence (PNI)*), a two-factor model (*PM* as one factor and *PNG/PNI* merged as a second factor), a three-factor model (*PM*, *PNG*, and *PNI*), and a four-factor model (*Perceived Overqualification*, *Perceived Underutilization*, *PNG*, and *PNI*). As a *post hoc* analysis, I ran another CFA on a fifth model that has a second-order factor over the four-factor model.

Table 5 displays the results of these analyses. For the one-factor model, results indicated the following estimates of model fit:  $\chi^2 = 1885.18$  ( $p < .05$ ), RMSEA = .145, CFI = .545, TLI = .500). The one-factor model suggested not a great fit based on the standards for evaluating model fit in that CFI and TLI should be at least .90 and RMSEA should be lower than .08 (Vandenberg & Lance, 2000). Hu and Bentler (1999) recommended good fit scores of below .06 for RMSEA and at or above .95 for CFI. Thus, the fit indices of the one-factor model were not within the acceptable ranges for adequate model fit. The two-factor model fit demonstrated slightly better fit, as the following results indicated:  $\chi^2 = 1349.07$  ( $p < .05$ ), RMSEA = .119, CFI = .692, TLI

= .660. Similarly, the three-factor model showed better yet still not great fit indices:  $\chi^2 = 906.52$  ( $p < .05$ ), RMSEA = .093, CFI = .813, TLI = .792. The four-factor model showed the best fit to the data:  $\chi^2 = 444.45$  ( $p < .05$ ), RMSEA = .054, CFI = .939, TLI = .932. The fit indices (RMSEA, CFI, and TLI) had better values than the other models and fell within the acceptable range of good model fit. CFI improved by 0.126 (higher than the recommended value of 0.002 or 0.01) from the three-factor model. A *post hoc* comparison between the four-factor and the five-factor model revealed that the fit indices did not improve. Furthermore, the chi-square difference was not significant. Overall, these results suggest the four-factor model yielded the best fit. To answer Research Question 1, *Perceived Mismatch* appears to be multidimensional and not unidimensional as it is currently portrayed in the literature. On the other hand, Hypothesis 1 that proposed a three-factor model was not supported. Table 6 shows the items for the revised four-factor POQWS.

Hypotheses 2-4 tested the relationships between the POQWS and prior measures of POQ in the nomological network. Hypothesis 2a predicted a correlation greater than .50 between *Perceived Mismatch* (PM) on the POQWS and the SPOQ. Based on the results of the CFA, *Perceived Mismatch* on the POQWS was further divided into *Perceived Overqualification* (PO) and *Perceived Underutilization* (PU). There was a significant positive correlation between PO and SPOQ ( $r = .48, p < .01$ ) as well as PU and SPOQ ( $r = .71, p < .01$ ). Thus, Hypothesis 2a was partially supported. Furthermore, there was a positive correlation above .50 between PO and *Perceived Mismatch* on the POQ scale ( $r = .54, p < .01$ ) as well as PU and *Perceived Mismatch* on the POQ scale ( $r = .56, p < .01$ ). Hypothesis 2b was supported. Next, there was a negative correlation

below .50 between PO and Perceived No Growth on the POQ scale ( $r = -.02, n.s.$ ) as well as a positive correlation below .50 between PU and Perceived No Growth on the POQ scale ( $r = .22, p < .01$ ). Hypothesis 2c was partially supported.

Hypotheses 3a, 3b, and 3b examined the relationship between *Perceived No Growth* on the POQWS and three previous POQ measures. Hypothesis 3a predicted a correlation below .50 between PNG on the POQWS and the SPOQ and was not supported ( $r = .66, p < .01$ ). On the other hand, Hypothesis 3b predicted a correlation below .50 between PNG on the POQWS and Perceived Mismatch on the POQ scale ( $r = .49, p < .01$ ) and was supported. Hypothesis 3c predicted a correlation above .50 between PNG on the POQWS and Perceived No Growth on the POQ scale. It was not supported ( $r = .30, p < .01$ ).

Moving to the next set of hypotheses, Table 4 provided support for Hypothesis 4a. The correlation between PNI on the POQWS and the SPOQ was below .50 ( $r = .37, p < .01$ ). Hypothesis 4b predicted a correlation below .50 between PNI on the POQWS and Perceived Mismatch on the POQ scale. This hypothesis was not supported ( $r = .51, p < .01$ ). Furthermore, the correlation between PNI on the POQWS and Perceived No Growth on the POQ scale was below .50, but not significant ( $r = -.08, n.s.$ ). Thus, no support was found for Hypothesis 4c. As supplementals analyses, Tables 7-10 shows the regression coefficients and variance statistics of each previous POQ measure on the four POQWS dimensions.

Next, I tested Hypotheses 5a, 5b, 5c, and 5d for the relationship between PM of the POQWS and work-related outcomes. Hypothesis 5a stated that PM of the POQWS is negatively related to job satisfaction, and this was partially supported because *Perceived*

*Mismatch* on the POQWS was divided into *Perceived Overqualification* (PO) and *Perceived Underutilization* (PU). There was a nonsignificant negative correlation between PO and job satisfaction ( $r = -.01, n.s.$ ) but a significant negative correlation between PU and job satisfaction ( $r = -.35, p < .01$ ). Similarly, Hypothesis 5b stated that PM of the POQWS is negatively related to organizational commitment. There was a nonsignificant negative correlation between PO and organizational commitment ( $r = -.02, n.s.$ ) but a significant negative correlation between PU and organizational commitment ( $r = -.37, p < .01$ ). These results partially supported Hypothesis 5b. Turning to the next work-related outcome variable, Hypothesis 5c predicted a negative relationship between PM of the POQWS and work engagement. There was a significant positive correlation between PO and work engagement ( $r = .17, p < .01$ .) but a significant negative correlation between PU and organizational commitment ( $r = -.11, p < .01$ ). Thus, Hypothesis 5c was partially supported. Lastly, Hypothesis 5d predicted a positive relationship between PM of the POQWS and turnover intention. There was a significant positive correlation between PO and turnover intention ( $r = .31, p < .01$ ) as well as a significant positive correlation between PU and turnover intention ( $r = .38, p < .01$ ). Hypothesis 5d was supported.

Hypotheses 6a, 6b, 6c, and 6d tested the relationship between PNG of the POQWS and work-related outcomes. Hypothesis 6a stated that PNG of the POQWS is negatively related to job satisfaction, and this was supported ( $r = -.54, p < .01$ ). Similarly, Hypothesis 6b stated that PNG of the POQWS is negatively related to organizational commitment, and this was supported ( $r = -.55, p < .01$ ). Hypothesis 6c predicted a negative relationship between PNG of the POQWS and work engagement, and this was

supported ( $r = -.25, p < .01$ .) Lastly, Hypothesis 6d predicted a positive relationship between PNG of the POQWS and turnover intention, and this was supported ( $r = .61, p < .01$ ).

Moving to the next set of hypotheses, Hypotheses 7a, 7b, 7c, and 7d tested the relationship between PNI of the POQWS and work-related outcomes. Hypothesis 7a stated that PNI of the POQWS is negatively related to job satisfaction, and this was supported ( $r = -.21, p < .01$ ). Similarly, Hypothesis 7b stated that PNI of the POQWS is negatively related to organizational commitment, and this was supported ( $r = -.18, p < .01$ ). Hypothesis 7c predicted a negative relationship between PNI of the POQWS and work engagement, and this was not supported ( $r = .11, p < .05$ .) Lastly, Hypothesis 7d predicted a positive relationship between PNI of the POQWS and turnover intention, and this was supported ( $r = .65, p < .01$ ).

To explore the relationship between the POQWS and various work-related outcomes further, I conducted a relative weight analysis using RWA Shiny App (Tonidandel & LeBrenton, 2015). Relative importance refers to the proportion of contribution each predictor makes to the total predicted criterion variance while considering a variable's contribution by itself and in combination with other predictor variables (Johnson & LeBrenton, 2004). The regression coefficients and relative weights are summarized in Table 6. In these analyses, 95% confidence intervals were used, and the significance tests were based on bootstrapping with 10,000 replications as recommended by Tonidandel et al. (2009). Results indicated that a weighted linear combination of *Perceived Overqualification* (PO), *Perceived Underutilization* (PU), *Perceived No Growth* (PNG), and *Perceived Needs Incongruence* (PNI) explained

approximately one-third of the variance in job satisfaction ( $R^2 = 0.32$ ). Furthermore, because the confidence intervals did not include zero, all four factors of the POQWS explained a statistically significant amount of variance in job satisfaction. The most important variable in predicting job satisfaction is PNG (RW = 0.21), PU (RW = 0.07), PNI (RW = 0.02), followed by PO (0.01). Similarly, the weighted linear combination of the four predictor variables explained about one-third of the variance in organizational commitment ( $R^2 = 0.33$ ). All four predictors explained a statistically significant amount of variance in organizational commitment, with the most important variable being PNG (RW = 0.22), PU (RW = 0.08), PNI (RW = 0.02), and PO (RW = 0.01). Moving to work engagement, the weighted linear combination of the four predictor variables explained a slightly lower percentage of the variance in the criterion variable ( $R^2 = 0.15$ ). All four predictors explained a statistically significant amount of variance in work engagement, with the most important variable being PNG (RW = 0.08), PO (RW = 0.03), PNI (RW = 0.03), and PU (RW = 0.01). Lastly, the weighted linear combination of the predictor variables explained roughly more than half of the variance in turnover intention ( $R^2 = 0.55$ ). All four factors of POQWS explained a statistically significant amount of variance in turnover intention, albeit with a different distribution in weights. The most important variable in predicting turnover intention is PNI (RW = 0.27), PNG (RW = 0.18), PU (RW = 0.06), followed by PO (RW = 0.03).

Compared to the traditional multiple regression analyses, the relative weight results sometimes differ. For example, in the multiple regression analysis, PNI did not significantly predict job satisfaction, holding the other dimension variables constant. However, PNI had significant relative weights. It is not uncommon to have differences in

significance in terms of regression coefficients and relative weights for the same variable (Tonidandel et al., 2009). Thus, it is important to explore both analyses because they provide different critical information to address different parts of the research question. In essence, regression weights focus on incremental prediction and represent the strength of the relationship between the predictor and job satisfaction accounting for all other predictors whereas relative weights focus on explaining the relative importance of the variables in predicting job satisfaction. As another example, PNI did not significantly predict organizational commitment in the multiple regression even though the relative weight of PNI is significant. Furthermore, PU did not significantly predict work engagement and PO did not significantly predict turnover intention. The regression coefficients and relative weights provide supplementary information. In summary, the results indicate that PO, PU, PNG, and PNI of the POQWS differentially predicted work-related outcomes in both relationship strength and relative importance (see Table 11).

### **Study 3**

#### *Number of Profiles*

To determine the optimal LPA model, I specified a one-profile model and considered the following fit indices: Bayesian information criterion (BIC), Akaike information criterion (AIC), Bootstrapped likelihood ratio test (BLRT), posterior classification probabilities, and entropy value. From Spurk et al. (2020)'s review of LPA studies, 78% of the studies applied BIC indices followed by AIC (58.7%), and BLRT (60.9%). Overall, the model with the lowest BIC and AIC values offers the best fit. When considering the BLRT value, a significant BLRT ( $p < .05$ ) for a model with  $k + 1$  profiles indicates the solution is more optimal than the  $k$ -profile solution. The posterior

classification probabilities indicate the probability that the people in the sample are classified into the correct profile, with high probabilities indicating a more accurate assignment. Similarly, the entropy value is a weighted average of the posterior classification probabilities, with higher entropy indicating a better fit. The recommended cutoff value is between .60 and .80 (Muthén, 2004).

Because latent profile analysis is largely exploratory in nature, it is important to consider not only the fit indices but also the theoretical and content-related justifications (Woo et al., 2018). As a general best practice, multiple fit values should be considered first, and the final profile solution should be supported by content criteria. The additional profile should provide a better fit than the previous solution and the new profile should be qualitatively meaningful. If the new profile is not meaningful (either by content or theory), then the more parsimonious profile should be retained.

From the fit indices shown in Table 12, the four-profile latent model had the lowest BIC value (2861.38) and a significant BLRT value compared to the three-profile model ( $p = .009$ ). Furthermore, the five-profile model had a non-significant BLRT value compared to the four-profile model ( $p = .13$ ). These results indicate that the four-profile model showed the most optimal fit. The number of cases in each profile ranged from 45 (13%) to 161 (48%), suggesting the sample size in each profile was large enough to be meaningful. The posterior probabilities for the four-profile model were relatively high (0.78-0.94), making each profile distinct from one another. Overall, these results suggest a four-profile model provided the best profile solution. To answer Research Question 2, there are four distinct and theoretically meaningful profiles based on the interactions of POQWS dimensions.

### *Profile Characterization*

Each profile was determined by a different combination of the POQWS. For visual interpretation, Figure 1 shows a plot of the means for each profile on the four POQWS dimensions: *Perceived Overqualification* (PO), *Perceived Underutilization* (PU), *Perceived No Growth* (PNG), and *Perceived Needs Incongruence* (PNI). The y-axis displays the standard scores of the dimension. Consistent with previous studies using LPA in organizational research, values around .5 standard deviation from the mean are considered moderate. Likewise, values above .5 standard deviation from the mean are considered high. From Figure 1, the four emerging profiles are distributed (from high to low) in terms of fits and needs. For example, profile 1 consisted of individuals with a low PO, PU, PNG, and a high PNI. This configuration reflects a group of people who have a good fit with their jobs (low PO, PU, PNG), but the jobs do not meet their needs (high PNI). Profile 1 is labeled as *good fit, does not meet needs*. This is the most common profile in this sample, with 161 people (46.9%).

Profile 2 is characterized by a group of individuals who scored high on PO and PU but low on PNG and PNI. This configuration reflects the opposite spectrum of profile 1, which consisted of individuals who have bad fit with their jobs, but the jobs meet their needs. Thus, profile 2 is labeled as *bad fit, meets needs*. This profile has 45 people (13%), the least common profile.

Profile 3 reflects a group of people who scored moderate to high on all four dimensions ( $> .50$  around or above the mean). Thus, this reflects individuals who have bad fit with their jobs and the jobs do not meet their needs. Profile 3 is labeled as *bad fit*,

*does not meet needs*. This profile has 64 people (18.7%) and is the third-largest profile in this sample.

Lastly, profile 4 represents the individuals who scored low on all four dimensions ( $> -.50$  below the mean). In other words, individuals in this profile have good fit with their jobs and the jobs meet their needs. Profile 4 is labeled as *good fit, meets needs*, and consists of 73 people (21.3%), the second-largest profile in this sample.

### *Profile Validation*

To establish internal validity for the four-profile model, I conducted ANOVAs with post hoc comparisons. Results are summarized in Table 13. The first set of ANOVAs indicates that there were significant differences between the profiles across each form of the POQWS (e.g., PO, PU, PNG, and PNI). This further supports the conclusion that the four profiles are distinct and meaningful. Post hoc analyses using pairwise comparisons are denoted in Table 13.

### *Criterion-Related Validity*

To further explore the importance of these profiles in predicting outcome variables, I conducted additional ANOVAs with four work-related outcomes (e.g., job satisfaction, organizational commitment, work engagement, and turnover intention). Figure 2 shows a plot of the means for each profile on the four outcome variables. The y-axis displays the standard scores.

Using profile membership as the independent variable and job satisfaction as the dependent variable, the result indicated there were significant differences between the profiles in job satisfaction. Furthermore, post hoc analyses revealed that the mean levels of job satisfaction associated with profile 1 ( $M = 3.66$ ) and profile 3 ( $M = 3.43$ ) were

significantly lower than that associated with profile 4 ( $M = 4.12$ ). Similarly, significant differences were found between the profiles and all three other work-related outcomes. Specifically, the mean levels of organizational commitment associated with profile 1 ( $M = 3.20$ ), profile 2 ( $M = 3.00$ ), and profile 3 ( $M = 3.00$ ) were significantly lower than that associated with profile 4 ( $M = 3.45$ ). The mean level of work engagement associated with profile 2 ( $M = 3.63$ ) was significantly lower than those associated with profile 3 ( $M = 4.25$ ) and profile 4 ( $M = 4.21$ ). Lastly, the mean level of turnover intention associated with profile 1 ( $M = 3.49$ ) was significantly higher than that associated with profile 4 ( $M = 2.39$ ). Thus, consistent with my previous prediction, profile 4 (*good fit, meets needs*) was associated with the least detrimental outcomes (e.g., higher job satisfaction, higher organizational commitment, higher work engagement, and lower turnover intention). Table 14 demonstrates the results of these analyses, providing evidence for Research Question 3 that different profiles differentially predicted workplace outcomes. To summarize the results for all three studies, a list of the hypotheses and outcomes is available in Table 15.

## CHAPTER 5: DISCUSSION

Despite calls to address the methodological concerns in the overqualification literature, little progress has been made on the psychometric front. Conceptually, researchers have understood and treated perceived overqualification and objective overqualification as two overlapping but distinct constructs (Maltarich et al., 2011; Harari et al. 2017). Although POQ can be shaped by multiple factors, it is generally considered a product engendered by objective overqualification (Feldman et al., 2002). The said “*multiple factors*” outside of objective overqualification are largely ignored. Consequently, in the last decade POQ has been measured the same way objective overqualification was assessed. In short, despite multidimensional conceptualizations, POQ continues to be assessed via by unidimensional scales mainly capturing aspects of objective overqualification. The field has largely ignored the other components of POQ (e.g., perceived no growth) without clear theoretical justifications. Thus, the “*multidimensional construct, unidimensional measure*” fallacy remains, and the literature cannot move forward unless the conceptual understanding and measurement align.

Consistent with the discussion above, one of the most widely used measures of POQ, the Scale of Perceived Overqualification (SPOQ) by Maynard and colleagues (2006) has dimensionality issues. First and foremost, the authors used principal component analysis (PCA) to analyze the SPOQ. While PCA is a great data reduction technique, it is not appropriate to identify the constructs underlying the relationship in the data. A factor analysis is more suitable in that there is psychological meaning assigned to the factors and not components. Second, while the results of the PCAs suggest one factor

explained most of the variance in the scale, a three-factor CFA model revealed a better fit than a one-factor model. Arvan et al. (2019) substantiated this finding, noting poor measurement fit on the specified unidimensional SPOQ in the study. Despite notable issues with its factor structure, the SPOQ is consistently used as a unidimensional scale by researchers in organizational studies. Often, reassessing the factor structure of the SPOQ is beyond the objective of studies that are more interested in understanding the consequences of POQ. Nevertheless, the outcomes of POQ cannot be ascertained unless there is evidence to support the psychometric properties of the POQ measure. The studies conducted in this dissertation have begun to address these methodological gaps.

The first contribution of my dissertation is the conceptual clarification of POQ, which expands the definition of perceived overqualification to include both excess demands relative to job requirements and excess needs/values relative to job supplies. The extant literature positions POQ as a type of P-J misfit but operationalizes it only using demands-abilities mismatch. The needs-supplies misfit part of P-J fit theory is largely underexplored. Defining perceived overqualification literally in terms of excess qualifications the person possesses is a narrow approach to viewing overqualification. In practice, when a person is “overqualified” there is an assumption that a person is too good for the job, or the job is somehow beneath the person. What constitutes “too good” for the job is often defined as excess qualifications not required by the job, which is consistent with the literature. However, being “too good” for the job can also stem from the lack of growth and developmental opportunities on the job. Likewise, being “too good” for the job can mean the person has a higher value system or needs for the job they

envisioned than what the job can offer. From a utilitarian perspective, expanding the scope of POQ to incorporate needs-supplies misfit has tremendous practical benefits.

Findings from Study 1 clearly suggest *Perceived No Growth* and *Perceived Needs Incongruence* are two distinct factors of POQ. Interestingly, the findings for *Perceived Mismatch* indicate inconsistent results from previous studies. The factor loadings for items on this subscale did not load onto one factor. Instead, results clearly showed the items were split into two groups: one set of items measuring perceived overqualification and one set of items measuring perceived underutilization. Traditionally, POQ is measured as a form of perceived mismatch, either as having excess KSAs not required by nor utilized on the job. Thus, the perception of mismatch is formed by overqualification and/or underutilization. These two concepts are often used and measured interchangeably. The findings of the current study do not support this assumption. In other words, perceived overqualification and perceived underutilization should be two distinct measures and not clustered together under perceived mismatch.

The second key contribution of this work is to measure POQ the same way it is conceptualized. Perhaps the most significant finding from Study 2 is the evidence to support a four-factor structure in the newly developed Perceived Overqualification at Work Scale (POQWS). In sum, POQ is operationalized in four different ways: *Perceived Overqualification*, *Perceived Underutilization*, *Perceived No Growth*, and *Perceived Needs Incongruence*. This finding is particularly important because even without considering the additional dimensions, the unidimensional view of perceived mismatch in the literature was not supported by empirical evidence. Although no previous studies have tested the difference between *Perceived Overqualification* and *Perceived*

*Underutilization*, this distinction is compelling for predicting various workplace outcomes.

Taking a multidimensional approach, overqualified employees are not all the same. Support for the four-factor structure indicates that there is more nuance to being overqualified than a simple skills-abilities mismatch. Even within the skills-abilities mismatch, overqualification and underutilization have different implications. Correlation results in Study 2 demonstrate that although the four dimensions of the POQWS predicted workplace outcomes (i.e., job satisfaction, organizational commitment, work engagement, and turnover intention) in similar directions, they differ in strength and relative importance.

Furthermore, relative weight analyses showed that the dimensions explain different amounts of total variance in these criterion variables. For example, results indicated that a weighted linear combination of *Perceived Overqualification* (PO), *Perceived Underutilization* (PU), *Perceived No Growth* (PNG), and *Perceived Needs Incongruence* (PNI) explained approximately one-third of the variance in job satisfaction ( $R^2 = 0.32$ ), one-third of the variance in organizational commitment ( $R^2 = 0.33$ ), fifteen percent of the variance in work engagement ( $R^2 = 0.15$ ), and about half of the variance in turnover intention ( $R^2 = 0.55$ ). Thus, the POQWS is better at predicting certain workplace outcomes than others.

To consider the POQWS subscales separately, the four dimensions also determined different outcomes. From relative weights analyses, the most important variables in predicting job satisfaction and organizational commitment were PNG and PU. The most important variables in predicting work engagement were PNG and PO

while the key predicting variables for turnover intention were PNI and PNG. This means that the lack of growth on the job seems to drive job satisfaction, organizational commitment, and work engagement heavily. In contrast, the lack of needs supplies provided by the job largely drives turnover intention. Unlike previous research that implies POQ predicts workplace outcomes equally, Study 2 highlights the importance of understanding differential predictions based on different components of POQ. From a practical standpoint, the findings from Study 2 suggest not all aspects of perceived overqualification are equally negative.

Lastly, the final contribution of this dissertation is to extend methodological developments by using a configural approach to studying employee overqualification. To the best of my knowledge, this is the first study exploring POQ from a person-centric view. The extant literature is extremely limited in understanding how overqualification profiles form and in turn shape different workplace outcomes. The findings from Study 3 clearly support the notion that overqualified employees are not all the same and they differ on specific dimension interactions on the POQWS. Four clear profiles emerged from the latent profile analyses. Significant ANOVAs across the profiles on the POQWS dimension provided further validating evidence for a four-profile model.

Determined by both model fit indices and content justifications, I identified four meaningful overqualification profiles that differed in terms of fit and needs. These profiles are labeled as '*good fit, does not meet needs*', '*bad fit, meets needs*', '*bad fit, does not meet needs*', and '*good fit, meets needs*'. Reviewing these profiles in detail, approximately half of the sample in Study 3 (46.9%) was sorted in profile 1 *good fit, does not meet needs*. Grounded in theoretical justification, profile 1 is characterized by

demands-abilities fit and needs-supplies misfit. In short, this group of individuals represent the most common type of overqualified employees. From a practical perspective, it is not difficult to imagine many of the employees in the real world should have an adequate fit with their jobs (assuming the hiring and selection process has good validity), yet the jobs do not necessarily meet their needs and visions of their dream jobs. This is the norm rather than the exception.

Individuals in profile 2 *bad fit, meets needs* have the opposite characteristics of profile 1. Essentially, this group of overqualified employees have bad fit in terms of demands-abilities but good fit in terms of needs-supplies. This is an interesting profile because these employees know and understand they are in jobs that do not require nor utilize their level of education, experience, and KSAs. Nonetheless, the job provides good fit to meet their values and needs. People working in nonprofit organizations exemplify a type of profile 2, as these employees often share a larger career aspiration and place a heavy emphasis on the value the organization carries. Thus, the job usually aligns with what profile 2 employees seek in life. On the other hand, the barrier to entry is often lower in the nonprofit sector, which can result in the organizations hiring overqualified employees in terms of their formal qualifications. For example, a volunteer coordinator position usually requires a few years of volunteer management experience but not necessarily a college degree. Many volunteer coordinators may have college degrees regardless. In summary, profile 2 represents a group of employees largely motivated by personal values and needs. It is the least common profile found in Study 3 (13%).

Profile 3 and profile 4 comprised of individuals who scored consistently high or low across all four POQWS dimensions, respectively. Profile 3 is labeled as *bad fit, does*

*not meet needs*. Not surprisingly, there exists many employees in the real world who have bad fit with their jobs and the jobs do not meet their needs. This group is consistent with how the overqualification literature portrays overqualified employees and it is what makes hiring overqualified individuals largely undesirable for organizations. Meanwhile, profile 4 is labeled as *good fit, meets needs* employees. Individuals in this profile have good fit with their jobs and the jobs meet their needs. These are the people who tend to fare well in organizations because both fit and needs are sufficiently met. They are driven by jobs that utilize their qualifications well as well as jobs that align with their life goals and values. Profile 4 has the best of both worlds compared to the previous profiles.

Contrary to existing literature that suggests POQ constitutes both bad fit and insufficient needs (i.e., demands-abilities misfit and needs-supplies misfit), I've provided a finer-grain view of POQ based on these four profiles. Overqualified employees differ based on a 2x2 interaction, represented by patterns of fit and needs on the POQWS. Rather than a dichotomization of overqualification, these profiles place overqualified individuals on a continuum based on specific patterns. This differentiation has major consequences for predicting workplace outcomes, as outlined in the following section.

Significant ANOVAs using profile membership as IV and outcome variables as DVs (i.e., job satisfaction, organizational commitment, work engagement, and turnover intention) suggest it is important to consider these profiles while examining the consequences of POQ. A variable-centric approach using the POQWS dimension in isolation is limited. Additional *post hoc* analyses revealed job satisfaction in profile 1 ( $M = 3.66$ ) and profile 3 ( $M = 3.43$ ) were significantly lower than job satisfaction in profile 4 ( $M = 4.12$ ). Similarly, organizational commitment in profile 1 ( $M = 3.20$ ), profile 2 ( $M =$

3.00), and profile 3 ( $M = 3.00$ ) were significantly lower than organizational commitment in profile 4 ( $M = 3.45$ ). Work engagement in profile 2 ( $M = 3.63$ ) was significantly lower than those in profile 3 ( $M = 4.25$ ) and profile 4 ( $M = 4.21$ ). Lastly, turnover intention in profile 1 ( $M = 3.49$ ) was significantly higher than that in profile 4 ( $M = 2.39$ ). Overall, these findings suggest employees in jobs with *good fit, meets needs* tend to fare well in the organization as predicted (e.g., higher job satisfaction, higher organizational commitment, higher work engagement, and lower turnover intention). Thus, organizations should target specific interventions for individuals in profiles 1, 2, and 3 to increase fit and address meeting employee needs. The person-centric approach provides employers with ways to differentiate and better manage overqualified employees. Instead of overqualification prevention, interventions are also viable.

### **Theoretical Implications**

Results from this dissertation have important theoretical implications for the overqualification literature. First and foremost, there is clear support for the construct validity of the POQWS. My results indicate that the POQWS demonstrates key methodological advantages over prior POQ measures. The POQWS aligns with and assesses the multidimensional nature of POQ. Furthermore, the subscales of POQWS differentially predicted various outcome variables and contributed different relative weights to these predictions. Because the POQWS builds on previous scales and expands the POQ domain, overqualification researchers can still link findings using the POQWS to prior research. The findings from previous literature are still very much relevant even as we shift the concept of POQ to include a comprehensive view as presented in this dissertation. Second, results from Study 1 and 2 marked a clear distinction between

objective and perceived overqualification. Future studies should carefully avoid measuring POQ using scales that treat it as objective overqualification. Lastly, perhaps the most critical contribution is the potential to inspire a paradigm shift in the organizational literature, from a variable-centric to a person-centric approach. Latent profile analysis offers a new way of studying employee overqualification based on dimension interactions. This methodology has important implications for accumulating new knowledge and subsequently building on theories in the literature. Current results indicate a reliable and interpretable set of profiles with respect to perceived overqualification.

### **Practical Implications**

From Erdogan and Bauer's (2021) review, the conclusion of this research is clear: overqualification is highly undesirable and carries negative consequences for both the employers and the employees. The present study suggests the conclusion is not quite so simple. Specifically, the findings lay grounds for a meaningful classification of overqualified employees. Organizations can now manage these employees based on group membership, as different profile carries different consequences to workplace outcomes. Lastly, the POQWS can serve as a diagnostic tool for organizations. This enables employers to understand the spectrum of employees they have at any point in time and perhaps monitor the development of different overqualified profiles over time. Based on this research, HR managers and practitioners should not assume that all overqualified employees are bad for the organizations. Instead, they should capitalize on these findings and address the fit and needs of the overqualified employee based on profile membership.

## **Limitations**

It is important to note that the current results need to be interpreted within the context of the cross-sectional nature of the data, i.e., all the predictors and outcome variables were assessed at one point in time. In many workplace situations, overqualification may emerge and change over the course of an employee's career. Thus, future research might extend conceptualizations of perceived overqualification to better incorporate the potential temporal nature of the perceptions. Here future work might focus on studies designed to better capture the concept of apparent and emergent overqualification. Specifically, different profiles (other than the ones listed here) may surface using longitudinal data. Second, the sample size for Study 2 and 3 is less than the recommended sample of 500. Although significant results were found, future studies should use a larger and more diverse sample. Cross-validation designed to explore the generalizability, and potential boundary conditions, of the profiles identified in the present study is clearly an important avenue for future research.

## **Future Research Directions**

Given the findings from this dissertation, future research needs to reexamine the existing definition of employee overqualification. Cross-validation studies are needed to determine if the four-factor structure of the POQWS are replicable across samples. Although various profiles of POQ have different implications for workplace outcomes, future research should determine if the perceptions of overqualification are formed differently in each of the profile found in the current study. Lastly, future studies need to consider the relevance of these profiles across national cultures. Expanding our

understanding of POQ using a person-centered approach is much warranted in the overqualification literature.

## **Conclusion**

In sum, the present studies suggest perceived overqualification is multidimensional and should be measured as such using appropriate scales. The POQWS accounted for different amount of variance in various workplace outcomes and each subscale differentially predicted those outcomes. Findings from this dissertation also provide a novel person-centered approach to studying employee overqualification. Four different types of profile membership emerged, and they have different implications for work-related outcomes. While still in the exploratory phase, these overqualification profiles hopefully represent the beginning of a new methodological paradigm shift in the organizational literature.

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**Table 1**

Initial Items for the Perceived Overqualification at Work Scale (POQWS)

Perceived Mismatch

1. I have more knowledge than my job requires.
2. My education level is higher than the education level required by my job.
3. I have more experience than my job requires.
4. I have more skills than my job requires.
5. I have more abilities than my job demands.
6. My job does not make good use of my skills and abilities.
7. Based on my qualifications, my job title should be higher.
8. I have skills that I do not utilize on the job.
9. I have knowledge that I do not utilize on the job.
10. I have previous experience that I do not utilize on the job.
11. Based on my qualifications, I am overqualified for my job.
12. My qualifications exceed the requirements of the job.

Perceived No Growth

13. My job does not provide me with learning opportunities.
14. I don't have a lot of potential for personal growth in this job.
15. The day-to-day content of my job rarely changes.
16. I don't find a lot of meaning in the work I do.
17. I don't see many promotional opportunities.
18. I am often bored doing my job.
19. I cannot learn anything new in this job.
20. I am not given the opportunity to improve my skills in my job.
21. I consider my job a dead-end job.
22. I cannot achieve my full potential with my current job.
23. I am often not being challenged in my job.
24. I don't have a mentor to help me grow.
25. I feel stuck in this job.

Perceived Needs Incongruence

26. I have higher ethical standards than what my job offers.
27. What I value in a job is more than what my job offers.
28. I need more work-life balance than what my job offers.
29. I have higher expectations for my current job.
30. I need more things that what my current job can offer.
31. Overall, I have higher needs than what my job offers.
32. I need better working conditions than what my job supplies.
33. I am worth more than what I am paid in this job.
34. The career goals I have for myself are bigger than what my job can supply.
35. My job does not meet my standard of a good job.
36. My job falls short of the vision I have for my future.

Table 1: Initial Items for the Perceived Overqualification at Work Scale (POQWS)  
(Continued)

- 37. The benefits my job provides are not enough for what I need.
- 38. My career aspirations are more than what my job can supply.
- 39. My job falls short of my expectations.
- 40. Based on what my job can provide, I am worthy of a better job.
- 41. Based on my standards, I am too good for my job.
- 42. Based on my value system, this job is beneath me.
- 43. The things I look for in a job are more than what my job can provide.
- 44. Based on what my job offers, my job is less than ideal.

**Table 2**

Exploratory Factor Analysis Results for the Initial POQWS

Variable	Factor		
	1	2	3
<i>Perceived Mismatch (<math>\alpha = .79</math>)</i>			
PM6	<b>.72</b>	.30	-.26
PM7	<b>.63</b>	<b>.43</b>	-.22
PM8	<b>.63</b>	.33	-.24
PM9	<b>.40</b>	.17	.17
PM1	.38	-.27	.27
PM5	.37	-.14	.32
PM10	.37	-.11	.35
PM4	.31	-.18	.32
PM3	.16	-.12	<b>.41</b>
PM2	.11	-.03	<b>.55</b>
<i>Perceived No Growth (<math>\alpha = .94</math>)</i>			
PNG8	.00	<b>.83</b>	-.03
PNG5	.01	<b>.82</b>	-.01
PNG1	.04	<b>.79</b>	-.03
PNG6	-.04	<b>.78</b>	.03
PNG2	-.01	<b>.77</b>	.04
PNG4	.06	<b>.77</b>	-.07
PNG9	.15	<b>.76</b>	-.07
PNG11	.01	<b>.75</b>	.06
PNG10	.25	<b>.74</b>	-.16
PNG7	-.06	<b>.70</b>	.11
PNG3	-.04	<b>.52</b>	.14
<i>Perceived Needs Incongruence (<math>\alpha = .92</math>)</i>			
PNI5	-.11	.01	<b>.78</b>
PNI1	-.13	-.01	<b>.72</b>
PNI3	-.12	.06	<b>.70</b>
PNI4	-.06	.05	<b>.69</b>
PNI6	-.08	.07	<b>.69</b>
PNI15	-.07	.13	<b>.68</b>
PNI2	-.06	.04	<b>.67</b>
PNI14	-.11	.22	<b>.63</b>
PNI8	.03	.06	<b>.62</b>
PNI7	.10	.03	<b>.61</b>
PNI13	.08	-.03	<b>.61</b>
PNI12	.02	.38	<b>.46</b>
PNI16	.04	.39	<b>.40</b>
PNI11	-.05	<b>.40</b>	.37

Table 2: Exploratory Factor Analysis Results for the Initial POQWS (*Continued*)

PNI10	.13	<b>.44</b>	.32
PNI9	.07	<b>.63</b>	.16
Factor Intercorrelations			
Factor 1: <i>Perceived Mismatch</i>	-		
Factor 2: <i>Perceived No Growth</i>	.29	-	
Factor 3: <i>Perceived Needs Incongruence</i>	.45	.40	-

*Note:* Factor loadings greater than or equal to .40 are highlighted in bold.

**Table 3**

Item Summary for the Revised POQWS

<b>Dimension</b>	<b>Items</b>
<i>Perceived Mismatch</i>	13
PM1 - I have more knowledge than my job requires.	
PM2 - My education level is higher than the education level required by my job.	
PM3 - I have more experience than my job requires.	
PM4 - I have more skills than my job requires.	
PM5 - I have more abilities than my job demands.	
PM6 - I have skills that I do not utilize on the job.	
PM7 - I have knowledge that I do not utilize on the job.	
PM8 - I have previous experience that I do not utilize on the job.	
PM9 - Based on my qualifications, I am overqualified for my job.	
PM10 - My qualifications exceed the requirements of the job.	
PM11 - I have excess education that I do not utilize on the job.	
PM12 - I have abilities that I do not utilize on the job.	
PM13 - Overall, I am underutilized on the job.	
<i>Perceived No Growth</i>	5
PNG2 - I don't have a lot of potential for personal growth in this job.	
PNG4 - I don't see many promotional opportunities.	
PNG5 - I cannot learn anything new in this job.	
PNG6 - I am not given the opportunity to improve my skills in my job.	
PNG9 - I am often not being challenged in my job.	
<i>Perceived Needs Incongruence</i>	6
PNI1 - I have higher ethical standards than what my job offers.	
PNI2 - What I value in a job is more than what my job offers.	
PNI3 - I need more work-life balance than what my job offers.	
PNI5 - Overall, I have higher needs than what my job offers.	
PNI6 - I need better working conditions than what my job supplies.	
PNI8 - The career goals I have for myself are bigger than what my job can supply.	

**Table 4**

Descriptive Statistics and Correlations for Study 2 Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Perceived Overqualification	3.99	0.61											
2. Perceived Underutilization	3.64	0.84	.44**										
3. Perceived No Growth	3.19	0.98	.25**	.56**									
4. Perceived Needs Incongruence	3.64	0.77	.39**	.17**	.47**								
5. Job Satisfaction	3.70	0.74	-.01	-.35**	-.54**	-.21**							
6. Organizational Commitment	3.19	0.61	-.02	-.37**	-.55**	-.18**	.69**						
7. Work Engagement	4.04	1.16	.17**	-.11*	-.25**	.11*	.54**	.53**					
8. Turnover Intention	3.25	1.11	.31**	.38**	.61**	.65**	-.48**	-.45**	-.14**				
9. SPOQ	3.68	0.71	.48**	.71**	.66**	.37**	-.39**	-.45**	-.15**	.54**			
10. Relative Deprivation	2.95	0.61	.15**	.17**	.35**	.33**	-.45**	-.42**	-.33**	.45**	.33**		
11. Perceived Mismatch (POQ)	3.79	0.65	.54**	.56**	.49**	.51**	-.21**	-.23**	.05	.50**	.72**	.18**	
12. Perceived No Growth (POQ)	2.59	0.58	-.02	.22**	.30**	-.08	-.46**	-.47**	-.51**	.17**	.26**	.35**	.03

*Note.*  $N = 343$ . *M* and *SD* are used to represent mean and standard deviation, respectively. SPOQ denotes the Scale of Perceived Overqualification. POQ in parentheses denotes the Johnson and Johnson's Perceived Overqualification Scale. \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

**Table 5**

## Confirmatory Factor Analyses Model Fit Indices

Model	Factors	$\chi^2$	$df$	$\Delta\chi^2$	RMSEA	CFI	TLI
Model 1	1 Factor All items merged	1885.18*	230		.145	.545	.500
Model 2	2 Factors PM PNG and PNI merged	1349.07*	229	536.11*	.119	.692	.660
Model 3	3 Factors PM PNG PNI	906.52*	227	442.55*	.093	.813	.792
Model 4	4 Factors Perceived Overqualification Perceived Underutilization PNG PNI	444.45*	224	462.07*	.054	.939	.932
Model 5	5 Factors Second Order Factor Perceived Overqualification Perceived Underutilization PNG PNI	547.04*	226	-	.064	.912	.901

*Note.*  $N = 343$ . PM = *Perceived Mismatch*; PNG = *Perceived No Growth*; PNI = *Perceived Needs Incongruence*; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square error of approximation \*significant at  $p < .05$ .

**Table 6**

Descriptive Statistics and Coefficient Alphas for the Revised 4-Factor POQWS

<b>Dimension</b>	<b>Items</b>	<b>Alpha</b>	<b>Mean (SD)</b>
<i>Perceived Overqualification</i>	6	.83	4.00 (0.61)
PM1 - I have more knowledge than my job requires.			
PM2 - My education level is higher than the education level required by my job.			
PM3 - I have more experience than my job requires.			
PM4 - I have more skills than my job requires.			
PM5 - I have more abilities than my job demands.			
PM10 - My qualifications exceed the requirements of the job.			
<i>Perceived Underutilization</i>	6	.87	3.60 (0.84)
PM6 - I have skills that I do not utilize on the job.			
PM7 - I have knowledge that I do not utilize on the job.			
PM8 - I have previous experience that I do not utilize on the job.			
PM11 - I have excess education that I do not utilize on the job.			
PM12 - I have abilities that I do not utilize on the job.			
PM13 - Overall, I am underutilized on the job.			
<i>Perceived No Growth</i>	5	.88	3.20 (0.98)
PNG2 - I don't have a lot of potential for personal growth in this job.			
PNG4 - I don't see many promotional opportunities.			
PNG5 - I cannot learn anything new in this job.			
PNG6 - I am not given the opportunity to improve my skills in my job.			
PNG9 - I am often not being challenged in my job.			

Table 6: Descriptive Statistics and Coefficient Alphas for the Revised 4-Factor POQWS (Continued)

<i>Perceived Needs Incongruence</i>	6	.86	3.60 (0.77)
PN11 - I have higher ethical standards than what my job offers.			
PN12 - What I value in a job is more than what my job offers.			
PN13 - I need more work-life balance than what my job offers.			
PN15 - Overall, I have higher needs than what my job offers.			
PN16 - I need better working conditions than what my job supplies.			
PN18 - The career goals I have for myself are bigger than what my job can supply.			

**Table 7**Regression Results using *Perceived Overqualification* as the Criterion

Predictor	<i>b</i>	<i>b</i> 95% CI [LL, UL]	<i>beta</i>	<i>beta</i> 95% CI [LL, UL]	<i>sr</i> <sup>2</sup>	<i>sr</i> <sup>2</sup> 95% CI [LL, UL]	<i>r</i>	Fit
(Intercept)	2.18**	[1.56, 2.75]						
SPOQ	0.20**	[0.08, 0.33]	0.23	[0.09, 0.38]	.02	[-.00, .06]	.48**	
JJPM	0.35**	[0.21, 0.50]	0.38	[0.23, 0.52]	.06	[-.02, .13]	.54**	
JJPNG	-0.10	[-0.22, 0.01]	-0.09	[-0.21, 0.01]	.01	[-.00, .04]	-.02	
								$R^2 = .316^{**}$ 95% CI [.23, .43]

*Note.* SPOQ = Scale of Perceived Overqualification, JJPM = Johnson and Johnson's POQ Scale Perceived Mismatch dimension, JJPNG = Johnson and Johnson's POQ Scale Perceived No Growth dimension. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. *sr*<sup>2</sup> represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

**Table 8**Regression Results using *Perceived Underutilization* as the Criterion

Predictor	<i>b</i>	<i>b</i> 95% CI [LL, UL]	<i>beta</i>	<i>beta</i> 95% CI [LL, UL]	<i>sr</i> <sup>2</sup>	<i>sr</i> <sup>2</sup> 95% CI [LL, UL]	<i>r</i>	Fit
(Intercept)	0.17	[-0.40, 0.73]						
SPOQ	0.71**	[0.55, 0.87]	0.60	[0.48, 0.72]	.15	[.09, .22]	.71**	
JJPM	0.17*	[-0.01, 0.33]	0.13	[-0.01, 0.26]	.01	[.00, .03]	.56**	
JJPNG	0.09	[-0.02, 0.20]	0.06	[-0.02, 0.14]	.00	[.00, .02]	.22**	
								<i>R</i> <sup>2</sup> = .509** 95% CI [.43, .60]

*Note.* SPOQ = Scale of Perceived Overqualification, JJPM = Johnson and Johnson's POQ Scale Perceived Mismatch dimension, JJPNG = Johnson and Johnson's POQ Scale Perceived No Growth dimension. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. *sr*<sup>2</sup> represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

**Table 9**Regression Results using *Perceived No Growth* as the Criterion

Predictor	<i>b</i>	<i>b</i> 95% CI [LL, UL]	<i>beta</i>	<i>beta</i> 95% CI [LL, UL]	<i>sr</i> <sup>2</sup>	<i>sr</i> <sup>2</sup> 95% CI [LL, UL]	<i>r</i>	Fit
(Intercept)	-0.79**	[-1.32, -0.24]						
SPOQ	0.75**	[0.56, 0.95]	0.55	[0.42, 0.69]	.13	[.07, .21]	.66**	
JJPM	0.14	[-0.08, 0.37]	0.09	[-0.05, 0.25]	.00	[.00, .03]	.49**	
JJPNG	0.26**	[0.11, 0.40]	0.15	[0.06, 0.23]	.02	[.00, .05]	.30**	
								<i>R</i> <sup>2</sup> = .455** 95% CI [.38, .54]

*Note.* SPOQ = Scale of Perceived Overqualification, JJPM = Johnson and Johnson's POQ Scale Perceived Mismatch dimension, JJPNG = Johnson and Johnson's POQ Scale Perceived No Growth dimension. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. *sr*<sup>2</sup> represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

**Table 10**Regression Results using *Perceived Needs Incongruence* as the Criterion

Predictor	<i>b</i>	<i>b</i> 95% CI [LL, UL]	<i>beta</i>	<i>beta</i> 95% CI [LL, UL]	<i>sr</i> <sup>2</sup>	<i>sr</i> <sup>2</sup> 95% CI [LL, UL]	<i>r</i>	Fit
(Intercept)	1.60**	[0.99, 2.20]						
SPOQ	0.05	[-0.11, 0.22]	0.04	[-0.10, 0.20]	.00	[.00, .02]	.37**	
JJPM	0.58**	[0.38, 0.75]	0.49	[0.33, 0.62]	.11	[.05, .18]	.51**	
JJPNG	-0.12	[-0.27, 0.03]	-0.09	[-0.20, 0.02]	.01	[.00, .04]	-.07	
								<i>R</i> <sup>2</sup> = .272**
								95% CI [.20, .36]

*Note.* SPOQ = Scale of Perceived Overqualification, JJPM = Johnson and Johnson's POQ Scale Perceived Mismatch dimension, JJPNG = Johnson and Johnson's POQ Scale Perceived No Growth dimension. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *beta* indicates the standardized regression weights. *sr*<sup>2</sup> represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. \* indicates *p* < .05. \*\* indicates *p* < .01.

**Table 11**

Summary of Regression Coefficients and Relative Weight Analysis in Study 2

Predictor	<i>b</i>	$\beta$	RW	CI-L	CI-U	RS-RW (%)
<b>Criterion = Job Satisfaction (<math>R^2 = 0.3221</math>; <math>F[338] = 40.15</math>, <math>p &lt; 0.001</math>)</b>						
Intercept	4.54*					
Perceived Overqualification	0.22*	0.18*	0.0143*	0.0049	0.0393	4.43
Perceived Underutilization	-0.13*	-0.15*	0.0711*	0.0375	0.1105	22.08
Perceived No Growth	-0.38*	-0.50*	0.2125*	0.1488	0.2808	65.96
Perceived Needs Incongruence	-0.02	-0.02	0.0242*	0.0097	0.0524	7.52
<b>Criterion = Organizational Commitment (<math>R^2 = 0.3332</math>; <math>F[338] = 42.23</math>, <math>p &lt; 0.001</math>)</b>						
Intercept	3.89*					
Perceived Overqualification	0.17*	0.18*	0.0134*	0.0045	0.0403	4.03
Perceived Underutilization	-0.12*	-0.16*	0.0809*	0.0467	0.1253	24.27
Perceived No Growth	-0.32*	-0.51*	0.2187*	0.1604	0.2790	65.63
Perceived Needs Incongruence	0.01	0.02	0.0202*	0.0096	0.0461	6.67
<b>Criterion = Work Engagement (<math>R^2 = 0.1552</math>; <math>F[338] = 15.53</math>, <math>p &lt; 0.001</math>)</b>						
Intercept	2.98*					
Perceived Overqualification	0.34*	0.18*	0.0328*	0.0080	0.0738	21.13
Perceived Underutilization	-0.01	-0.01	0.0145*	0.0066	0.0336	9.31
Perceived No Growth	-0.47*	-0.40*	0.0797*	0.0393	0.1340	51.31
Perceived Needs Incongruence	0.34*	0.23*	0.0283*	0.0091	0.0665	18.25

Table 11: Summary of Regression Coefficients and Relative Weight Analysis in Study 2 (Continued)

**Criterion = Turnover Intention ( $R^2 = 0.5457$ ;  $F[338] = 101.50$ ,  $p < 0.001$ )**

Intercept	-0.95*					
Perceived Overqualification	-0.01	-0.01	0.0306*	0.0107	0.0616	5.60
Perceived Underutilization	0.17*	0.13*	0.0599*	0.0308	0.0993	10.98
Perceived No Growth	0.35*	0.31*	0.1840*	0.1304	0.2406	33.72
Perceived Needs Incongruence	0.69*	0.48*	0.2712*	0.2008	0.3406	49.70

*Note.*  $b$  = unstandardized regression weight,  $\beta$  = standardized regression weight, RW = raw relative weight (within rounding error raw weights will sum to R2), CI-L = lower bound of confidence interval used to test the statistical significance of raw weight, CI-U = upper bound of confidence interval used to test the statistical significance of raw weight, RS-RW = relative weight rescaled as a percentage of predicted variance in the criterion variable attributed to each predictor (within rounding error rescaled weights sum to 100 %). \* $p < .05$ .

**Table 12**

## Latent Profile Analyses Model Fit Statistics

Model	AIC	BIC	SABIC	BLRT	Entropy	Posterior Probabilities	
						Min	Max
1	2919.90	2973.63	2929.22	-	-	-	-
2	2664.56	2775.86	2683.86	285.33*	0.749	0.924	0.934
3	2611.42	2780.28	2640.70	83.14*	0.689	0.830	0.925
4	2534.95	2761.38	2574.21	106.47*	0.735	0.783	0.943
5	2522.12	2806.11	2571.37	42.83	0.775	0.768	0.953

*Note.* AIC = Akaike information criteria, BIC = Bayesian information criteria, SABIC = sample-size adjusted BIC, BLRT = Bootstrap Likelihood ratio test \* $p < .05$ .

**Table 13**

Means, Standard Deviations, and One-Way Analyses of Variance Table for POQWS Dimensions

Measure	Profile 1		Profile 2		Profile 3		Profile 4		$F[3, 339]$	$\eta^2$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Perceived Overqualification	4.00 <sup>ac</sup>	0.44	4.41 <sup>b</sup>	0.45	4.20 <sup>cd</sup>	0.39	3.54 <sup>d</sup>	0.85	28.34***	.20
Perceived Underutilization	3.60 <sup>a</sup>	0.61	4.40 <sup>b</sup>	0.45	4.22 <sup>b</sup>	0.44	2.75 <sup>c</sup>	0.90	85.90***	.43
Perceived No Growth	3.23 <sup>a</sup>	0.77	3.10 <sup>a</sup>	1.06	4.21 <sup>b</sup>	0.37	2.29 <sup>c</sup>	0.82	70.82***	.39
Perceived Needs Incongruence	3.91 <sup>a</sup>	0.40	2.86 <sup>b</sup>	0.91	4.20 <sup>c</sup>	0.42	3.03 <sup>b</sup>	0.79	83.14***	.42

*Note.*  $N = 343$ . Common letters across row indicate a non-significant difference between the means. \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ .

**Table 14**  
Means, Standard Deviations, and One-Way Analyses of Variance Table for Outcome Measures

Measure	Profile 1		Profile 2		Profile 3		Profile 4		$F[3, 339]$	$\eta^2$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Job Satisfaction	3.66 <sup>a</sup>	0.63	3.57 <sup>ab</sup>	0.99	3.43 <sup>a</sup>	0.50	4.12 <sup>b</sup>	0.80	12.38***	.10
Organizational Commitment	3.20 <sup>a</sup>	0.50	3.00 <sup>ab</sup>	0.93	2.97 <sup>b</sup>	0.35	3.45 <sup>c</sup>	0.67	9.23***	.08
Work Engagement	4.00 <sup>ac</sup>	1.08	3.63 <sup>ab</sup>	1.47	4.25 <sup>cd</sup>	1.05	4.21 <sup>cd</sup>	1.17	3.22*	.03
Turnover Intention	3.49 <sup>a</sup>	0.83	2.69 <sup>b</sup>	1.37	4.04 <sup>c</sup>	0.57	2.39 <sup>bc</sup>	1.13	43.22***	.28

*Note.*  $N = 343$ . Common letters across row indicate a non-significant difference between the means. \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ .

**Table 15**

Hypothesis Summary Table

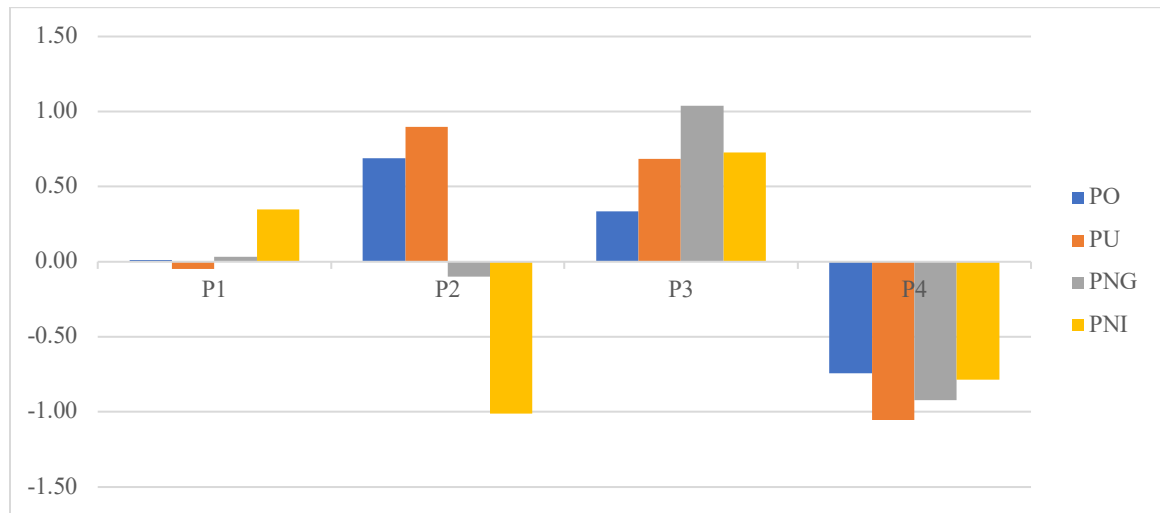
<b>Hypothesis</b>	<b>Result</b>
Hypothesis 1: A three-factor structure in confirmatory factor analysis (CFA) will provide adequate fit for The Perceived Overqualification at Work Scale (POQWS).	No Support
Hypothesis 2a: Perceived Mismatch scores on the POQWS will correlate above .50 with scores on the SPOQ.	Partial Support
Hypothesis 2b: Perceived Mismatch scores on the POQWS will correlate above .50 with Perceived Mismatch scores on the POQ Scale.	Support
Hypothesis 2c: Perceived Mismatch scores on the POQWS will correlate below .50 with Perceived No Growth scores on the POQ Scale.	Partial Support
Hypothesis 3a: Perceived No Growth scores on the POQWS will correlate below .50 with scores on the SPOQ.	No Support
Hypothesis 3b: Perceived No Growth scores on the POQWS will correlate below .50 with Perceived Mismatch scores on the POQ Scale.	Support
Hypothesis 3c: Perceived No Growth scores on the POQWS will correlate above .50 with Perceived No Growth scores on the POQ Scale.	No Support
Hypothesis 4a: Perceived Needs Incongruence scores on the POQWS will correlate below .50 with scores on the SPOQ.	Support
Hypothesis 4b: Perceived Needs Incongruence scores on the POQWS will correlate below .50 with Perceived Mismatch scores on the POQ Scale.	No Support

Table 15: Hypothesis Summary Table (Continued)

Hypothesis 4c: Perceived Needs Incongruence scores on the POQWS will correlate below .50 with Perceived No Growth scores on the POQ Scale.	No Support
Hypothesis 5a: Perceived Mismatch of the POQWS will be negatively related to job satisfaction.	Partial Support
Hypothesis 5b: Perceived Mismatch of the POQWS will be negatively related to organizational commitment.	Partial Support
Hypothesis 5c: Perceived Mismatch of the POQWS will be negatively related to work engagement.	Partial Support
Hypothesis 5d: Perceived Mismatch of the POQWS will be negatively related to positively related to turnover intention.	Support
Hypothesis 6a: Perceived No Growth of the POQWS will be negatively related to job satisfaction.	Support
Hypothesis 6b: Perceived No Growth of the POQWS will be negatively related to organizational commitment.	Support
Hypothesis 6c: Perceived No Growth of the POQWS will be negatively related to work engagement.	Support
Hypothesis 6d: Perceived No Growth of the POQWS will be positively related to turnover intention.	Support
Hypothesis 7a: Perceived Needs Incongruence of the POQWS will be negatively related to job satisfaction.	Support
Hypothesis 7b: Perceived Needs Incongruence of the POQWS will be negatively related to organizational commitment.	Support
Hypothesis 7c: Perceived Needs Incongruence of the POQWS will be negatively related to work engagement.	No Support
Hypothesis 7d: Perceived Needs Incongruence of the POQWS will be positively related to turnover intention.	Support

**Figure 1**

## Characterization of Latent Profiles



*Note.* PO = *Perceived Overqualification*, PU = *Perceived Underutilization*, PNG = *Perceived No Growth*, PNI = *Perceived Needs Incongruence*. Profile 1 = *good fit, does not meet needs*. Profile 2 = *bad fit, meets needs*. Profile 3 = *bad fit, does not meet needs*. Profile 4 = *good fit, meets needs*.

**Figure 2**

Characterization of Latent Profiles on Outcome Variables



*Note.* JS = job satisfaction, OC = organizational commitment, WE = work engagement, TI = turnover intention. TI is reverse scored for visualization purpose.

## **Appendix A. Scale of Perceived Overqualification**

Response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*

Please select the response that best reflects how you feel about your current job.

1. My job requires less education that I have.
2. The work experience that I have is not necessary to be successful on this job.
3. I have job skills that are not required for this job.
4. Someone with less education than myself could perform well on this job.
5. My previous training is not being fully utilized on this job.
6. I have a lot of knowledge that I do not need in order to do my job.
7. My education level is above the education level required by my job.
8. Someone with less experience than myself could do my job just as well.
9. I have more abilities than I need in order to do my job.

Source: SPOQ; Maynard, Joseph, and Maynard (2006)

## **Appendix B. Perceived Overqualification Scale**

Response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*

Please select the response that best reflects how you feel about your current job.

### *Perceived Mismatch*

1. My formal education overqualifies me for my present job.
2. My talents are not fully utilized on my job
3. My work experience is more than necessary to do my present job
4. I have mastered nearly every aspect of my job.
5. Based on my skills, I am overqualified for the job I hold.
6. Continuing education related to my job has improved my job performance.

### *Perceived No Growth*

7. My job frequently provides me with new challenges.
8. My job provides me with the opportunity to learn new things.
9. The day-to-day content of my job seldom changes.
10. My job has a lot of potential for change and growth.

Source: POQ Scale; Johnson and Johnson (1996)

## Appendix C. Demographics

Please answer the following information about yourself to the best of your ability. This data will help us interpret the results of the survey. Thank you for your participation.

1. Gender:

- ☐ Male
- ☐ Female
- ☐ Transwoman/transfeminine
- ☐ Transman/transmasculine
- ☐ Nonbinary, gender non-conforming, trans, or genderqueer
- ☐ My identity is not listed

2. Race (please select all that apply):

- ☐ American Indian/Alaska Native
- ☐ Black or African American
- ☐ Asian
- ☐ Caucasian/White
- ☐ Native Hawaiian or other pacific islander
- ☐ Other, please specify:

3. Ethnicity: ☐ Hispanic/Latino (any race) ☐ Not Hispanic/Latino

4. Age: \_\_\_\_\_

5. Highest Level of Education Completed (check ONE):

If currently enrolled, highest degree received

- ☐ Some high school
- ☐ High school degree or equivalent
- ☐ Associate degree
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Ph.D.
- ☐ Other (please specify)

6. Marital Status:

- ☐ Married
- ☐ Widowed
- ☐ Divorced or separated
- ☐ Never married or single

**Appendix D. Job Satisfaction**

Response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*

Please select the response that best reflects how you feel about your current job.

1. In general, I do not like my job.
2. All in all, I am satisfied with my job.
3. In general, I like working here.

Source: MOAQ; Cammann, Fichman, Jenkins, and Klesh (1983)

## Appendix E. Organizational Commitment

Response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*

Please select the response that best reflects how you feel about your current job.

1. I would be very happy to spend the rest of my career with this organization.
2. I enjoy discussing my organization with people outside it.
3. I really feel as if this organization's problems are my own.
4. I think that I could easily become as attached to another organization as I am to this one.
5. I do not feel like 'part of the family' at my organization.
6. I do not feel 'emotionally attached' to this organization.
7. This organization has a great deal of personal meaning to me.
8. I do not feel a strong sense of belonging to my organization.

Source: Affective Commitment Scale; Allen and Meyer (1990)

## Appendix F. Work Engagement

Response scale: 0 = *never*, 1 = *almost never (a few times a year or less)*, 2 = *rarely (once a month or less)*, 3 = *sometimes (a few times a month)*, 4 = *often (once a week)*, 5 = *very often (a few times a week)*, 6 = *always (everyday)*

Please select the response that best reflects how you feel about your current job.

1. My job inspires me.
2. I am enthusiastic about my job.
3. At my job, I feel strong and vigorous.
4. When I get up in the morning, I feel like going to work.
5. At my work, I feel bursting with energy.
6. I am proud on the work that I do.
7. I am immersed in my work.
8. I get carried away when I'm working.
9. I feel happy when I am working intensely.

Source: Utrecht Work Engagement Scale (UWES-9); Schaufeli, Bakker, and Salanova (2006)

**Appendix G. Turnover Intention**

Response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*

Please select the response that best reflects how you feel about your current job.

1. I often think about quitting this organization.
2. I intend to search for a position with another employer within the next year.

Source: Hom and Griffeth (1991); Jaros (1997)

## Appendix H. Relative Deprivation

Response scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*

Please select the response that best reflects how you feel about your current job.

1. I feel deprived when I compare the job I have to the one other people who have similar qualifications as me have.
2. I feel privileged when I compare the job I have to the job other people with similar qualifications as me have.
3. I feel resentful when I see how other people with similar qualifications as me prosper in their job.
4. When I compare the job I have with the job other people with similar qualifications as me have, I realized that I am quite well off.

Source: Callan, Shead, and Olson (2011)