

**What Type of Maximizer Are You? Uncovering Latent Profiles of Maximizing**

by

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## Abstract

Maximizing, originally defined as the tendency to seek the best decision through alternative search and decision difficulty, has undergone significant revision since the construct was introduced nearly two decades ago. However, the narrow focus on scale development and the proliferation of 15 new maximizing scales have resulted in major inconsistencies in how the construct is conceptualized, measured, and linked to correlates and outcomes. Although an overarching goal and strategy model of maximizing has been proposed to help clarify *what* is maximizing, there remains several issues to be addressed in order to further validate both the model and the maximizing experience. The present study utilized latent profile analysis to enable a more nuanced investigation into the facets of maximizing and how certain configurations of responses on these facets may create unique profiles of maximization (i.e., types of maximizers and satisficers). Results uncovered the presence of two types of maximizers who have distinctive experiences with Decision Difficulty: *Distressed Maximizers* who experience high difficulty making decisions and *Decisive Maximizers* who do not. Furthermore, *Decisive Maximizers* were associated with more adaptive personality traits and well-being experience. These results indicate that *Decision Difficulty* should be kept as an emotional dimension in the measurement of study of maximizing. Extending beyond variable-centric approaches and using the person-centric approach of latent profile analysis to study Goal (*High Standards*), Strategy (*Alternative Search*), and Emotion (*Decision Difficulty*) model of maximizing will allow us to answer the question: *Who* are maximizers?

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## **What Type of Maximizer Are You? Uncovering Latent Profiles of Maximizing**

The study of decision making has been long informed by economics (e.g., “homo economicus”), rational choice theory, and utility-based models of decision making (Simon, 1959). These decision-making approaches illustrate the pursuit of optimal decisions by fully informed and rational decision makers. However, human limitations in the ability to process information, deal with complexity, and make decisions under cognitively demanding factors such as time pressure mean that human decision makers often deviate from rational choice. This concept was first illustrated in Simon’s (1959) theory of bounded rationality and between maximizing and satisficing approaches to choice. Maximizing represents the search for the optimal, or best, solution among all possible alternatives whereas satisficing favors a solution that meets the minimum, or satisfactory, criteria or threshold (Simon, 1959). Bounded rationality, an alternative to rational choice theory, more closely represents human decision makers in real-world. Consequently, maximizing and satisficing have been examined as an individual difference trait (Schwartz, Ward, Monterosso, Lyubomirsky, White & Lehman, 2002). Schwartz and colleagues (2002) created the first Maximization Scale (MS) measuring human decision makers on their *tendency to maximize* (i.e., maximizers) or *satisfice* (i.e., satisficers).

The original MS (Schwartz et al., 2002) conceptualized maximizers as those who consistently seek the “best” solution through an exhaustive search of alternatives, whereas those considered “satisficers” are decision makers who settle for the first acceptable (i.e., “good enough”) option (Schwartz et al. 2002). The MS was constructed to be a unidimensional measure of the desire to make only the best decision through a tendency to search out and make comparisons among alternatives and find decisions stressful (Cheek & Schwartz, 2016). Thus, maximizing is measured on a continuum with higher composite scores representing a greater

tendency to maximize and lower scores representing a tendency to satisfice. In the original conceptualization, maximizing was found to be related to maladaptive outcomes such as regret, depression, and perfectionism, along with lower scores on satisfaction with life, optimism, and happiness (Schwartz et al., 2002). Since its introduction as an individual difference approach, maximizing continues to receive significant attention in judgment and decision making research. This is best illustrated by the emergence of 15 unique measures of maximizing in addition to the cross-fertilization of maximization to research in diverse disciplines including the military and organizational psychology (Giacopelli, Simpson, Dalal, Randolph, & Holland, 2013; Shortland, Alison, Thompson, 2020). However, the rapid proliferation of scales measuring maximizing and satisficing have created issues surrounding construct clarity and the ability of the field to arrive at a consensus as to what is maximization and who are maximizers (and satisficers; Cheek and Schwartz, 2016).

The proposed study utilizes a novel methodology in examining and validating the maximizing construct and its relationship with well-being. The narrow focus on scale development in previous research has left the field in disagreement over which facets are critical to the measurement of the maximizing experience. Additionally, differential relationships between the maximizing facets and both well-being outcomes and other individual difference traits highlight the need for a more holistic approach to examining how scores on these facets combine in creating an adaptive or maladaptive well-being experience for maximizers. This proposal addresses these questions through the investigation of types of maximizers. This will allow us to expand previous research and theorizing by empirically examining the joint impact of maximizing facets on both the nomological network and outcomes of maximizing. Additionally, by comparing the maximizing relationship with well-being at the composite-, facet-, and profile-

level, we will obtain further insight into how the measurement and analysis of maximizing impacts how we answer the critical question: “Who are maximizers?”.

### **The Evolution of Maximizing**

Since the introduction of the MS, the maximizing facets, as well as the measurement of each facet, have been hand-picked, revised, and expanded upon by researchers studying the experience of maximizers. This has resulted in scales that greatly diverge from the original conceptualization of maximizing. Currently, *two critical differences set maximizing scales apart*: 1) the facets being measured as part of the maximizing experience and 2) how the scores (i.e., composite vs facet-level) on these measures are computed and linked to outcomes. Table 1 presents a comprehensive list of maximizing scales, the facets measured, and how scores are computed.

#### **Maximizing Facets**

The Short Form Maximization Scale (MS-S; Nenkov, Morrin, Ward, & Hulland, 2008) was the first to investigate the content and factor structure of the MS. They found that the maximization construct was divided into three separate facets: *High Standards*, *Alternative Search*, and *Decision Difficulty* (described in greater detail below). Based upon these three facets, the authors refined and shortened the MS and recommended that future maximizing research further utilize and investigate these facets as sub-scale of maximization. However, although these three facets remain relevant in maximizing research today, there is debate among researchers as to which facets belong in the measurement of maximizing. Currently, there is still no consensus on exactly *what is* maximizing as the maximizing measures have evolved over the years to measure different constructs under multiple revisions of the original scale. Although some measures still use all three of the original facets, others have removed, added, or otherwise



changed the facets of maximization. Critically, the revision of these scales has been largely absent of theoretical or conceptually-driven rationales and lack clarity as to what the revision of these facets means for the conceptualization of maximization.

**High Standards.** One consistent trend across measures is the agreed upon use of the *High Standards* facet. *High Standards* represents the maximizer's tendency to search for the best option and hold high standards for themselves and things in general (e.g., "I never settle for second best": Nenkov et al., 2008). Past research has largely agreed that the "definitional" goal of maximizing is to achieve the best, objective outcomes (Schwartz et al., 2002; Weaver Daniloski, Schwarz, & Cottone, 2015). To this end, maximizers are less likely to commit to their choice just in case a better option should arise (Sparks, Ehrlinger, & Eibach, 2012) and seek to verify they have made the best choice by engaging in social comparison (Weaver et al., 2015).

Presently, *High Standards* is the most consistently measured and most highly developed facet of maximizing. All scales, but one, assess having high decision standards (i.e., wanting the best) as a critical part of maximizing. The first major scale emphasizing the criticality of the *High Standards* facet was the Maximizing Tendency Scale (MTS; Diab, Gillespie, & Highhouse, 2008). Importantly, Diab et al. (2008) interpreted the definition of maximizing as "*a general tendency to pursue the identification of the optimal alternative*" (p. 365). They argued for the removal of both *Alternative Search* and *Decision Difficulty* facets based upon the original conceptualization of maximization as purely an "optimization goal" (Simon, 1959). Thus, the MTS is a unidimensional measure of the *High Standards* facet composed of only items based on the narrow definition of the optimization goal. Additionally, the MTS measures maximizing using content-free items (i.e., items are free from setting and sample specific context) which minimizes issues associated with perceived relevance across unique samples and settings (Lai,

2010). Higher scores represent a general tendency to maximize and lower scores represent a general tendency to satisfice. A further revision of the scale led to the removal of two items with content that did *not* distinguish between having low versus high standards because they did not tap into the maximizing construct (e.g., I am uncomfortable making decisions before I know all of my options; Dalal, Diab, Zhu, and Hwang, 2015). The authors argue that neither *Alternative Search* or *Decision Difficulty* should be considered as characterizations of maximizing because they could be indicative of other decision making constructs (e.g., rational decision making) and should only be studied as outcomes of maximizing. Thus, the revised MTS-7 is a shortened, more theoretically-aligned measure of the *High Standards* facet (Dalal et al., 2015).

On the other hand, the Maximization Inventory (MI; Turner, Rim, Betz, & Nygren, 2012) is the only scale to dictate that *High Standards* should *not* be considered a critical facet of maximizing. The authors argue that the *High Standards* facet does not fit with the conceptualization of maximization as postulated by the original definition and cite research that indicates no relation between *High Standards* and the behavioral aspects of maximizing. Furthermore, factor analysis of the *High Standards* items they tested did not load highly onto a single factor and had poor reliability. Consequently, they suggested *High Standards* should not be included in the nomological network of maximizing at all (Rim, Turner, Betz, & Nygren, 2011; Turner et al., 2012). Thus, the MI is composed of three separate scales: *Decision Difficulty* (MI-DD), *Alternative Search* (MI-AS), and *Satisficing* (MI-S) . Critically, the MI was the first measure of maximizing to 1) attempt to measure *Satisficing* independently from maximizing, and 2) suggest that the facets should not be summed for a total score because they measure unique constructs (Turner et al., 2012).

**Alternative Search.** The facet of *Alternative Search* reflects the tendency to explore a large number of options (e.g., “No matter how satisfied I am with my job, it’s only right for me to be on the lookout for better opportunities”; Schwartz et al., 2002). The *Alternative Search* facet is tied closely with maximizer’s goal of obtaining the best option. In pursuit of making the optimal choice, maximizers are attracted to a larger number of alternatives which seemingly increases their chances of finding the best option and are willing to make sacrifices such as time, energy, or money to gain access to a larger number of options (Dar-Nimrod, Rawn, Lehman, & Schwartz, 2009). Thus, the pursuit of the best (i.e., *High Standards*) is thought to be carried out through the behavior of seeking out a larger number of alternatives or options.

The first deviation from the original facets of maximization was demonstrated in the development of the Refined Maximization Scale (MS-R; Richardson, Ye, Ege, Suh, & Rice, 2014). Citing the need for a scale closer to the core definition of maximizing (Simon, 1959), the authors refined maximization to represent “a behavioral pattern characterized by exploring all possible options in attempts to make the best possible choice” (pg. 232). This resulted in a scale measuring facets they termed *Decisional Difficulty*, *Want the Best* (i.e., *High Standards*), and *Regret*. Thus, the MS-R scale the first revision of maximizing to explicitly leave out the facet of *Alternative Search* (Richardson et al., 2014). However, their definition of *Decisional Difficulty* as carrying out an extensive search to obtain the best result is more aligned to the original *Alternative Search* facet, calling into question the conceptual and content clarity of the MS-R.

In the more theoretically-driven development, the *Alternative Search* sub-scale of the MI was developed by creating and selecting items that were most conceptually aligned with the strategy of searching through alternatives (Turner et al., 2012). Importantly, the MI conceptualizes *Alternative Search* as representing a behavioral aspect of maximizing and argues

that items not closely aligned with the behavioral or emotional (i.e., *Decision Difficulty*) aspects should be discarded. Additionally, they critique the *Alternative Search* items from the original and revised MS scales for describing behavior in specific situations (e.g., “I treat relationships like clothing: I expect to try a lot on before I get the perfect fit”) rather than being a reflection of general maximizing tendencies. Consequently, the updated *Alternative Search* scale is composed of items that reflect general tendencies to consider alternative options (e.g., “I can’t come to a decision unless I have carefully considered all of my options”). Thus, the facet of *Alternative Search* has been updated to reflect the behavioral pattern of seeking alternatives across decision situations.

**Decision Difficulty.** The *Decision Difficulty* facet of maximization represents difficulty associated with choosing and making decisions (e.g., “Renting videos is really difficult. I’m always struggling to pick the best one”; Schwartz et al., 2002). *Decision Difficulty* has faced the most scrutiny regarding whether it belongs as a critical facet of maximizing. In an examination of the original MS and MTS scale, Lai (2010) found that the items only represented the *High Standards* and *Alternative Search* facets with none of the items reflecting the difficulty facet of decision making. Furthermore, multiple studies have questioned the inclusion of *Decision Difficulty* because they have found no relationships between *Decision Difficulty* and the other two facets of maximizing (Diab et al., 2008, Kim & Miller, 2007; Lai, 2010). These patterns of correlations suggest that *Decision Difficulty* may represent a separate construct rather than an inherent facet of maximizing (Lai, 2010). However, many of these studies have failed to use explicit measures of *Decision Difficulty*. For instance, Kim and Miller (2017) found that *perceived* decision difficulty on decision tasks was not significantly related to *High Standards* or *Alternative Search* indicating that maximizers may not feel decision difficulty consistently.

However, task-specific *perceived* decision difficulty is different than as traditionally measured in maximizing research, and further research is needed to validate the removal of the *Decision Difficulty* facet.

In the most theoretically driven critique of *Decision Difficulty*, Cheek and Schwartz (2016) proposed commonly measured components of maximizing such as *Decision Difficulty* and regret should be considered causes or consequences of maximizing rather than facets that comprise maximization. That is, they argue that decision difficulty is *not necessary* to the maximizing experience. Furthermore, Cheek and Goebel (2020) argued that decision difficulty is best conceptualized as an outcome of maximizing due to alternative search strategies and greater cognitive load. Including decision difficulty in the measure of maximization is problematic for two reasons. First, including an outcome or consequence of maximization in the measurement of the construct obstructs our ability to study the relationship between the two variables. Secondly, decision difficulty, as a negative outcome of maximizing, may be negatively biasing the relationship between maximizing, well-being, and other related outcomes (Cheek & Goebel, 2020; Dalal et al., 2015; Diab et al., 2008). Cheek and Goebel (2020) further posit that decision difficulty and indecisiveness are essentially the same constructs created in different streams of research. Indecisiveness is an individual difference that “describes the general tendency to experience difficulty during decision making” (Cheek & Goebel, 2020). This includes taking a long time to make decisions, delaying or avoiding decisions, changing one’s mind frequently before making a decision, and ruminating about decisions (Frost & Shows, 1993; Germeijs & De Boeck, 2002; Rassin, Muris, Franken, Smit & Wong, 2007; Van Matre & Cooper, 1984). In testing the relationship between indecisiveness and maximization, a correlation of .85 between *Decision Difficulty* (MI-DD; Turner et al., 2012) and indecisiveness (Indecisiveness Scale;

Germeijs and De Boeck, 2002). Furthermore, factor analyses suggest that the two measures are assessing the same underlying construct. The authors argue that the inclusion of decision difficulty in the measurement of maximization to be an example of the jingle-jangle fallacies. That is, measuring decision difficulty and indecisiveness as two separate constructs is an example of assuming two constructs are unique only because they are measured by scales with different names (i.e., the jangle fallacy). Additionally, measuring decision difficulty as a component of maximization inappropriately conflates maximizing with indecisiveness (i.e., the jingle fallacy). Since their proposal, the examination of the *Decision Difficulty* facet has seen a decrease in utilization and measurement in maximizing research (Mikkelsen & Ray, 2020; Voss, Lake, Chlevin-Thiele, 2019).

**Satisficing.** One concept that has been largely ignored in previous research on maximization is the construct and experience of satisficing. The majority of maximizing research has simply suggested that maximizing and satisficing exist on a continuum with low scale scores representing the tendency to satisfice when making decisions. However, recent research has begun to conceptualize and measure satisficing as a unique construct. Importantly, the MI was the first measure of maximizing to include a separate sub-scale measuring the tendency to satisfice. The authors found that the *Satisficing* facet was only moderately related to the *Alternative Search* facet and unrelated to the *Decision Difficulty* facet. Additionally, *Satisficing* showed positive relationships with well-being outcomes while the other facets were either unrelated or negatively related with well-being (Turner et al., 2012). Other research has proposed that *Satisficing* may actually represent a unique type of maximizing and tested the idea that there are different *types* of maximizers and satisficers (Misuraca, Faraci, Gangemi, Carmeci, & Miceli, 2015). The authors critiqued the *Satisficing* scale of the MI for including items that were too

generic about decision situations and replaced them with items that explicitly refer to the satisficing decision making process (e.g., “In choosing between alternatives, I stop at the first that works for me.”). Two different sub-types of *Satisficers* were uncovered based on based upon observed factor-level relationships with maximizing correlates: less ambitious and more ambitious satisficers (Misuraca et al., 2015). Less ambitious satisficing was *unrelated* to the facets of High Standards and Alternative search as well as to well-being outcomes such as happiness and depression, or with personality factors such as neuroticism and extraversion (Vargova, Zibrinova, & Banik, 2020). Consequently, this inconsistency in the conceptualization and measurement of *Satisficing* leaves uncertainty as to whether satisficing sits at the opposite end of the continuum of maximizing or if it is a construct separate from maximizing.

**Summary of Maximizing Facets.** Although the maximizing construct has long-evolved from the first conceptualization by Schwartz et al., (2002), the critical question of *who* are maximizers remains blurry as different scales with unique conceptualizations continue to be utilized across maximizing research. There is a lack of consensus regarding which facets, *High Standards*, *Alternative Search*, *Decision Difficulty*, and *Satisficing*, are critical to the maximizing experience. Some researchers posit that only *High Standards* is the truest conceptualization of maximization (Dalal et al., 2015; Diab et al., 2008; Weinhardt et al., 2012) while others believe that *Alternative Search* and *Decision Difficulty* should remain core components of maximization (Mikkelsen & Pauly, 2013; Misuraca et al., 2015; Nenkov et al., 2008; Turner et al., 2012). Additionally, some explicitly argue for the removal of the *Decision Difficulty* facet all together (Cheek & Schwartz, 2016; Cheek & Goebel, 2020). Furthermore, regardless of which facets are used to measure maximizing, there remains inconsistency in calculating and utilizing maximizing scores. That is, some scales are analyzed at the facet-level with each facet

independently computed and linked to outcomes (Misuraca et al., 2015; Mikkelson et al., 2020; Richardson et al., 2014; Turner et al., 2012; Weinhardt et al., 2012). Other measures combine facet-level scores to create a composite maximizing score (Lai, 2010; Mikkelson & Pauley, 2013; Schwartz et al., 2002; Voss et al., 2019). However, a few scales utilize both composite and facet-level approaches to calculation and analysis (Nenkov et al., 2008; Newman et al., 2018). This inconsistency raises questions as to how the unique maximizing facets should be combined to represent the holistic construct of maximizing. That is, are maximizers those who score highly on a single facet (e.g., *High Standards*) or are maximizers those who score highly on all the measured facets (e.g., *High Standards, Alternative Search, and Decision Difficulty*)? Are you considered a satisficer if you don't score highly on all maximizing facets? Importantly, Misuraca et al. (2015) introduced the idea of different *types* of maximizers and satisficers. For example, a *resolute maximizer* is associated with scrupulousness and perseverance while a *fearful maximizer* is only characterized by scrupulousness. This raises the question of whether different types of maximizers exist and, critically, support the notion that different types of maximizers have differential relationships with outcomes. Thus, *types* of maximizing (and satisficing) represent another potential approach to investigating the maximizing experience. Taken together, the proliferation of maximizing measures have created major inconsistencies and discrepancies in the conceptualization of which facets compose the maximizing construct.

### **The Goal and Strategy Model of Maximization**

Based on the resulting collection of unique measures and the different ways maximizing scores are linked to outcomes, maximization research is in need of an overarching framework to guide the defining facets and measurement of the maximizing experience. In pursuit of integrating and clarifying maximization research, Cheek and Schwartz (2016) proposed a two-



component model of maximizing consisting of a *goal* and a *strategy* component. This model stems from research highlighting the importance of personal goals and cognitive behavioral strategies in achieving goals. The first component defines the maximization goal of *optimizing decision making by choosing the best* (Cheek & Schwartz, 2016). One important distinction is the emphasis placed on desiring the *best*. Importantly, the goal definition denotes that, although maximizers may have high standards for their decisions, satisficers may also hold high standards when making decisions. Thus, having high standards alone is not exclusive to maximizing. Instead, maximizers must desire *and* pursue the best alternative; the pursuit of *only* the best option is what distinguishes maximizers from satisficers. The second component of the model is the maximization strategy of *alternative search*. Cheek and Schwartz (2016) posit that it is not just the act of seeking out information that distinguishes maximizers from satisficers, but instead, the comparison and evaluations of tradeoffs between options. Thus, this two-component model of *High Standards* and *Alternative Search* distinguishes between two distinct, albeit related, facets of maximizing. Accordingly, maximization is the *combination* of both desiring the best option *and* seeking out and comparing among alternatives. Cheek and Schwartz (2016) recommended using the MTS-7 to measure *High Standards* and the alternative search scale of the MI to measure *Alternative Search*.

A core distinction of the goal and strategy model is the strong argument for the removal of Decision Difficulty from the measurement of maximization. Cheek and Schwartz (2016) propose that decision difficulty is the same construct as indecisiveness (Germeijs and De Boeck, 2002) and is more appropriately measured as a cause or outcome of maximization. Thus, their model is based on the proposition that not all maximizers experience decision difficulty, and that different levels of experienced decision difficulty across maximizers indicate the facet is *not*

critical to the definition of maximizing. However, we lack direct evidence that decision difficulty is differentially experienced by maximizers as measured by their model (i.e., those high in *both High Standards and Alternative Search*). Previous research utilizing the goal and strategy framework have focused largely on substantiating the roles of *High Standards* and *Alternative Search* and less on validating the proposal of removing or defining the role of *Decision Difficulty* (or Indecisiveness) in the maximizing experience. As this is a core tenet of the framework, research examining the experience of decision difficulty by maximizers is needed to further validate the removal of this facet.

Overall, the goal and strategy model is a promising framework to study the experience of maximization and provides structure and recommendations to the critical issue of construct clarity. Importantly, this model suggests *only a certain combination of scores indicate a true maximizer* (e.g., high scores on both *High Standards* and *Alternative Search*). Since both the goal and strategy components constitute the measurement of maximizing, unique types of maximizers may exist - including those who would be considered satisficers (i.e., *low* scores on both the goal of choosing the best and engaging in alternative search). That is, the pattern of scores on the two-component model may indicate those that engage in both the maximizing goal and strategy while others may simply engage in the goal (i.e., *High Standards*), the strategy (i.e., *Alternative Search*), or neither.

### **A Holistic Examination of Maximizing**

The multitude of ways that maximization has been conceptualized and measured has created a crucial issue of construct clarity. Due to a lack of consistency of the facets used, we still lack a construct-level understanding of what it means to be a maximizer. If maximizers, as proposed by the goal and strategy model, must *pursue the best decision through alternative*

*search*, we also need to be linking maximization to associated outcomes at the same level (i.e., through a *combination* of *High Standards* and *Alternative Search*). That is, if the *defining* feature of a maximizer is to score high on both the *High Standards* and *Alternative Search* facets, then we also need measures and analyses that lend itself to that definition. Research using the goal and strategy model have linked maximization to outcomes at the facet level. Although these analyses result in a richer understanding of each facet (e.g., how the facets vs composite are related to associated outcomes), research needs to examine how unique combinations of these facets provide a more nuanced description of the maximizing experience.

**Research Question 1a:** Do different types of maximizers or satisficers exist?

We propose that maximization research can be enhanced by concurrently examining responses patterns on the *High Standards*, *Alternative Search*, and *Decision Difficulty* facets to indicate the presence of different types of maximizers. First, the examination of *types* of maximization will help us uncover whether maximizers exist as defined by the goal and strategy model or whether other types of maximizers exist. Despite the conceptual existence of types of maximizers, these types have not been explicitly analyzed using methods that are able to empirically uncover distinct groups (Misuraca et al., 2015). Additionally, maximizing facets are analyzed independently of one another without accounting for the way in which an individual may score on each facet relative to the others. The goal and strategy model indicates that maximizers are those who score higher on both the *High Standards* and *Alternative Search* facets. It's possible, however, that there may be groups of respondents who score high on one facet and not the other (e.g., those who have high standards for their decision but don't engage in alternative search). The empirical examination of types of maximizers will allow us to discern if certain patterns or groups of responses exist on a *combination* of variables. This could indicate

groups of respondents who engage in both the goal and strategy when making decisions, those who engage in either the goal or strategy, or those who do not engage in either.

**Hypothesis 1a:** The types of maximizers and satisficers will follow the definition of maximizing as outlined by the goal and strategy model (i.e., maximizers are those who score high in both High Standards and Alternative Search).

**Research Question 1b:** Do all types of maximizers experience Decision Difficulty?

Additionally, we can directly examine if decision difficulty is differentially experienced by maximizers and if difficulty in making decisions has meaningful relationships with *High Standards* and *Alternative Search* (i.e., the goal and strategy model). That is, different types of maximizers may exist based on their experience of *Decision Difficulty* (i.e., whether they experience it or not), but have remained hidden due to the independent analyses of each facet in previous research. Despite Cheek and Goebel (2020)'s argument for removal of *Decision Difficulty* from the maximizing experience, analyzing the impact of decision difficulty in combination with the other constructs will allow us to examine whether distinct and meaningful groups of maximizers exist based on the inclusion or exclusion of this variable. This concurrent examination of *Decision Difficulty* in relation to maximizers defined by the goal and strategy model will help substantiate the removal or inclusion of the facet in the definition and measurement of maximizing.

**Hypothesis 1b:** Decision difficulty will be differentially experienced by maximizers (i.e., one group that scores high in Decision Difficulty while other groups may score low).

**Research Question 1c:** As identified by the types of maximizers, does satisficing exist on the same continuum as maximizers?

Furthermore, the examination of maximizing types will help us better understand satisficing. Although maximizers continue to be compared to their satisficer counterparts theoretically, oftentimes, the assumption is that satisficing is the opposite end of the continuum of maximization. It is critical to update our understanding of the satisficing construct in parallel with maximizing. Cheek & Schwartz (2016) make no explicit recommendations as to the measurement or linkage of satisficing with their framework as satisficing is generally assumed to be on the opposite end of the continuum as maximizing with low scores on *High Standards* and *Alternative Search*. However, satisficing has also been proposed to be a unique construct that should be measured separately from maximizing (Turner et al., 2012). Thus, although satisficing is often discussed in the context of maximizing, it's important to directly examine how the construct of satisficing may be related to the other maximizing facets as a separate sub-scale or if the experience of satisficing manifests as a pattern of responses on the maximizing facets such as low scores on all maximizing facets.

**Hypothesis 1c:** Satisficing will be represented by low scores on both the High Standard and Alternative Search facets.

In order to validate the goal and strategy model and clarify the critical facets of the maximizing construct, it is critical to examine how the facets combine to create the maximizing experience. That is, the study of patterns of responses on multiple maximizing variables and the interpretation of variables that define these unique groups allows us to take a more person-centric approach to studying *who* maximizers are and not just *what* maximization is.

### **Maximizing and Well-Being**

In addition to hindering construct clarity, the lack of consensus as to what configuration of facets make up the maximizing construct have strong implications for what we know about

the correlates and consequences of being a maximizer. Originally, maximization was linked with maladaptive well-being outcomes including higher regret, perfectionism, depression, and social comparison, as well as lower happiness, optimism, satisfaction with life, and self-esteem (Schwartz et al., 2002). Subsequent research continued to build upon these findings and generally concluded that maximizing is related to maladaptive outcomes such as negative affect (Peng et al., 2018; Purvis, Howell, & Iyer, 2011), frustration (Hughes, 2018), and anxiety (Oren, Dar, & Liberman, 2018) and *negatively* associated with broad measures of well-being such as subjective happiness (Kokkoris, 2016; Nenkov et al., 2008), optimism (Nenkov et al., 2008; Rim et al., 2011), and positive affect (Peng et al., 2018; Purvis et al., 2011). Thus, it seems that maximizing comes at a cost to subjective well-being (Cheek & Ward, 2019; Dar-Nimrod, Rawn, Lehman, & Schwartz, 2009).

Currently, there is disagreement as to just how maladaptive maximizing is as conclusions about the consequences and correlates of maximizing have been found to be largely dependent on the scale. From a construct perspective, the configuration of facets used to measure maximizing have a critical impact on whether maximizing appears to be maladaptive. Critically, these facet-level relationships can only be uncovered when each sub-scale is examined separately, rather than using a summed composite score. Previous research has found that different facets often result in opposing relationships with well-being. More specifically, the maximization facets of *High Standards* and *Satisficing* are generally associated with positive outcomes, whereas *Alternative Search* and *Decision Difficulty* are associated with negative well-being outcomes (Nenkov et al., 2008; Rim et al., 2012). Table 2 provides a summary of the maximizing facets and the general pattern of results to well-being.

**Maximizing as Maladaptive.** In the first facet-level analysis of maximizing, Nenkov et al. (2008) found that the *Alternative Search* and *Decision Difficulty* facets were both positively related to regret and depression. In contrast, the *High Standards* facet was *unrelated* to depression, happiness, and life satisfaction. This indicated that the maladaptive relationship between maximizing and well-being outcomes may be largely driven by the tendency to compare alternatives (i.e., *Alternative Search*) and experience difficulty making decisions (i.e., *Decision Difficulty*) (Nenkov et al., 2008). Subsequent research on these facets continued to find the *Alternative Search* and *Decision Difficulty* facets to be generally maladaptive for well-being. Maximization as a composite and the facets of *Alternative Search* and *Decision Difficulty* were negatively related to satisfaction with life, subjective happiness, positive affect, and positively related to negative affect (Purvis et al., 2011). Both are also negatively correlated with optimism, generalized self-efficacy, and self-regard, with *Decision Difficulty* also being highly correlated with regret (Turner et al., 2012).

Furthermore, Kim & Miller (2017) suggest that the experience of decision difficulty may trigger secondary consequences such as uncertainty, regret, or disappointment, but those who do not experience decision difficulty may not experience those maladaptive outcomes. Using the two-component goal and strategy model (i.e., without *Decision Difficulty*), researchers found that the maximizing strategy of *Alternative Search* was related to neuroticism, self-rumination, depression, and negative beliefs about choice as well as affective costs such as regret and frustration when making decisions (Hughes & Scholer, 2017). Alternatively, *High Standards* facet was *not* related to well-being, negatively related to neuroticism, and associated with positive beliefs about choice (Cheek & Ward, 2019; Vargová, Zibrínová, & Baník, 2019). This research utilizing the goal and strategy framework suggests that it is the strategy of alternative

search and not the goal of wanting the best that is linked to maladaptive outcomes even in the absence of decision difficulty. Thus, the conclusion is that maximization is negatively related to psychological well-being *only as long as maximization is measured using the facets of Alternative Search and Decision Difficulty* (Turner et al., 2012).

**Maximizing as Adaptive.** Not only do the relationships between maximization and well-being become attenuated after focusing on the *High Standards*, but these relationships may actually become positive or adaptive in nature (Oishi et al., 2014). High Standards as an *adaptive* maximizing trait can be clearly seen in conceptualizations of maximizing only including the High Standards facet. In the development of the MTS, *High Standards* was *uncorrelated* with all psychological well-being variables except for regret (Diab et al., 2008). However, most studies have found *High Standards* to be positively associated with well-being. Using the *High Standards* facet alone resulted in a *positive* relationship to satisfaction with life, subjective happiness, and positive affect while being unrelated to negative affect and psychological distress (Purvis et al., 2011). Furthermore, *High Standards* is positively related to life satisfaction, happiness, optimism, generalized self-efficacy, and self-regard, and *negatively* related to indecisiveness, avoidance, neuroticism, and depression (Rim et al., 2012; Weinhardt et al., 2012). However, when incorporating the *Alternative Search* and *Decision Difficulty* facets into the maximizing measure, these relationships were reversed. Maximizing became negatively related to optimism, generalized self-efficacy, and self-regard (Rim et al., 2012) with *Decision Difficulty* exhibiting the strongest maladaptive relationships (Weinhardt et al., 2012). Additionally, *High Standards* has been associated with other non-traditional well-being outcome such as eudaimonic well-being (i.e., well-being derived from the development of one's potential and fulfillment of self-expression) (Kokkoris, 2016) and adaptive decision-making styles such as



an analytical decision-making style (Rim et al., 2011). Furthermore, when measured as a unique facet, *Satisficing* is also *positively* related to optimism, generalized self-efficacy, and self-regard (Turner et al., 2012). Thus, without examining the unique relationships between maximizing facets and well-being, the conclusion would have been that maximizing was generally maladaptive for well-being. These findings emphasize the need to investigate how different combinations of these facets are related to differential relationships with well-being.

**Research Question 2a:** Does well-being significantly vary with maximizing profile?

The collection of studies indicates that maximizers' negative relationship with well-being is driven by specific facets of maximizing such as *Alternative Search* and *Decision Difficulty* and is also dependent on the maximizing scale used. Rather than concluding that maximizing is a maladaptive decision style when it comes to general well-being, a more nuanced facet-level investigation indicates that the *High Standards* facet may actually be adaptive to the well-being experience whereas the *Decision Difficulty* facet is the most deleterious for well-being. Critically, the examination of different types of maximizers allows us to determine how certain configurations of the maximizing facets are differentially related to well-being. That is, rather than independently comparing the facet-level relationships to each other, the identification of types of maximizers based on unique patterns of responses on the facets will allow us to interpret the well-being experience based on the inter-relations of *all* maximizing facets. For instance, a maximizer who scores high on both the *High Standards* and *Alternative Search* facet but low on the *Decision Difficulty* facet may have more adaptive well-being outcomes compared to those who score high on all three facets. Analyses at the facet level only allow us to interpret the relationships between each facet and well-being without taking into account the holistic experience of all maximizing facets in combination. Thus, based on the previously established

and unique relationships that the maximizing facets hold with well-being outcomes, different types of maximizers may also have meaningful differences in their relation to well-being.

**Hypothesis 2a:** Maladaptive well-being are related to types of maximizers with high scores in Alternative Search and Decision Difficulty.

### **Other Correlates of Maximizing**

Additional correlates have been studied in relation to maximizing in order to both clarify the relationship maximizing has with well-being and expand our understanding of the maximizing experience with other individual difference traits.

**Research Question 2b:** Do the correlates of personality, regret, and risk taking significantly vary with maximizing profile?

### **The Big Five**

In order to explain the link to decreased well-being, Purvis et al. (2011) examined the potential relationships between personality traits and maximization. Neuroticism emerged at the strongest predictor of maximization followed by openness to experience. However, when examining the facets independently, both extraversion and conscientiousness negatively predicted *Decision Difficulty* while conscientiousness and openness strongly predicted *High Standards*. *High Standards* is positively related to extraversion, agreeableness, conscientiousness, and openness, and unrelated to neuroticism (Willits & Franco-Watkins, 2021). Critically, research has found that when controlling for the Big Five traits, most of the correlations between maximizing facets and well-being were attenuated or non-significant. Other studies support the relationship between conscientiousness and high standards regardless of the *High Standards* measure used as well as negative relationships between Alternative Search and openness (Dalal et al., 2015). This is preliminary evidence that personality traits associated with

maximizing facets may be contributing to the maladaptive experience of a maximizing (Purvis et al., 2011). For instance, the patterns of associations between the *High Standards* and *Alternative Search* and subjective well-being were unchanged when neuroticism was included as a control variable. However, the negative association between *Decision Difficulty* and life satisfaction/happiness disappeared after including neuroticism as a control. Thus, *Alternative Search* remained negatively associated with happiness and life satisfaction and positively related to depression, while *High Standards* showed the opposite pattern of correlations with the same outcomes. This remained the case when using the *High Standards* in a Japanese sample (Oishi, Tsutsui, Eggleston, & Galinha, 2014). Thus, when neuroticism is examined with *Alternative Search* and *Decision Difficulty*, maximizing appears to have a more adaptive relationship with well-being. It is critical to examine maximizing in relation to other personality correlates such as the Big Five traits that may help clarify the associations between the maximizing facets and well-being.

## **Regret**

Regret is most often studied using the five-item Regret Scale which measures the tendency to be regretful after making decisions (Schwartz et al., 2002). Importantly, in the goal and strategy model, Cheek & Schwartz (2016) emphasize that regret, like *Decision Difficulty*, should be considered an *outcome* rather than a component of maximization. Previous research supports maximizing to be related to regret regardless of measure used (Cheek & Ward, 2019; Diab et al., 2008; Purvis et al., 2011; Roets, Schwartz, & Guan, 2012; Schwartz et al., 2002; Weinhardt et al., 2012). Critically, regret mediates the relationships between maximization and well-being. Experienced regret mediated the negative relationship between maximization and life satisfaction after controlling for the Big Five personality traits (Purvis et al., 2011) as well as the

relationship between maximization and subjective well-being (i.e., life satisfaction, positive, and negative affect; Peng et al., 2016). Additionally, maximizing is indirectly associated with depression through regret proneness even after controlling for negative life decision outcomes (Bruin de Bruin et al., 2016).

Importantly, regret as a mechanism is dependent on both the maximizing facet used and the computation of the maximizing score (e.g., composite vs facet). For instance, using the MI, Moyano-Diaz, Martinez-Molina, and Ponce (2014) found the mediating effect of regret between maximizing and life satisfaction only manifested through the facet of *Decision Difficulty* (and not *Alternative Search*). This finding supports that *Decision Difficulty* is the most detrimental to the well-being experience of maximizers. Furthermore, cultural differences in the emphasis placed on individual choice affects the impact of maximizing and regret on well-being. Maximizers in western cultures who place a high value on individual choice as a route to personal happiness, report lower well-being and experienced regret over imperfect choices. However, in non-western societies such as China where personal choice is less crucial, maximizing was unrelated to well-being generally (Roets et al., 2012). Thus, regret seems to play a role in defining the relationship maximization has with maladaptive outcomes and these relationships are dependent on the specific scales and facets used to measure maximizing.

### **Anticipated Regret**

Similar to the feeling of regret, recent research indicates that maximizers may have a unique relationship with *anticipated* regret stemming from making a certain choice rather than post-decision regret (Willits & Franco-Watkins, 2021). Specifically, maximizing was associated with less anticipated regret for engaging in risky voice behavior and more anticipated regret for not choosing to speak up. This suggests that maximizers are not adequately predicting the levels

of regret they may feel after making decisions, especially risky decisions (Willits & Franco-Watkins, 2021). However, it is important to note that the measurement of anticipated regret was specific to the decision to engage in employee voice. Therefore, a domain-general anticipated regret in the context of maximizing would be beneficial to examine whether maximizers are generally more or less sensitive to their future states of regret when making decisions. Clarifying this relationship will help us understand if maximizers are generally experiencing higher levels of post-decision regret even if they are anticipating future regret when making decisions.

### **Risk Propensity**

The general tendency to take risks shows strong relationships with maximizing (Zhang, Highhouse & Nye, 2019). Generally, maximizing has a positive relationship with risk taking (Qui, Bai, & Lu, 2020) as well as when using a combination of the *High Standards* and *Alternative Search* facets (Qui et al., 2020; Willits & Franco-Watkins, 2021). One explanation may stem from the focus maximizers place on desirability (i.e., outcomes) versus feasibility (i.e., the process). Maximizers are more willing to risk a higher likelihood of obtaining nothing to win a larger reward as well as they are more likely to choose a more desirable option even if it associated with lower feasibility (Hsieh & Yalch, 2020). This supports the argument that maximizing is positively associated with risk-taking tendencies because maximizers are willing to take on more risk to seek the best outcome or “upper-bound” of an option (Qui et al., 2020). Furthermore, the *High Standards* facet is associated with both an increased propensity to take risks as well as decreased anticipated regret for engaging in risky decisions (Willits & Franco-Watkins, 2021).

Together, this research suggests that maximizing holds strong and important relationships with personality and individual difference traits such as the Big Five, risk-taking, and regret.

**Hypothesis 2b:** Neuroticism, regret, and risk-taking propensity will be related to types of maximizers with high scores in Alternative Search and Decision Difficulty. Adaptive personality traits are related to types of maximizers with high scores in High Standards.

Similar to the investigation of the maximization paradox with well-being, the examination of these relationships needs to take into account both the scale used to measure maximizing, as well as the how the scale scores are computed and linked to these correlates. By holding these measurements and analyses consistent in the study of all correlates, we will be able to make stronger comparisons and interpretations of these relationships which will lend to a sharper picture of the maximizing experience.

### **Expanding the Well-Being Domain**

Although maximizing as an individual difference has become prevalent in the judgment and decision making (JDM) literature, there has still been little cross-fertilization of the construct to different areas of research. The development and validation of the goal and strategy framework to measure maximizing as an individual difference in decision making will facilitate cross-fertilization by clarifying and differentiating between the components and outcomes of maximization. By having a clearer picture of who maximizers are, we can also begin to examine the relationship maximizing has with important outcomes in other fields. Relatedly, maximizing may hold important relationships with congruent well-being outcomes in more specific domains.

**Research Question 2c:** Does job burnout significantly vary with maximizing types?

The study of employee health and well-being in organizational psychology may benefit from the introduction of a unique decision-making construct. To date, maximizing has been studied in organizational psychology to predict job attitudes and job performance including outcomes such as job satisfaction, intentions to quit, intrinsic motivation for work, and employee

voice decisions (Giacopelli, Simpson, Dalal, Randolph, & Holland, 2013; Lai, 2010; Willits & Franco-Watkins, 2021). Maximizing was not found to be a strong predictor of performance and satisfaction over traditional organizational predictors (Giacopelli et al., 2013). Additionally, maximizing did not moderate the relationship between risky voice situations and decision to engage in voice (Willits & Franco-Watkins, 2021). However, when considering the strong and maladaptive relationships between maximizing and well-being outcomes in the JDM literature, maximizing may actually be better suited for subjective well-being correlates as opposed to objective performance criterion.

One of the most frequently studied well-being phenomena in the workplace is the experience of job burnout. Burnout is defined as, “a physiological syndrome involving chronic emotional and interpersonal stressors that individuals experience at work and their subsequent responses to their tasks, organizations, coworkers, clients, and themselves” (pg. 487, Swider & Zimmerman, 2010). The study of burnout is critical as it has implications for individuals through physical illness, work-family conflict, and substance abuse as well as for organizations through decreased job performance and increased turnover (Swider & Zimmerman, 2010). Additionally, burnout has been linked to the Big Five traits including neuroticism and conscientiousness which are also significantly related to the maximizing facets and their consequential relationships with well-being. Thus, burnout as an indicator of employee well-being is more compatible with the established maximizing construct and serves as a more proximal antecedent to objective criterion such as employee performance and turnover, Similar to the experience of general psychological well-being variables, job burnout may vary due to the unique configuration of facets representing different types of maximizers.

**Hypothesis 2c:** Job burnout is related to types of maximizers with high scores in Alternative Search and Decision Difficulty.

### **Summary**

The present study aims to uncover patterns of responses on existing maximizing facets and, thus, the existence of unique types of maximizers. Established correlates including traditional well-being and personality variables such as happiness, satisfaction with life, and the Big Five traits are proposed to vary according to maximizing profile membership. Additionally, this study expands the well-being domain to include the workplace and proposes that job burnout will also vary as a function of profile membership. This is the first study to take an empirical, person-centered approach to holistically examine how the configuration of maximizing facets impact the adaptive or maladaptive experience of maximizers.

### **Methods**

#### **Sample and Procedure**

Participants were recruited from Amazon's Mechanical Turk (MTurk) via a listing for an organizational research study. The use of MTurk for organizational survey data has been found to be a generalizable, valid, and reliable means for collecting data (Michel, O'Neill, Hartman, & Lorys, 2018). To be eligible to complete the study, MTurk workers must work a minimum of 35 hours per week, be at least 18 years old, and live in the USA. A primary threat for introducing systematic bias into web-based survey data is careless responding (Mead & Craig, 2012). In order to identify careless responding in participants, three items designed to detect insufficient effort responding were inserted throughout the survey (e.g., "Please select strongly disagree for this item"). Participants who answered one or more of these items incorrectly were removed from the analyses. After reading the information sheet and consenting to participate in the study,



participants were directed to a Qualtrics link in order to complete the survey. Upon completion of the survey, participants were compensated \$1.50 through their MTurk accounts.

The final sample consisted of 373 participants who correctly responded to all three directed response items. Participants had an average age of 36 (SD = 10.63) and 51% of sample identified as female. The majority of the sample was White (80%), followed by African-American (9.10%), and less than 3% each for Hispanic, Asian, Arabic, and Native American participants. On average, participants reported working 42 hours a week.

## **Measures**

Participants completed a questionnaire containing measures of maximizing, general risk-taking propensity, the Big Five, and a variety of scales measuring traditionally associated general well-being outcomes as well as other personality and individual difference correlates.

**Maximizing.** Maximizing decision making style was assessed using the items from the 7-Item Maximizing Tendency Scale (MTS; Diab et al., 2008) and the Maximization Inventory (MI; Turner et al., 2012). As recommended by Cheek & Schwartz (2016), the MTS was used to measure the goal of seeking the best (e.g., High Standards; “I don’t like having to settle for good enough”). The 12-item Alternative Search sub-scale of the MI was used to measure the strategy of alternative search (e.g., “I can’t come to a decision unless I have carefully considered all my options”). The 12-item Decision Difficulty sub-scale of the MI (e.g., “I am usually worried about making a wrong decision”) was used to measure the Decision Difficulty facet of maximizing in order to examine the experience of decision difficulty in relation to the two-component model. The 10-item Satisficing sub-scale of the MI was used to measure Satisficing as a unique facet of maximizing (e.g., “I can’t possibly know everything before making a decision”).

The MTS-7 is a 7-item scale measured on a 6-point Likert scale from (1) *Strongly Disagree* to (6) *Strongly Agree* with higher scores indicating higher maximizing tendencies ( $\alpha = .81$ ). The MI is a 34-item scale that measures three components of maximizing: *Alternative Search* ( $\alpha = .92$ ), *Decision Difficulty* ( $\alpha = .93$ ), and *Satisficing* ( $\alpha = .85$ ) on a 6-point Likert scale from (1) *Strongly Disagree* to (6) *Strongly Agree*. Sub-scales are scored separately and never combined to form composite maximizing scores.

**General Risk Propensity.** The General Risk Propensity Scale (GRiPS; Zhang & Highhouse, 2018) was used to measure an individual's domain-general risk-taking preferences (e.g., "Taking risks makes life more fun"). The GRiPS is an 8-item scale answered on a scale from (1) *Strongly Disagree* to (5) *Strongly agree*.

**The Big Five.** The traditional Big Five personality facets were measured using The Big Five Inventory (John et al., 1991), a 44-item scale used to assess the five major facets of personality: conscientiousness, neuroticism, openness, agreeableness, and extraversion with responses ranging from (1) *Strongly Disagree* to (5) *Strongly Agree*.

**Regret.** Post-decision experience of regret was measured using the Regret sub-scale of the original MS (e.g., "If I make a choice and it turns out well, I still feel like something of a failure if I find out that another choice would have turned out better"; Schwartz et al., 2002). The Regret scale is 5-items measured on a Likert scale of (1) *Strongly Disagree* to (5) *Strongly Agree* with a higher composite score indicating higher levels of experienced regret.

**Anticipated Regret.** As anticipated regret is usually measured in the context of a specific decision, a 5-item scale was created in order to measure domain-general anticipated regret (e.g., "I often consider the regret that I may feel after making decisions"). The Anticipated Regret

Scale was measured on a Likert scale of (1) *Strongly Disagree* to (5) *Strongly Agree* with higher composite scores indicating a higher sensitivity to pre-decision anticipated regret.

**Satisfaction with Life.** General satisfaction with life is a well-being outcome traditionally associated with maximizing. Satisfaction with life was measured using the 5-item Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin, 1985) and was measured on a Likert scale of (1) *Strongly disagree* to (7) *Strongly agree* (e.g., “In most ways my life is close to ideal”). Higher composite scale scores indicate higher satisfaction with life.

**Happiness.** Happiness is a traditional well-being outcome associated with maximizing. Happiness was measured using the 4-item Subjective Happiness Scale (Lyubomirsky & Lepper, 1999). The items assessed general happiness and each have a unique response scale (e.g., “Compared to most of my peers, I consider myself: (1) *Less happy* to (7) *More happy*.”) with higher composite scores indicating greater general happiness.

**Depression.** Depression is a traditional well-being outcome associated with maximizing. Depression was measured using a short form of the Center for Epidemiologic Studies-Depression scale (CES-D) (Cole, Rabin, Smith, & Kaufmann, 2004), which is a 10-item depression screening tool for general populations. Items assessed content such as “I felt my life had been a failure” and “I felt lonely” over the last two weeks and are measured on a scale from (1) *Rarely/none* to (3) *Most of the time* with higher scores reflecting greater distress.

**Optimism.** Optimism is a well-being outcome associated with maximizing. Optimism was measured using the 10-item revised Life Orientation Test (LOT-R; Scheier & Carver, 1995). The scale contains four filler items and is measured on a scale of (0) *Strongly disagree* to (4) *Strongly agree* with higher composite scores reflecting greater optimism (e.g., “In uncertain times, I usually expect the best”).

**Burnout.** In order to assess employee burnout, the present study administered the 14-item Shirom-Melamed Burnout Measure (SMBM; Shirom & Melamed, 2006) to capture the depletion of emotional (e.g., “I feel I am not capable of investing emotionally in my coworkers and customers”), cognitive (“I feel I’m not thinking clearly”), and physical resources (“I feel physically drained”). The scale asked respondents to indicate how often they’ve felt this way in the past 30 days on a scale of (1) *Never or almost never* to (7) *Always or almost always* with higher scores on each sub-scale and composite score indicating higher levels of burnout.

**Demographic questions.** General demographic questions (e.g., age, gender, race) were asked at the end of the survey.

### **Analyses**

Latent profile analysis (LPA) was used to examine the existence of different profiles (i.e., types) of maximizing. LPA is considered a latent mixture model and is used as a technique to uncover hidden groups of respondents by obtaining the probability those respondents belong to unique groups (Ferguson, Moore, & Hull, 2020). Latent variable approaches are model based, meaning that they propose formal models of the data. In LPA, the observed variables are continuous and data is assumed to be sampled from a probability distribution composed of multiple distributions (i.e., one for each group or profile) with each profile characterized by its unique set of parameters (Pastor, Barron, Miller & Davis, 2007). LPA is carried out through the examination of these distributions and determination of whether these heterogeneous distributions are meaningful. LPA was conducted using maximum likelihood (ML) to identify latent profiles and estimate model parameters. Maximum likelihood estimation uses log-likelihood functions derived from the probability density function underlying the latent profile model to estimate model parameters (i.e., means, variances, covariances) for each of the profiles as well as the

probability of membership in each profile. Model identification followed the criteria as outlined by Nylund, Asparouhov, and Muthen (2007) which consists of an iterative model evaluation process using a) model fit statistics including the Approximate Weight of Evidence (AWE), Consistent Akaike Information Criterion (CAIC), sample-adjusted Bayesian information criterion (SABIC), and the bootstrapped likelihood ratio test (BLRT), b) interpretation of the number of cases in each profile, and c) the posterior probabilities associated with each profile (i.e., the probability a case belongs to the assigned profile and not one of the others) (Nylund et al., 2007). The best fitting model (i.e., the model with the optimal number of profiles) consisted of the AWE, CAIC, SABIC value, BLRT values closes to zero, a significant BLRT p-value, and profiles with the highest posterior probabilities. However, it's critical to interpret model fit indices in combination with one other as well as with other estimated models and theoretical interpretability of selected model. Importantly, the chosen model and profiles should be meaningful, with none of the profiles consisting of a disproportionally small number of cases (i.e., no less than 5% of the respondents) (Nylund et al., 2007). Based on this model approach, LPA also provides the profile membership variable which can be used in other analyses (e.g., ANOVA) to determine between-profile differences. Critically, LPA can also examine the effect of covariates on profile membership and determine if profile membership varies based upon other variables in the model such as demographic or personality variables (Stanley, Kellermanns, & Zellweger, 2017).

Importantly, LPA is considered a person-centered approach to latent variable analysis. This person-oriented approach is grounded in three arguments. First, individual differences are present and critical to the experience of an effect or phenomenon (e.g., the impact of decision difficulty on the maximizing experience). This is opposed to a variable or algorithmic approach

(i.e., regression) that assumes that all individuals in a sample belong to the same profile or homogenous group (Ferguson et al., 2020). Second, these differences are assumed to occur in a logical way that can be examined through patterns in responses on the observed variables (Ferguson et al., 2020). Latent profile models serve to group or cluster respondents and a *configural or pattern-based approach* is used to jointly consider the impact of all variables on outcomes as opposed to single variable (Stanley et al., 2017). Third, LPA rests on the argument that the number of patterns or profiles that result from the LPA are meaningful, interpretable, and occur across individuals (Ferguson et al., 2020). These groups may differ qualitatively (e.g., different sub-types of maximizers and satisficers) and quantitatively (e.g., high- and low-scoring on goal and strategy components) (Lubke & Muthén, 2005). In variable centered analyses, outcome variables are typically related to each observed variable separately. However, in LPA, differences in outcome variables can be examined for groups of respondents who have similar scores across multiple facets of a construct such as maximizing (Pastor et al., 2007). Thus, the goal of utilizing LPA in the study of maximizing is to help us understand whether 1) unique and theoretically meaningful profiles of maximizers exist, 2) if these profiles and relationships are in line with the recently proposed goal and strategy model, and 3) whether these profiles differ based up on external covariates such as personality traits and well-being indices.

LPA was conducted using the tidyLPA package (Rosenberg, Beymer, Anderson, CJ, & Schmidt, 2018) in R which can work in conjunction with the mclust package or MPlus. Covariate analyses to determine if the profiles vary on any of the included covariates (e.g., well-being, personality) was carried out using the mixed model analysis package in MPlus (Muthén & Muthén, 202).

## **Model Enumeration**

Enumeration involved the sequential testing of one-to-five profile solutions, as well as the testing of four variance/covariance model structures. Although *Satisficing* was proposed as an indicator along with the traditional dimensions of *High Standards*, *Alternative Search*, and *Decision Difficulty*, the response patterns of the *Satisficing* dimension indicated no differences among the profiles and lacked any type of theoretical interpretation in relation to the other maximizing dimensions. Consequently, *Satisficing* was removed from the overall model as an indicator and will be examined separately in order to determine the validity of the dimension. Table 3 presents the fit statistics of the candidate models. Model fit statistics indicated that a profile varying, unrestricted model - with variances and covariances between indicators allowed to freely vary across profiles - was the superior model. Within this model, all fit statistics including the AWE, CAIC, and BLRT statistics pointed to a two-profile solution. Latent profile probabilities for most likely latent profile membership exceeded .89, showing adequate separation between profiles. The smallest profile was composed of 48% of the total sample.

## **Results**

The current study used latent profile analysis to determine if response patterns on the traditional facets of maximizing support the existence of homogenous subgroups. This study is the first to take a more holistic, person-centered approach in the investigation of the maximizing construct and how the dimensions of *High Standards*, *Alternative Search*, *Decision Difficulty*, and *Satisficing* combine to create the maximizing experience and define who maximizers are.

## **Covariates**

Following model selection, additional covariate models were ran using the mixed model analysis package in Mplus (Muthen & Muthen, 2021). Profile membership and covariate

significance was examined to determine whether levels of Big Five personality traits, risk propensity, various well-being variables such as regret, depression and burnout, and various demographic variables were associated with increased likelihood of membership in one of the two uncovered profiles.

### ***Dimension vs. Composite Relationships***

Table 4 presents the correlations amongst the key study variables. Both facet-level and composite scores are reported for the maximizing dimensions of *High Standards*, *Alternative Search*, *Decision Difficulty*, and *Satisficing*. All maximizing dimensions were positively related to one another with strongest relationship exhibited between *High Standards* and *Alternative Search* ( $r = .62, p < .01$ ). *Decision Difficulty* was most strongly related to *Alternative Search* ( $r = .45, p < .01$ ) followed by *High Standards* ( $r = .30, p < .01$ ). The dimension of *Satisficing* as was also positively correlated with *High Standards* ( $r = .40, p < .01$ ), *Alternative Search* ( $r = .45, p < .01$ ), and *Decision Difficulty* ( $r = .12, p < .05$ ). In terms of the sub-scale of *Satisficing*, the current study found stronger relationships than previous studies (Turner et al., 2012).

**Maladaptive Relationships.** Relationships between maximizing and many of the covariate variables were consistent with findings from previous research. *Decision Difficulty* was most strongly related to *maladaptive* outcomes such as lower levels of satisfaction with life ( $r = .15, p < .01$ ), happiness ( $r = -.14, p < .01$ ), and optimism ( $r = -.40, p < .01$ ) as well as higher levels of depression ( $r = .63, p < .01$ ), regret ( $r = .60, p < .01$ ), and anticipated regret ( $r = .43, p < .01$ ) compared to the *High Standards* and *Alternative Search* dimensions. *Decision Difficulty* was also strongly related to all facets of burnout (i.e., physical fatigue, cognitive weariness, and emotional exhaustion;  $r = .58, .65, .63, ps < .01$ ). Furthermore, *Decision Difficulty* was strongly and negatively related to Conscientiousness ( $r = -.61, p < .01$ ) and Agreeableness ( $r = -.37, p <$



.01) and positively related to Neuroticism ( $r = .51, p < .01$ ) and risk-taking propensity ( $r = .53, p < .01$ ).

**Adaptive Relationships.** Alternatively, and consistent with previous findings, the *High Standards* dimension was most strongly related to *adaptive* outcomes including higher levels of satisfaction with life ( $r = .37, p < .01$ ), happiness ( $r = .20, p < .01$ ), and optimism ( $r = .19, p < .01$ ) and lower levels of depression ( $r = .13, p < .05$ ), regret ( $r = .16, p < .01$ ), anticipated regret ( $r = .17, p < .01$ ). Although still positively related to the burnout facets of physical fatigue, cognitive weariness, and emotional exhaustion ( $r = .15, .19, .23, ps < .01$ ), these relationships were weaker compared to the dimensions of Alternative Search and Decision Difficulty. Additionally, *High Standards* was significantly and positively related to Extraversion ( $r = .26, p < .01$ ), Openness ( $r = .20, p < .01$ ), risk-taking propensity ( $r = .33, p < .01$ ) and un-related to Conscientiousness, Neuroticism, and Agreeableness. The *Alternative Search* dimension showed similar relationships to the *High Standards* facet with the magnitude of the relationships falling in between the magnitude of relationships exhibited by the *High Standards* and *Decision Difficulty* dimension.

These results indicate that the *High Standards* facet is the most adaptive maximizing dimension followed by the *Alternative Search* and *Decision Difficulty* dimensions. Lastly, this study examined *Satisficing* as a unique dimension rather than assuming *Satisficing* as the lower end of the maximizing continuum. Relationships between the maximizing and covariate personality and well-being variables showed generally adaptive relationships similar to the *High Standards* and *Alternative Search* dimension but to a lesser degree of magnitude. *Satisficing* was unrelated to optimism, depression, risk-taking propensity and all facets of burnout except for physical fatigue ( $r = .12, p < .05$ ), but exhibited positive relationships with satisfaction with life

( $r = .19, p < .01$ ) and happiness ( $r = .28, p < .01$ ). Furthermore, *Satisficing* showed stronger positive relationships with Agreeableness ( $r = .23, p < .01$ ) and Conscientiousness ( $r = .20, p < .01$ ) compared to the *High Standards* dimension.

**Full Maximizing Composite.** In order to further examine the nuances between the maximizing dimensions, maximizing composites were calculated by combining the scores on 1) the *High Standards*, *Alternative Search*, and *Decision Difficulty* dimensions (i.e., the full composite) and 2) just the *High Standards* and *Alternative Search* dimensions (i.e., the goal and strategy model; Cheek & Schwartz, 2016). The relationships between the full maximizing composite and study covariates were the most comparable to *Decision Difficulty* when examining the strong, positive relationships between maladaptive well-being variables. Maximizing, as a composite, was positively related to all facets of burnout (i.e., physical fatigue, cognitive weariness, emotional exhaustion;  $r = .47, .53, .53, ps < .01$ ) as well as depression ( $r = .48, p < .01$ ), regret ( $r = .52, p < .01$ ), and anticipated regret ( $r = .43, p < .01$ ). Additionally, higher composite scores were associated with lower levels of Agreeableness ( $r = -.19, p < .01$ ) and Conscientiousness ( $r = -.36, p < .01$ ) and higher levels of Neuroticism ( $r = .33, p < .01$ ) and risk-taking propensity ( $r = .51, p < .01$ ). In contrast to the full composite containing the *Decision Difficulty* dimension, the goal and strategy composite (i.e., *Alternative Search* and *High Standards* combined) showed stronger, positive relationships with well-being and adaptive personality traits.

**Goal and Strategy Composite.** Maximizing measured with only *High Standards* and *Alternative Search* was associated with higher levels of satisfaction with life ( $r = .36, p < .01$ ) and happiness ( $r = .26, p < .01$ ) as well as lower levels of depression ( $r = .18, p < .01$ ), burnout (i.e., physical fatigue, cognitive weariness, emotional exhaustion;  $r = .21, .25, .27, ps < .01$ ),

regret ( $r = .29, p < .01$ ), and anticipated regret ( $r = .29, p < .01$ ). Higher scores on the goal and strategy composite were also positively related to adaptive personality traits such as Extraversion ( $r = .23, p < .01$ ) and Openness ( $r = .23, p < .01$ ) and unrelated to Agreeableness and Conscientiousness in contrast to the negative relationships found using the full composite. Additionally, the positive relationship between the full composite and Neuroticism was reduced to insignificance when the *Decision Difficulty* dimension was not included.

Taken together, the differences between the dimension-level, full composite, and goal and strategy composite relationships are in line with previous research indicating that *Decision Difficulty* is most strongly associated with maladaptive well-being and personality traits. In order to take a more nuanced look into the maximizing experience, latent profile analysis was conducted to establish whether different types of maximizers exist and which dimensions are critical to defining the maximizing experience for these groups.

### **Research Question 1 – Profiles of Maximizing**

**Research Question 1a.** The first research question investigated whether or not different types or profiles of maximizers exist. We used latent profile analysis in order to determine whether patterns of responses on the established maximizing dimensions of *High Standards*, *Alternative Search*, and *Decision Difficulty* support the existence of homogenous sub-groups of maximizers. Fit statistics for the maximizing profiles are located in Table 3. Based on model fit indices and a holistic consideration of profile differentiation and theoretical interpretability of the candidate profiles, a 2-profile model was chosen wherein variances and covariances were freely estimated across indicators. See Figures 1 and 2 for the final 2-profile solution for maximizing, supporting the hypothesis that different types of maximizers exist.

**Profiles.** Representing 53% of the sample, Profile 1 is characterized by relatively high scores on all three dimensions of maximizing. In Profile 1, the average reported levels of *High Standards*, *Decision Difficulty*, and *Alternative Search* were not differentiated from one another, but were significantly higher compared to Profile 2. Importantly, the dimension of *Decision Difficulty* was the critical differentiator between the two profiles. Compared to Profile 1 ( $M = 4.61$ ), Profile 2 ( $M = 3.16$ ) experiences much *lower levels of difficulty* when making decisions. Although scores on both the *High Standards* and *Alternative Search* dimensions are significantly lower in Profile 2, *Decision Difficulty* is the dimension that critically distinguishes and defines the two profiles. Consequently, Profile 1 is labeled *Distressed Maximizers* to capture those who have face high of difficulty making decisions whereas Profile 2 is labeled *Decisive Maximizers* to capture those who face low levels of difficulty making decisions.

**Research Question 1b.** Based on recent research suggesting that *Decision Difficulty* should be removed from the measurement of maximizing (Cheek & Goebel, 2020) the current study aimed to empirically verify whether *Decision Difficulty* is a critical and defining dimension of the maximizing experience. The profile analysis results support that not all maximizers experience high levels of *Decision Difficulty* when making decisions. The profiles indicate a separation between those who experience difficulty (i.e., the *Distressed Maximizers*) and those who do not (i.e., the *Decisive Maximizers*). Furthermore, similar scores between these profiles indicate that *Decision Difficulty* is the critical difference between the group and, thus, responsible for driving differences between the groups. This evidence suggests that removing the dimension of *Decision Difficulty* from the measurement of maximizing would create a skewed image of the overall experience of maximizers.

**Research Question 1c.** The current study also examined whether the experience and dimension of *Satisficing* as a part of the maximizing experience. Findings from the current study do *not* support the notion that maximizing lies on a continuum with *Satisficing* represented at the opposite end. That is, no profile was found that illustrated the conceptualization of *Satisficing* assumed in previous research which indicates low scores on all dimensions of maximizing. Furthermore, when *Satisficing* was included as an indicator in the profile analysis, responses on the dimension 1) did not vary significantly between the Distressed and Decisive Maximizers and 2) were higher on average than scores on any of the other maximizing dimensions. This brings into question to the theoretical validity of the *Satisficing* construct, as many of the items represent the opposite behavior measured by the *Decision Difficulty* and *Alternative Search* dimensions (e.g., “At some point you need to make a decision about things.”, “I accept that life often has uncertainty”).

### **Research Question 2 – Maximizing Profiles and Well-Being**

In order to further substantiate and understand the experience between Distressed and Decisive Maximizers, various personality and well-being covariates were examined in relation to the maximizing profiles. The results generally support the hypothesis that maladaptive well-being and personality traits are generally associated with higher scores on the *Alternative Search* and *Decision Difficulty* dimensions such as those considered Distressed Maximizers. Compared to the Distressed Maximizers who experience high levels of *Decision Difficulty*, Decisive Maximizers possessed significantly higher levels of Conscientiousness and Analytical decision-making style. Furthermore, membership in the Decisive Maximizer profile was associated with more adaptive well-being outcomes. Decisive Maximizers were associated with significantly lower levels of cognitive weariness and emotional exhaustion (i.e., burnout) as well as lower

levels of depression, regret, anticipated regret, and higher levels of optimism compared to Distressed Maximizers. Contrary to expectations, membership in the Decisive Maximizer profile was associated with significantly lower levels of satisfaction with life compared to Distressed Maximizers. This was the only well-being covariate significantly related in the opposite direction as expected. The other personality traits of Extraversion, Agreeableness, Neuroticism, and Openness as well as the well-being variables of physical fatigue or happiness did not covary by profile.

### **Discussion**

Through the discovery of different types of maximizers and their differential association with personality and well-being variables, the current study provides evidence for the need to adopt a more nuanced approach to the measurement and understanding of the maximizing experience. Notably, this was the first study to utilize a person-centered approach in examining the maximizing construct. The use of latent profile analysis allowed us to empirically investigate how certain configurations of responses on the dimensions of maximizing (i.e., types of maximizers) are associated with different decision making and well-being experiences. Results indicated the presence of two distinct profiles of maximizers: Distressed Maximizers and Decisive Maximizers with the dimension of *Decision Difficulty* being the critical differentiator between the two profiles. Decisive Maximizers who experience lower levels of *Decision Difficulty* had more adaptive personality traits and well-being outcomes compared to Distressed Maximizers.

### **Traditional Variable-Centered Methods**

Previous research has relied on variable-centered approaches with an emphasis on dimension- and composite-level correlational analyses. However, the inconsistent measurement

of the maximizing construct from both a dimension and scale perspective, has created a critical issue of construct clarity. The correlational analyses in the current study support the notion that both the dimensions measured and the method of scoring (i.e., facet vs composite) define both the strength and the directionality of the maximizing relationships with personality and well-being correlates. Although facet-level relationships allow a more nuanced look at how the dimensions differentially relate to correlates, the interpretation of only dimension-level relationships do not allow us to examine maximizing as a holistic, multi-faceted experience (i.e., maximizers as people and not facets). The correlations between *High Standards*, *Alternative Search*, and *Decision Difficulty* in the current study are consistent with previous research indicating that *High Standards* is the most adaptive dimensions while *Decision Difficulty* is the most maladaptive. However, when using dimension-level analyses, the question remains as to who maximizers are based on these individual relationships alone. That is, are maximizers those who possess high levels of all the dimensions utilized in the study or are maximizers those who score highly on just one of the dimensions? The use of *composite* scores suggest that maximizers are those who score highly on all dimensions, with higher composite scores related to strong maximizing behavior. However, because the composites are composed of dimensions that are both positively and negatively related to key correlates, the composite scores – although a more holistic way to look at the maximizing experience – also have the potential to create a biased picture of the maximizing experience. Based on the current theorizing and the differential relationships between the dimensions and key correlates, the current study calculated two composite scores: 1) a combined score on the *High Standards*, *Alternative Search*, and *Decision Difficulty* dimensions, and 2) a combined score on only the *High Standards* and *Alternative Search* dimensions (i.e., the goal and strategy model of maximizing). Thus, the major difference

between the two composite scores is the exclusion of *Decision Difficulty* from the composite aligning to the goal and strategy model of maximizing (Cheek & Goebel, 2020). Comparison of the composite-level results indicate that *Decision Difficulty* negatively skews the maximizing relationships such that the goal and strategy composite (i.e., without the *Decision Difficulty* dimension) was positively, and more strongly related to *adaptive* well-being and personality covariates. Thus, when using variable-centered approaches such as correlational analyses, the results and picture of the maximizing experience is largely dependent on both the dimensions used and how the scores are calculated. While dimension-level correlations create a clearer picture of how each dimension is differentially related to well-being, they do not create a holistic picture of how the dimensions combine to create the maximizing experience. Alternatively, although composites take all dimensions into account when defining and analyzing the maximizing experience, the nuance of the differential dimension-level relationships are lost within that higher level of analysis.

### **A Novel, Person-Centered Method**

In order to address the tradeoffs associated with variable-centered techniques, the current study utilized latent profile analysis as an empirical, person-centered approach in the study of the maximizing experience. Latent profile analysis allowed us to empirically investigate the existence of underlying profiles, or types, of maximizers.

During model enumeration and the selection of profiles, *High Standards*, *Alternative Search*, *Decision Difficulty*, and *Satisficing* were used as indicators for which to examine patterns of responses. Although the three traditional dimensions of maximizing have received considerable amounts of research and scrutiny, *Satisficing* has generally been assumed to lie on the opposite end of the continuum of maximizing as lower scores on the measure of maximizing



indicated higher propensity to engage in satisficing. In order to explicitly examine the validity of *Satisficing* as a unique dimension of maximizing (Turner et al., 2012), *Satisficing* was included as a profile indicator which allowed us to examine the response patterns in relation to the other dimensions of maximizing. However, during initial interpretation of the profiles, *Satisficing* as a unique indicator of maximizing was not theoretically supported. Interestingly, response patterns on *Satisficing* indicated that all participants scored *higher* on the *Satisficing* dimension than any of the other maximizing dimensions. This makes little theoretical sense, as the content of the *Satisficing* items measure the opposite of what high scores on the *Alternative Search* and *Decision Difficulty* should indicate (e.g., “I can’t possibly know everything before making a decision.”). In addition to the high scores, responses on the *Satisficing* dimension did not vary between any of the profiles, even when responses on the other maximizing dimensions differed. This is further evidence that we need an advanced theoretical understanding of what it means to “satisfice” before attempting to measure it as a unique construct or dimension of maximizing. Consequently, *Satisficing* was removed from the model.

Response patterns on the dimensions of *High Standards*, *Alternative Search*, and *Decision Difficulty* supported the existence of two distinct types of maximizers: *Distressed and Decisive Maximizers*. Critically, these two types of maximizers align to the definition of maximizers as outlined by the goal and strategy model of maximization proposed by Cheek and Goebel (2020). As evidenced by the high scores on the *High Standards* and *Alternative Search* dimensions for *both* types of maximizers, these profiles indicate that maximizing is defined by high scores on the combination of these traits. Furthermore, there was no profile uncovered that was defined by low scores on both or one of these dimensions, further substantiating the goal and strategy model. Thus, maximizing as defined by this framework and uncovered profiles is a

combination of the goal of having high standards when making decision and carrying out this goal by seeking out information and searching through alternatives.

However, one of the main proponents of the goal and strategy model was the argument for the removal of the *Decision Difficulty* dimension. Based on the assumption that difficulty making decisions was not common across all maximizers, Cheek & Goebel (2020) suggested removing the dimension from the measurement of maximizing in order to create a clearer picture of the maximizing experience. Results from the current study are the first to empirically validate the proposition that maximizers experience varying levels of *Decision Difficulty*. As illustrated by the profiles, there was an even split between those maximizers who experience high levels of *Decision Difficulty* and those that experience low levels of *Decision Difficulty*. This is an important advancement in the study of maximizing, as it suggests that *Decision Difficulty* is actually the critical distinction between types of maximizers and is crucial for understanding the decision making and well-being experience of maximizers.

Furthermore, the method of latent profile analysis allows us to overcome the challenges associated with understanding the well-being experience of maximizers when including *Decision Difficulty* in dimension- or composite-level scores. As opposed to using variable-centered methods, the assignment of maximizers to homogenous groups based upon their relationship with *Decision Difficulty* allows us to partition and investigate the impact that *Decision Difficulty* has between types of maximizers. Key covariate analyses indicate that Decisive Maximizers (i.e., those who experience low levels of difficulty when making decisions), generally possess more adaptive personality traits and experience more positive well-being outcomes compared to Distressed Maximizers. Decisive Maximizers were significantly less burnt out, as well as less depressed, experienced less regret and anticipated regret and higher levels of optimism and

conscientiousness compared to Distressed Maximizers. Additionally, this was the first-time maximizing was linked to organizationally-relevant well-being covariates such as burnout. Maximizing at the dimension, composite, and profile-level of analysis generally showed consistent and strong relationships with the burnout facets of physical fatigue, cognitive weariness, and emotional exhaustion. However, one of the major distinctions between the variable- and person-centered approaches was the directionality of the relationships between maximizing and burnout. All first-order correlations between the dimensions and composites of maximizing showed positive relationships with the facets of burnout, including the dimension of *High Standards*. However, when examining the profiles of maximizing, Decisive Maximizers (i.e., those who experience low levels of *Decision Difficulty*) were negatively related to the facets of cognitive weariness and emotional exhaustion and unrelated to physical fatigue. Combined with higher levels of conscientiousness compared to Distressed Maximizers, this indicates that Decisive Maximizers may be less prone to work-related burnout. In turn, this may impact their experience with other important organizational outcomes such as performance, job satisfaction, and turnover. Although past research has failed to find meaningful relationships between maximizing and organizational outcomes (Giacopelli et al., 2013), maximizing was studied using only dimension or composite scores. Results from the current study suggest that understanding and using typologies of maximizing (i.e., Distressed vs. Decisive Maximizers) may help further illuminate these relationships.

Due to *Decision Difficulty* being the critical differentiator between the two profiles, the differences in covariate relationship between profiles are largely due to differential experiences in *Decision Difficulty* by Distressed and Decisive Maximizers. Although the current study used a different method to analyze these relationships, these results are largely in line with previous

research indicating that *Decision Difficulty* is responsible for driving the maladaptive experience that maximizers face (Cheek & Goebel, 2020; Kim & Miller, 2017; Lai, 2010). However, the current study highlights that only *some* maximizers, approximately half, experience these maladaptive outcomes. Thus, by using latent profile analysis, we are not defining a single experience of maximizing. Instead, by including *Decision Difficulty* and examining types of maximizers, we take a more nuanced look into how the maximizing experience varies due to a critical emotional dimension of maximizing. This key takeaway is crucial for the advancement of maximizing research, showing that we can empirically examine the role of *Decision Difficulty* while still accounting for responses on the dimensions of *High Standards* and *Alternative Search*.

### **A New Model of Maximizing**

Based upon the results from this study and in combination with previous research and theorizing, we suggest a new model and method in the measurement of maximizing. In response to the goal and strategy model, our study results align with the proposal that maximizers are those who score highly on both the *High Standards* and *Alternative Search* dimensions. However, our results do *not* align with the proposition to remove *Decision Difficulty* from the measurement of maximizing. We suggest that in order to have a better understanding of the maximizing experience, *Decision Difficulty* must be included as a critical, defining dimension of maximizing. The explanatory power of the goal and strategy model can be further augmented by including *Decision Difficulty* as an *emotional dimension* of the maximizing experience. Thus, the goal of *High Standards* represents a motivational aspect, the strategy of *Alternative Search* represents a behavioral aspect, and *Decision Difficulty* represents an emotional aspect of maximizing. Together, these three dimensions combine to define the components of maximizing that drive well-being experiences, both adaptive and maladaptive.

Decision making is a complex and multi-faceted process, including an emotionally taxing process for many people. If maximizing research continues to study well-being as a key correlate of maximizing, we should be using dimensions (i.e., measurement facets) that are theoretically aligned to such outcomes. The measurement of *Decision Difficulty* is heavily based around the emotional experience associated with maximizing. This includes items measuring emotions such as worry, remorse, uncertainty, and agonizing in the decision-making process (Turner et al., 2012). Thus, the *Decision Difficulty* dimension represents the emotional burden of making decisions for maximizers and, by nature, should be strongly associated with well-being as found in the current study.

Additionally, the inclusion of *Decision Difficulty* does not necessarily mean we are convoluting the relationships and conclusions we can make between maximizing and well-being. Instead, it calls for the use of methodologies that allow for a more nuanced investigation of the maximizing construct. We suggest that person-centered approaches such as latent profile analysis have strong value for understanding *maximizers as people* and not just scores on certain variables. The concurrent examination of the *High Standards*, *Alternative Search*, and *Decision Difficulty* dimensions and subsequent discovery of types of maximizers with different well-being outcomes has shed light on the “who” of maximization and not just the “what”.

### **Implications For Maximizing Research**

Findings from the current study have multiple implications for the definition and measurement of maximizing. Current models propose that high scores on *both the High Standards* and *Alternative Search* dimensions define maximizing; however, current methods only allow for the independent examination of dimension- or composite-level scores. By using latent profile analysis to identify patterns of maximizing, we were able to find empirical support

for the existence of underlying types of maximizers and identify which dimensions are critical to the measurement of maximizing. Results substantiated a new model by uncovering the criticality of the *Decision Difficulty* dimension in explaining the maximizing relationship with well-being. Maximizers did not differ meaningfully on any of the other dimensions, indicating that *Decision Difficulty* should be included as an emotional component in the definition and measurement of maximizing. Thus, our research suggests that a model incorporating the maximizing goal (*High Standards*), strategy (*Alternative Search*), and emotion (*Decision Difficulty*) is crucial to a deeper understanding of maximizers. By examining *Decision Difficulty* in conjunction with *High Standards* and *Alternative Search*, we were able to discern that maximizing can be maladaptive, but only for certain types of maximizers (i.e., those who experience high decision difficulty). Critically, difficulty in making decisions does not define the maximizing experience for everyone. Future research should expand beyond variable-centered approaches examining first order relationships between maximizing and correlates and utilize person-centered approaches to understanding the *who* of maximization.

### **Limitations and Future Research**

First, the profiles uncovered in this study described Distressed Maximizers who experience high levels of *Decision Difficulty* as experiencing generally maladaptive well-being outcomes, including significantly higher work-related burnout such as physical fatigue, cognitive weariness, and emotional exhaustion. Critically burnout, as a description of an individual's emotional well-being in the workplace, is not a traditional well-being correlate studied with maximizing. This was the first study to examine the relationship between maximizing and well-being in the workplace. Thus, the broader impact of profile membership, and maximizing in general, should continue to be studied in the work domain before conclusions can be made as to

the utility of the construct in organizational research. Although previous studies have found maximizing to be unrelated to important work outcomes including job performance and turnover (Giacopelli et al., 2013), the current study indicated that maximizing may be strongly related to variables related to *well-being and emotional aspects of work*. Additionally, previous research on maximizing in the workplace has only measured maximizing using dimension or composite scores. By using theoretically aligned workplace outcomes (i.e., well-being) and methods that allow for a more nuanced look into the construct (i.e., latent profile analysis), we increase the predictive validity of the maximizing across different research domains. Thus, in order to have a clearer picture of the maximizing experience at work, future studies should incorporate additional measures of organizational well-being and performance when examining profiles of maximizing.

Second, in the discovery of profiles and distinct types of maximizers, the current study uncovered some relationships in opposition with what may be expected based on previous research. As this is the first study to empirically uncover profiles of maximizing, it's unclear as to whether, or how, these profiles may be impacting these relationships. For instance, membership in the Decisive Maximizer profile was associated with significantly *lower* satisfaction with life compared to Distressed Maximizers. Additionally, although not significant, Decisive Maximizers were also associated with lower levels of happiness. However, based on their decreased difficulty when making decisions, we would expect Decisive Maximizers to have higher satisfaction with life and happiness compared to Distressed Maximizers. One explanation is that the slight, but significant, lower levels of both *High Standards* and *Alternative Search* that describes Decisive Maximizers most strongly influenced their relationships with these well-being variables. That is, although they experienced low levels of *Decision Difficulty*, their decreased

*High Standards* and *Alternative Search* behaviors may have been low enough to impact life satisfaction and happiness. Thus, although the current study indicates that low Decision Difficulty is generally associated with a more adaptive well-being experience, lower High Standards and Alternative Search may overpower the positive impact of not experiencing *Decision Difficulty*, but only for *certain* well-being outcomes. Future research should continue to examine the tradeoffs for maximizers who experience low Decision Difficulty, but also experience lower levels of the adaptive dimensions of High Standards and Alternative Search. =

Third, although the current study used scales that have been recommended for their strong psychometric properties and theory-driven creation (Cheek & Schwartz, 2015; Turner et al., 2012), it's unclear how the profiles may have turned out if we had used other maximizing scales. In the best-case scenario, profile analysis should utilize scales that were created to explicitly and validly measure each of the profile indicators (i.e., the dimensions). Thus, maximizing research should continue to revise or create a scale that directly aligns with the goal (*High Standards*), strategy (*Alternative Search*), and emotion (*Decision Difficulty*) model recommended in this study. By creating a measure that is both empirically and theoretically derived, maximizing research can start to consistently and confidently utilize a single scale. This will create uniformity in both the dimensions being used to measure maximizing and how the maximizing scores are computed and examined with covariates. Furthermore, it allows for better cross-fertilization of the maximizing construct to other research domains, such as organizational psychology.

### **Conclusion**

Although the construct of maximizing has made significant progress since its formal introduction nearly two decades ago, Cheek and Schwartz (2016) stated that, "Previous research



on the measurement of maximization has perhaps risked using psychometric analyses as an end rather than a means, with too little regard for construct validity and maximization theory” (p. 130). In response, the proposed study introduces a novel, person-centered approach in the measurement and analysis of the maximizing experience. We uncovered the existence of two distinct profiles of maximizing: *Distressed Maximizers* who experience high levels of difficulty making decisions and *Decisive Maximizers* who do not. Decisive Maximizers were associated with more adaptive personality traits and a more positive well-being experience compared to Distressed Maximizers, indicating that not all maximizers are subject to the negative well-being experience uncovered in previous research. *Decision Difficulty*, as an emotional dimension of maximizing, should be measured and studied in addition to the *High Standards* (i.e., maximizing goal) and *Alternative Search* (i.e., maximizing strategy) dimensions. Furthermore, the continued use of latent profile analysis to study different types of maximizers will allow us to examine maximizers as people, who inherently vary on the dimensions and thus experience differential outcomes. Through the combination of a theoretically aligned model of maximizing and the appropriate person-centered method to empirically study these relationships, we can start to better understand *who* maximizers are as people, and not just variables.

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**Table 1** Evolution of Maximizing Scales by Construct and Level of Analysis

Authors	Scale	Facets				Level of Analysis	
		High Standards	Alternative Search	Decision Difficulty	Satisficing	Composite Level	Facet Level
Schwartz et al., (2002)	Maximization Scale (MS)	X	X	X		X	
Nenkov et al. (2008)	Short Form Maximization Scale (MS-S)	X	X	X		X	X
Diab et al. (2008)	Maximizing Tendency Scale (MTS)	X				X	
Lai (2010)	Modified Maximizing Scale (MMS)	X	X			X	
Turner et al., (2012)	Maximization Inventory (MI)		X	X	X		X
Weinhardt et al., (2012)	Revised Short Form Maximization Scale (MS-S-R)	X	X	X			X
Weinhardt et al., (2012)	Revised Maximizing Tendency Scale (MTS-R)	X				X	
Mikkelsen & Pauley (2013)	Relational Maximization Scale (RMS)	X	X	X		X	
Richardson et al., (2014)	Refined Maximization Scale (MS-R)	X		X			X
Ma & Roese (2014)	Maximizing mindset	X	X			Experimental manipulation	
Dalal et al., (2015)	7-Item Maximizing Tendency Scale (MTS-7)	X				X	
Misuraca et al., (2015)	Decision Making Tendency Inventory (DMTI)	X	X	X	X		X
Newman et al., (2018)	Relational Maximization	X	X	X	X	X	X

	Scale (Friendship)						
(Voss et al., 2019)	Career Maximizing Scale	X	X			X	
Mikkelson & Ray (2020)	Revised Relational Maximization Scale (R-RMS)	X	X				X

**Table 2** Summary of Relationships Between Maximizing and Well-Being

	<b>Definition</b>	<b>Relationship with Well-being</b>
<b>Maximizing as a composite</b>	When measured as a composite, the definition depends on the facets used in the specific maximizing scale – the tendency to maximize is defined by high scores on those facets (see below).	Composite scores of maximizing generally indicate a <b>maladaptive relationship</b> with well-being. Maximizing as a composite has been related to <i>higher</i> regret, perfectionism, depression, and social comparison, as well as <i>lower</i> happiness, optimism, satisfaction with life, and self-esteem.
<b>High Standards</b>	The tendency to search for the best option and hold high standards for themselves and things in general.	The High Standards facet has an <b>adaptive relationship</b> with well-being. High Standards has been found to be either un-related or positively related to well-being outcomes such as <i>higher</i> satisfaction with life, subjective happiness, and positive affect, and optimism.
<b>Alternative Search</b>	The tendency to explore a large number of options when making decisions.	The Alternative Search facet has a <b>maladaptive relationship</b> with well-being. Alternative Search has been associated with <i>higher</i> neuroticism, self-rumination, depression, and regret and <i>lower</i> satisfaction with life, happiness, optimism, and self-efficacy.
<b>Decision Difficulty</b>	The tendency to experience difficulty when making decisions.	The Decision Difficulty facet has the <b>strongest maladaptive relationship</b> with well-being. Decision Difficulty has been consistently associated with <i>higher</i> regret, depression, negative affect, neuroticism, and <i>lower</i> satisfaction with life, subjective happiness, positive affect, optimism, and self-efficacy.
<b>Satisficing</b>	There is no explicit definition of satisficing. Although satisficing has started to be examined as a unique facet, satisficing has traditionally been considered to fall on the opposite end of the continuum as maximizing.	Satisficing as a unique facet is just starting to be examined, but current findings suggest Satisficing may have an <b>adaptive relationship</b> with well-being. Satisficing has been associated with <i>higher</i> happiness, optimism, generalized self-efficacy, and self-regard

**Table 3** Fit Statistics of Candidate Models for Maximizing

$\Sigma_k$	# of profiles, $k$	$LL$	AWE	SABIC	CAIC	BLRT, ( $p$ )
Profile-invariant $\Sigma_k$	1	-1393	2873.9	2803.8	2828.3	---
	2	-1291	2729.9	2610.8	2652.1	203.9 (<.01)
	3	-1244	2695.8	2534.7	2586.6	93.2 (<.01)
	4	-1209	<b>2685.1</b>	2476.5	2544.1	70.1 (<.01)
	5	<b>-1189</b>	2704.7	<b>2448.8</b>	<b>2532.0</b>	39.8 (<.01)
Profile-varying, diagonal $\Sigma_k$	1	-1393	2873.9	2803.3	2828.3	---
	2	-1239	2670.6	2515.0	2567.2	307.5 (<.01)
	3	-1184	<b>2665.0</b>	2424.7	2508.1	109.6 (<.01)
	4	-1155	2709.4	2384.5	2497.1	59.4 (<.01)
	5	<b>-1130</b>	2764.4	<b>2354.7</b>	<b>2496.5</b>	49.0 (<.01)
Profile-invariant, unrestricted $\Sigma_k$	1	-1261	2653.4	2546.6	2584.2	---
	2	-1193	<b>2576.8</b>	2421.5	2475.7	136.1 (<.01)
	3	-1176	2603.2	2399.1	2470.1	33.3 (<.01)
	4	-1155	2620.3	<b>2367.9</b>	<b>2455.5</b>	42.3 (<.01)
	5	<b>-1155</b>	2680.0	2378.8	2483.1	0.09 (<.01)
Profile-varying, unrestricted $\Sigma_k$	1	-1260	2653.4	2546.6	2584.2	---
	<b>2</b>	-1109	<b>2499.5</b>	2271.1	<b>2350.4</b>	303.0 (<.01)
	3	-1098	2625.4	2276.0	2397.0	22.6 (.24)
	4	-1074	2726.5	2256.2	2418.9	47.3 (<.01)
	5	<b>-1058</b>	2843.4	<b>2252.2</b>	2456.7	31.5 (.08)

**Table 4** Descriptive Statistics and Correlations Among Key Study Variables

	M(SD)	1	2	3	4	5	6	7	8	9	10	11	12	13
1.Age	35.9(10.6)	--												
2.Gender	51% Female	.14**	--											
3.Hours	40.5(7.8)	.12*	.08	--										
4.HighSt	4.34(.80)	-.07	-.02	.04	<b>.80</b>									
5.AltSear	4.49(.71)	-.04	-.14**	.01	.62	<b>.88</b>								
6.DecDiff	3.89(1.0)	-.24**	-.18**	-.10	.29**	.45**	<b>.91</b>							
7. Satis	4.73(.65)	.13*	-.08	.06	.40**	.45**	.12*	<b>.77</b>						
8.FullCom	4.22(.69)	-.18**	-.17**	-.05	.68**	.82**	.84**	.35**	<b>.92</b>					
9.GSCom	4.43(.67)	-.06	-.11*	.02	.85**	.94**	.43**	.48**	.85**	<b>.90</b>				
10.Extra	3.13(.74)	-.02	.07	-.13*	.26**	.18**	-.03	.13*	.12*	.23**	<b>.80</b>			
11.Agree	3.51(.67)	.18**	-.03	.00	.05	.03	-.37**	.23**	-.19**	.04	.18**	<b>.77</b>		
12.Consc	3.72(.66)	.27**	.07	.10	.02	-.02	-.61**	.20**	-.36**	-.00	.16**	.65**	<b>.80</b>	
13.Neuro	2.80(.80)	-.08	-.18**	.02	-.02	.09	.51**	-.07	.33**	.05	-.43**	-.54**	-.60**	<b>.81</b>
14.Open	3.56(.53)	.04	.02	.01	.20**	.21**	-.08	.32**	.09	.23**	.20**	.24**	.21**	-.19**
15.GRiPS	3.14(1.12)	-.37**	-.02	-.10	.34**	.27**	.53**	.07	.51**	.33**	.41**	-.23**	-.43**	.07
16.BrnPf	3.68(1.64)	-.12*	-.12*	-.00	.15**	.21**	.58**	.12*	.47**	.21**	-.20**	-.43**	-.60**	.62**
17.BrnCw	3.41(1.69)	-.16**	-.08	-.08	.19**	.25**	.65**	.08	.53**	.25**	-.10	-.45*	-.65**	.59**
18.BrnEE	3.34(1.69)	-.22**	-.04	-.12*	.23**	.25**	.63**	.03	.53**	.27**	.01	-.51**	-.67**	.48**
19.SWL	5.07(1.41)	-.13*	-.05	-.07	.37**	.29**	.15**	.19**	.30**	.36**	.48**	.13*	.05	-.30**
20.Happy	4.87(1.19)	.01	-.03	-.06	.29**	.20**	-.14**	.28**	.08	.26**	.49**	.43**	.35**	-.57**
21.Optim	2.17(.59)	.13*	.04	-.05	.19**	-.00	-.40**	.07	-.18**	.08	.36**	.46**	.44**	-.65**
22.Depres	1.17(.70)	-.25**	-.10*	-.06	.13*	.18**	.63**	.01	.48**	.18**	-.16**	-.53**	-.71**	.71**
23.Regret	3.31(.79)	-.20**	-.07	-.06	.16**	.32**	.60**	.12*	.52**	.29**	-.10	-.16**	-.35**	.39**
24.AntReg	3.67(.79)	-.09	-.13*	.00	.17**	.32**	.43**	.26**	.43**	.28**	-.13*	-.13*	-.24**	.39**
25.Analy	3.84(.79)	.10	.08	.06	.11*	.16**	-.26**	.18*	-.06	.16**	.03	.30**	.34**	-.25**

\* = significant at  $\alpha = .05$ ; \*\* = significant at  $\alpha = .01$

Notes: N=373. Gender: 1=female, 2=male. Hours=hours work/week; HighSt=High Standards; AltSear=Alternative Search; DecDiff=Decision Difficulty; Satis=Satisficing; FullCom=Full Max Composite. GSCom=Goal/Strategy Composite; Extra=Extraversion; Agree=Agreeableness; Cons=Conscientiousness; Neuro=Neuroticism; Open=Openness; GRiPS=General Risk Taking Propensity; BrnPf=Physical Fatigue [Burnout]; BrnCw=Cognitive Weariness [Burnout]; BrnEE=Emotional Exhaustion [Burnout]; SWL=Satisfaction With Life; Happy=Happiness; Optim=Optimism; Depres=Depression; Regret=Regret; AntRegret=Anticipated Regret; Analy=Analytical

	14	15	16	17	18	19	20	21	22	23	24	25
14.Open	<b>.72</b>											
15.GRiPS	.07	<b>.95</b>										
16.BrnPf	.01	.31**	<b>.96</b>									
17.BrnCw	-.02	.40**	.87**	<b>.96</b>								
18.BrnEE	-.02	.50**	.79**	.86**	<b>.94</b>							
19.SWL	.04	.41**	-.13*	.01	.14**	<b>.91</b>						
20.Happy	.15**	.18**	-.34**	-.25**	-.17**	.66**	<b>.74</b>					
21.Optim	.19**	-.04	-.44**	-.36**	-.29**	.41**	.65**	<b>.89</b>				
22.Depres	-.07	.40**	.80**	.80**	.74**	-.17**	-.50**	-.58**	<b>.89</b>			
23.Regret	.12*	.32**	.38**	.42**	.35**	.00	-.18**	-.35**	.47**	<b>.76</b>		
24.AntReg	.16**	.16**	.40**	.37**	.32**	.04	-.11*	-.28**	.41**	.54**	<b>.74</b>	
25.Analy	.40**	-.18**	-.23**	-.32**	-.28**	-.03	.15**	.25**	-.30**	-.04	.02	<b>.69</b>

\* = significant at  $\alpha = .05$ ; \*\* = significant at  $\alpha = .01$

**Notes:** Open=Openness; GRiPS=General Risk Taking Propensity; BrnPf=Physical Fatigue [Burnout]; BrnCw=Cognitive Weariness [Burnout]; BrnEE=Emotional Exhaustion [Burnout]; SWL=Satisfaction With Life; Happy=Happiness; Optim=Optimism; Depres=Depression; Regret=Regret; AntRegret=Anticipated Regret; Analy=Analytical

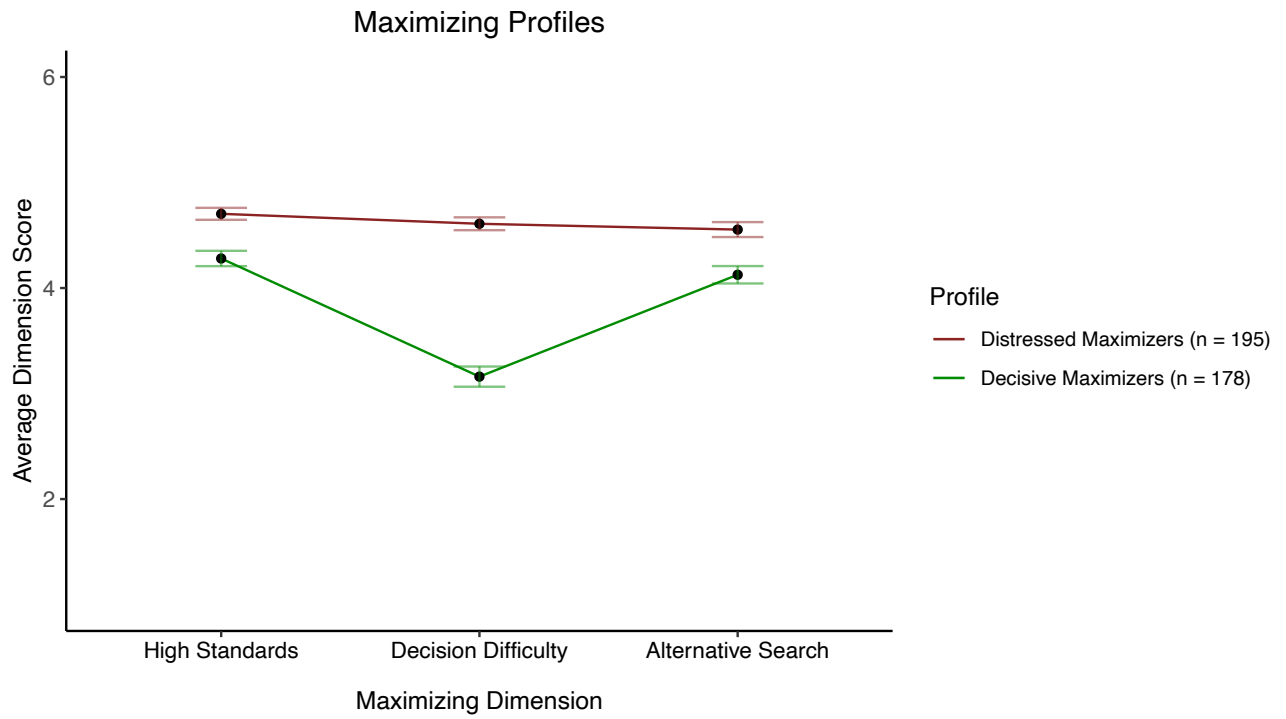
**Table 5** Covariate Results for Maximizing Profiles

<i>Variable</i>	Profile	
	Decisive Maximizers	Distressed Maximizers
Personality	B <sub>Cons</sub> = 1.75 (.86)* B <sub>GRIPS</sub> = -4.67(1.25)*	<i>Reference Profile for all covariate analyses</i>
Burnout	B <sub>Cog</sub> = -0.72(.25)* B <sub>Emo</sub> = -.50(.19)*	
Well-being	B <sub>SWL</sub> = -1.40(.64)* B <sub>Dep</sub> =-2.86(.59)* B <sub>Opt</sub> =0.95(.42)* B <sub>Regret</sub> = -1.57(.28)*	
Other	B <sub>AntReg</sub> = -0.83(.32)* B <sub>Anal</sub> = 0.39(.16)*	
Non-Sig	No effects for Extraversion, Agreeableness, Neuroticism, Openness, Physical Fatigue, or Happiness	

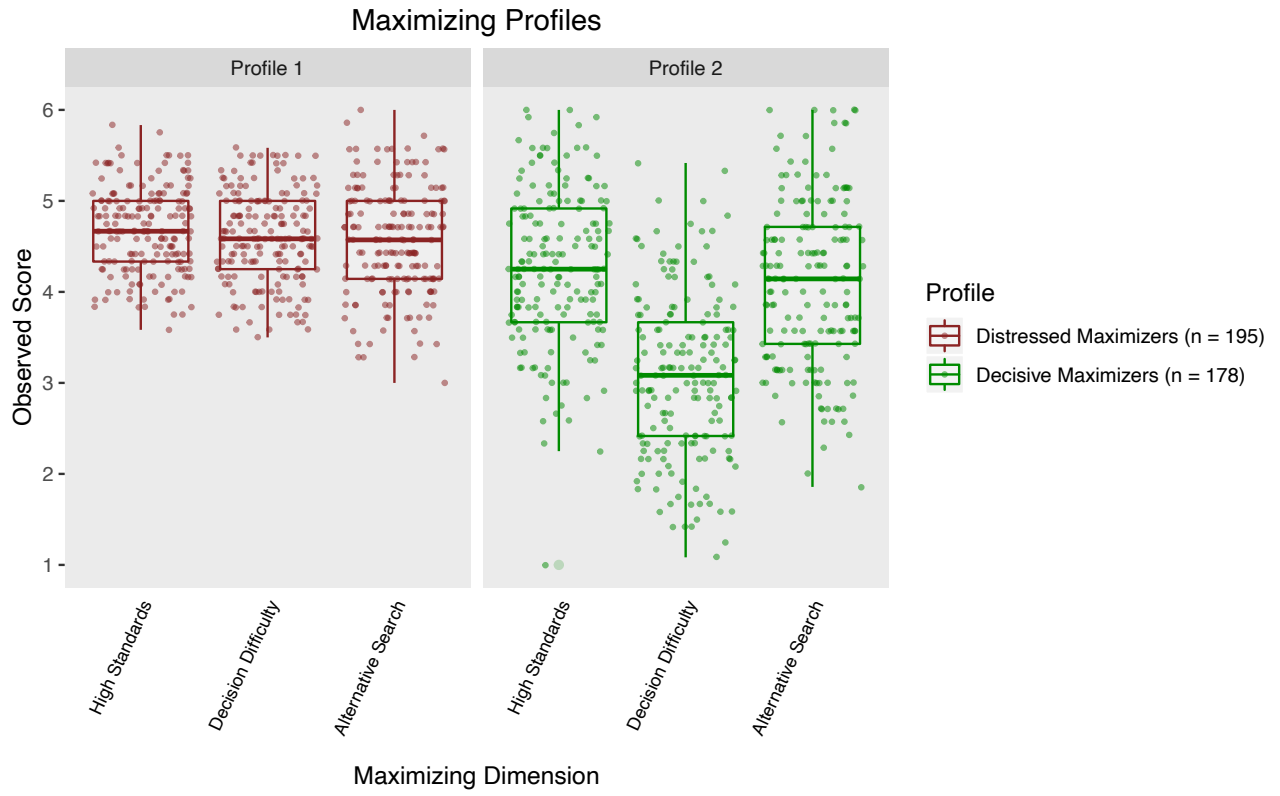
Notes: \* = significant at alpha = .05



**Figure 1.** Final 2-profile Solution for Maximizing – Indicator Means



**Figure 2.** Final 2-Profile Solution for Maximizing – Plotted Responses



## Appendix A

### Measures

#### 7-Item Maximizing Tendency Scale (Dalal et al., 2015)

Please read each statement carefully and indicate 1: (strongly disagree) to 6 (strongly agree)

1. I don't like having to settle for "good enough".
2. I am a maximizer.
3. No matter what I do, I have the highest standards for myself.
4. I will wait for the best option, no matter how long it takes.
5. I never settle for second best.
6. I never settle.
7. No matter what it takes, I always try to choose the best thing.

#### Maximization Inventory (Turner et al., 2012)

Please read each statement carefully and indicate: 1 (strongly disagree) to 6 (strongly agree)

##### Satisficing

1. I usually try to find a couple of good options and then choose between them.
2. At some point you need to make a decision about things.
3. In life I try to make the most of whatever path I take.
4. There are usually several good options in a decision situation.
5. I try to gain plenty of information before I make a decision, but then I go ahead and make it.
6. Good things can happen even when things don't go right at first.
7. I can't possibly know everything before making a decision.
8. All decisions have pros and cons.
9. I know that if I make a mistake in a decision that I can go "back to the drawing board".
10. I accept that life often has uncertainty.

##### Decision Difficulty

11. I usually have a hard time making even simple decisions.
12. I am usually worried about making a wrong decision.
13. I often wonder why decisions can't be more easy.
14. I often put off making a difficult decision until a deadline.
15. I often experience buyer's remorse.
16. I often think about changing my mind after I have already made the decision.
17. The hardest part of making a decision is knowing I will have to leave the items I didn't choose behind.
18. I often change my mind several times before making a decision.
19. It's hard for me to choose between two good alternatives.
20. Sometimes I procrastinate in deciding even if I have a good idea of what decision I will make.
21. I find myself often faced with difficult decisions.
22. I do not agonize over decisions.

##### Alternative Search

23. I can't come to a decision unless I have carefully considered all of my options.
24. I take time to read the whole menu when dining out.

25. I will continue shopping for an item until it reaches all of my criteria.
26. I usually continue to search for an item until it reaches my expectations.
27. When shopping, I plan on spending a lot of time looking for something.
28. When shopping, if I can't find exactly what I'm looking for, I will continue to search for it.
29. I find myself going to many different stores before finding the thing I want.
30. When shopping for something, I don't mind spending several hour looking for it.
31. I take the time to consider all alternatives before making a decision.
32. When I see something that I want, I always try to find the best deal before purchasing it.
33. If a store doesn't have exactly what I'm shopping for, then I will go somewhere else.
34. I just won't make a decision until I am comfortable with the process.

The Big Five Inventory (John, Donahue, & Kentle, 1991)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who "likes to spend time with others"? Please select the number (1 = Strongly Disagree to 5 = Strongly Agree) that indicates the extent to which you agree or disagree with that statement.

I am someone who...

1. Is talkative
2. Tends to find fault with others
3. Does a thorough job
4. Is depressed, blue
5. Is original, comes up with new ideas
6. Is reserved
7. Is helpful and unselfish with others
8. Can be somewhat careless
9. Is relaxed, handles stress well
10. Is curious about many different things
11. Is full of energy
12. Starts quarrels with others
13. Is a reliable worker
14. Can be tense
15. Is ingenious, a deep thinker
16. Generates a lot of enthusiasm
17. Has a forgiving nature
18. Tends to be disorganized
19. Worries a lot
20. Has an active imagination
21. Tends to be quiet
22. Is generally trusting
23. Tends to be lazy
24. Is emotionally stable, not easily upset
25. Is inventive
26. Has an assertive personality

27. Can be cold and aloof
28. Perseveres until the task is finished
29. Can be moody
30. Values artistic, aesthetic experiences
31. Is sometimes shy, inhibited
32. Is considerate and kind to almost anyone
33. Does things efficiently
34. Remains calm in tense situations
35. Prefers work that is routine
36. Is outgoing, sociable
37. Is sometimes rude to others
38. Makes plans and follows through with them
39. Gets nervous easily
40. Likes to reflect, play with ideas
41. Has few artistic interests
42. Likes to cooperate with others
43. Is easily distracted
44. Is sophisticated in art, music, or literature

Regret Scale (Schwartz et al., 2002)

Please read each statement carefully and indicate 1: (strongly disagree) to 5 (strongly agree)

1. Whenever I make a choice, I'm curious about what would have happened if I had chosen differently
2. Whenever I make a choice, I try to get information about how the other alternatives turned out
3. If I make a choice and it turns out well, I still feel like something of a failure if I find out that another choice would have turned out better
4. When I think about how I'm doing in life, I often assess opportunities I have passed up
5. Once I make a decision, I don't look back (R)

General Risk Propensity Scale (Zhang & Highhouse, 2018)

Please read each statement carefully and indicate 1: (strongly disagree) to 5 (strongly agree)

1. Taking risks makes life more fun
2. My friends would say I'm a risk taker
3. I enjoy taking risks in most aspects of my life
4. I would take a risk even if it meant I might get hurt
5. Taking risks is an important part of my life
6. I commonly make risky decisions
7. I am a believer of taking chances
8. I am attracted, rather than scared, by risk

Satisfaction with Life Scale (Diner, Emmons, Larsen & Griffin, 1985)

(Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, 49(1), 71-75.)

Instructions for administering the scale are: Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding. The 7-point scale is: (1) strongly disagree to (7) strongly agree.

1. In most ways my life is close to my ideal
2. The conditions of my life are excellent
3. I am satisfied with my life
4. So far I have gotten the important things I want in my life
5. If I could live my life over, I would change almost nothing

Depression – Center for Epidemiologic Studies Depression Scale (CES-D; Cole, et al., 2004)

Please read each statement carefully and indicate whether, in the *last two weeks*, you have experienced any of the following... Items will be answered on a scale of (0) *rarely/none* to (3) *most of the time*

1. I felt my life had been a failure.
2. I felt fearful.
3. I felt that I was just as good as other people.
4. People were unfriendly.
5. I felt that I could not shake of the blues even with the help from my friends or family.
6. I was bothered by things that usually don't bother me.
7. I felt that everything I did was an effort.
8. I felt hopeful about the future.
9. I felt lonely.
10. I had trouble keeping my mind on what I was doing.

Optimism scale (Revised Life Orientation Test; Scheier & Carver, 1995)

Respondents are asked to indicate the extent of their agreement with each of the items on a scale from (0) *Strongly disagree* to (4) *Strongly agree*. Instructions caution respondents to be as accurate and honest as they can throughout.

1. In uncertain times, I usually expect the best
2. It's easy for me to relax (filler item)
3. If something can go wrong for me, it will
4. I'm always optimistic about my future
5. I enjoy my friends a lot (filler item)
6. It's important for me to keep busy (filler item)
7. I hardly ever expect things to go my way
8. I don't get upset too easily (filler item)
9. I rarely count on good things happening to me
10. Overall, I expect more good things to happen to me than bad

Shirom-Malamed Burnout Measure (Shirom & Melamed, 2006)

Below are a number of statements that describe different feelings that you may feel at work. Please indicate how often, in the past 30 days, you have felt each of the following feelings from 1 (Never or almost never) to 7 (Always or almost always)

1. I feel tired
2. I have no energy for going to work in the morning
3. I feel physically drained
4. I feel fed up
5. I feel like my “batteries” are “dead”
6. I feel burned out
7. My thinking process is slow
8. I have difficulty concentrating
9. I feel I’m not thinking clearly
10. I feel I’m not focused in my thinking
11. I have difficulty thinking about complex things
12. I feel I am unable to be sensitive to the needs of my coworkers and customers
13. I feel I am not capable of investing emotionally in coworkers and customers
14. I feel I am not capable of being sympathetic to coworkers and customers

#### Subjective Happiness Scale (Lyubomirsky & Lepper, 1999)

For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you

1. In general, I consider myself: 1 (Not a very happy person) to 7 (A very happy person)
2. Compared to most of my peers, I consider myself: 1 (Less happy) to 7 (More happy)
3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you? 1 (Not at all) to 7 (A great deal)
4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you? 1 (Not at all) to 7 (A great deal)

#### Anticipated Regret Scale (items created for this study)

Please read each statement carefully and indicate 1: (strongly disagree) to 5 (strongly agree)

1. I often consider the regret that I may feel after making decisions
2. I anticipate the emotional consequences of my decisions
3. I take into account the potential to experience regret when making a decision
4. If I feel like I may regret a choice, I am less likely to make that choice
5. When making decisions, I consider if I will regret the decision

#### Analytical Approach Scale

1. I enjoy comprehensively analyzing the pros and cons of complex solutions at work.
2. I tend to spend more time than others exploring data for potential problem causes that create useful insights.
3. I enjoy identifying and exploring data to see where the data leads me.

4. I enjoy analyzing complex concepts and identifying logical connections between them.
5. I do not enjoy analyzing hypothetical situations or theoretical models. (R)
6. I find it tiring to spend a lot of time reviewing data in analyzing problem causes. (R)
7. I like to solve problems based on my intuition rather than taking the time to do a systematic analysis. (R)
8. Compared to my colleagues, I tend not to enjoy data gathering and analysis. (R)

Demographic questionnaire

Please answer the following questions to the best of your ability:

1. What is your age?
2. What is your gender?
  1. Male
  2. Female
  3. Other
4. What is your race/ethnicity?
  1. African-American/Black
  2. Caucasian/White (Non-Hispanic)
  3. Hispanic
  4. Asian/Pacific Islander
  5. Arabic
  6. Native American
  7. Other