**Mindset of Obligation: Conceptualization and Empirical Validation of a New Measure of Initiation and Perseverance**

**Abstract**

We theoretically develop and empirically validate a measure of mindset of obligation, building on the concept of the form of commitment that receives the least attention from scholars – normative commitment. We define a mindset of obligation as the pervasive tendency to *initiate* new endeavors and *persevere* through existing roles and responsibilities *out of a sense of obligation*. We suggest that this mindset acts as a binding agent that affects strain and withdrawal in and outside the workplace. We find that Initiation is more maladaptive, and Perseverance is more adaptive for favorable work and nonwork outcomes. Individuals with high levels of Initiation tend to commit to tasks out of a sense of obligation, with the potential to overcommit and not deliver on these commitments. Those with high levels of Perseverance may experience a sense of accomplishment from fulfilling their commitments, and may be seen as responsible or reliable by others. We describe theoretical and practical implications of the mindset of obligation construct and measure, which sheds valuable insight on normative commitment, on personality traits, and other mindset constructs. These insights add understanding about the implications of the motives one has for committing to roles and responsibilities across various domains of life.

*Keywords****:*** normative commitment, mindset of obligation, motivation, strain, withdrawal

Why do some people seem to feel such a strong sense of obligation to persist in certain behaviors or roles? Normative commitment has been used to describe obligation-based loyalty within the workplace, but has limited use in nonwork domains. We are interested in understanding the tendencies and motivations that may lie beneath obligation-oriented attitudes and behavior across life domains. Namely, we propose that a *mindset of obligation* describes the individual tendency to initiate and persevere through tasks, projects, and relationships. Accordingly, a mindset of obligation may influence outcomes inside and outside the workplace, such as organizational citizenship, engagement, life satisfaction, and work-family balance. Drawing on research on commitment and motivation, we heed calls by Bergman (2006) and Meyer and Morin (2016) to use a person-centered approach to examine how normative (and other) forms of commitment arise.

A mindset is a “mental frame or lens that selectively organizes and encodes information, thereby orienting an individual toward a unique way of understanding an experience and guiding one toward corresponding actions and responses” (Crum et al., 2013, p. 717). Mindsets (e.g., stress mindset, growth mindset, value mindset) are discussed across the psychology and business literature (Crum & Langer, 2007; Dweck, 2008; Kam et al., 2016; Meyer et al., 2013; Meyer et al., 2015; Stern & Hutchinson, 2004). We adopt “mindset” as a label in our work because, as Fisher (1997) observed, it is a “middle-range kind of word, somewhere between jargon that is too technical and ordinary usage that fails to stimulate fresh thinking” (p. 2). Although it can be experimentally manipulated for short-term effects (e.g., Heintzelman & King, 2016; Taylor & Gollwitzer, 1995), a mindset is generally described as a stable predisposition reflecting how a person views the world. Thus, we suggest that a mindset of obligation forms across one’s life experiences, acting as a lens through which one views new and existing roles and responsibilities across life domains. In conceptualizing this construct, we aim to provide an integrated view of theory on organizational commitment and work motivation, each of which are vast, but largely independent bodies of literature. The organizational commitment literature is centered primarily on persevering, whereas the work motivation literature is focused on initiating roles, tasks, or projects with a sense of focus, energy, and intent to persevere (Pinder, 1998). Viewing these together provides new insight into the implications of the obligation and mindset an individual may experience at work and at home.

Commitment acts as a binding force between the individual and the organization, resulting in employees who are less likely to leave (for a full review, see WeiBo et al., 2010; see also Allen & Meyer, 1990; Klein et al., 2012; Meyer & Herscovitch, 2001). The most common conceptualization of organizational commitment holds that individuals remain with their organizations because they *want* to (affective commitment), they *have* to (continuance commitment), or they feel they *ought* to (normative commitment; Allen & Meyer, 1990; Bergman, 2006; Meyer & Allen, 1996), with normative commitment receiving the least attention, despite its interesting implications. In contrast, motivation is an intrinsic or extrinsic force that drives organizational commitment and other workplace states and behaviors (Battistelli et al., 2013; Pinder, 1998). This driving force determines the direction, intensity, and persistence of an individual’s behavior within a domain.

The commitment and motivation streams of research each focus independently on specific aspects of obligation-related attitudes and behaviors, without accounting for individual factors that may drive both commitment and motivation to engage in certain behaviors. We take an integrated approach, drawing upon both literatures to theoretically conceptualize and empirically investigate a *mindset of obligation* as a predictor of these states. In doing so, we extend work on normative commitment (i.e., the tendency of individuals to remain with their respective organizations out of a sense of obligation) by considering one’s motivation (i.e., obligatory feelings) to both initiate and persist in roles and behaviors across work and nonwork domains. We demonstrate in three studies that a mindset of obligation consists of two distinct components: a pervasive tendency to feel obligated to *initiate* and/or *persevere* with commitments. Additionally, our research contributes by presenting a scale that has been empirically tested for content, construct, criterion, and external validity across three studies. As such, our work contributes to the literature on commitment, motivation, and individual differences. In particular, the presence of different levels of Initiation and Perseverance in individuals may predict organizational citizenship, engagement, and prosocial behaviors, as well as strain and withdrawal, and therefore, might be advantageous in selecting, training, and managing employees.

**Theoretical Foundation for Mindset of Obligation**

Obligation to others, studied by numerous thought leaders dating back to Aristotle, is a sense of being bound to behave in certain ways out of duty and responsibility, which “create obligations that apply to all members of the relevant social group” (Owens, 2012, p. 116). Unlike non-normative obligations (e.g., those based on the dynamics of a specific relationship, such as social exchange; Blau, 1964), normative obligations are driven by internal pressure rooted in deeply held beliefs. To date, several streams of research on obligation have emerged (e.g., Hannah et al., 2014; Ng & Feldman, 2015), and we build on these to provide a comprehensive view of obligation aimed at synthesizing extant knowledge from both commitment and motivation theories.

**Commitment**

Meyer and Allen’s traditional three-component model of organizational commitment (TCM; 1996) has been criticized for being target-dependent (i.e., organization) and lacking definitional clarity (Cohen, 2007; Klein et al., 2012). In response to such concerns, Klein et al. (2012) defined commitment as a “type of bond reflecting volitional dedication and responsibility for a target and conceptualized as a psychological state” (p. 1). Furthermore, Klein et al. and Cohen use normative commitment in conjunction with the other forms of commitment to distinguish instrumental bonds (normative in conjunction with continuance commitment) from psychological attachment (normative in conjunction with affective commitment). This work has made great strides by specifying realistic combinations of aspects of the TCM that can apply across all workplace referents (e.g., commitment to supervisors and coworkers).

Klein et al. 's (2012) and Cohen’s (2007) research also advances commitment theory by conceptualizing commitment as a bond. These authors suggest that a normative mindset (similar to our conceptualization of a mindset of obligation) may act as an antecedent to all types of bonds, in addition to specific commitment attitudes. However, these conceptualizations still blur our understanding of obligation and commitment by focusing on combinations of commitment attitudes rather than the obligation itself. In addition, this type of commitment research is limited to examining perseverance of existing obligations (i.e., focusing on existing bonds and their effects on employee outcomes), while ignoring the initiation of new obligations (i.e., propensity to start new tasks). Therefore, we build on this promising work to suggest that mindset of obligation has targets in all domains of life, not just at work, and that obligation is characterized not only by the feeling that one *ought* to commit (i.e., normative commitment), but also includes some genuine affective *desire* to commit, even if motivated out of a sense of duty. We extend this notion to include not only persevering through existing obligations, but also initiating new obligations out of a sense of duty.

Meyer and Morin (2016) note that the TCM often lacks context and nuance, and Bergman (2006) notes that strong correlations sometimes emerge between the components. Accordingly, we wish to shed light on these nuances by incorporating a person-centered approach. Although variable- and person-centered approaches are similar in that each ultimately seeks to provide insight into the relationship between antecedents and outcomes (Zyphur, 2009), the former focuses on how a set of factors uniquely contribute to an outcome, and the latter is concerned with the relationship between factors that give form to one or more profiles (Gabriel et al., 2015). Thus, we build on promising person-centered research, suggesting that a mindset of obligation has implications for both work and nonwork domains.

Another area where the extant literature on commitment falls short is in the conceptualization of how normative commitment is formed. Although much of the commitment research suggests that it is rooted in post-organizational-entry socialization, some scholars (Allen & Meyer, 1990; Cohen, 2007; Meyer & Herscovitch, 2001; Meyer & Parfyonova, 2010) suggest that normative commitment trait-like orientations (i.e., commitment propensity, personal disposition for loyalty and duty, or work ethic) may actually develop *prior* to organizational entry, early in one’s life (e.g., Dawson et al., 2015). For instance, normative commitment is a stronger predictor of turnover in collectivistic and high power-distance cultures (Clugston, et al., 2000; Meyer et al., 2012). Furthermore, parental norms and expectations lead to commitment in certain domains (e.g., commitment to one’s religion; Dudley & Wisbey, 2000). Dawson et al. (2015) provide further evidence of pre-entry development, demonstrating that family expectations are related to normative commitment among those working in family businesses.

We build on this stream of research that conceptualizes the mindset of obligation not as an attitude that is influenced by the actions, values, and behaviors of the organization, but rather as a propensity that one brings to the organization, influenced by life experiences priorto entry to the organization, across domains and time.  In our efforts to contribute to contemporary work on commitment, we turn to the theory of planned behavior (Ajzen & Fishbein, 1980), which predicts that subjective norms, personal attitudes, and perceived control determine subsequent behavior (Ajzen, 1991; Ajzen & Fishbein, 1973). Subjective norms (i.e., attitudes that affect our behavior) are influenced by normative beliefs, or beliefs of what society expects, and motivation to comply, which focuses on the value or importance one places on the behavior compared to what is expected of others. Normative commitment, a workplace attitude, is one such subjective norm; we conceptualize a mindset of obligation as an antecedent of subjective norms, related to, yet distinct from other antecedents (i.e., normative beliefs and motivation to comply). The theory of planned behavior suggests that individuals will be consistent in approaching obligation-oriented loyalties in each life domain (e.g., work and relationships). Even when they place different priorities on each domain, we propose that some individuals generally approach all domains similarly in terms of their feelings of obligation.

**Motivation in Contrast to Commitment**

     Work motivation, like commitment, has been referred to as a force, “originating from both inside and outside an individual, driving employees toward intentional action” (Pinder, 1998, p. 11). One of the reasons that a mindset of obligation is important to conceptualize is that obligation-oriented motivation appears to exist in the gray area between intrinsic and extrinsic motivation. When intrinsically motivated, one engages in work activities considered interesting and meaningful (Deci & Ryan, 1985; Gagné & Deci, 2005). Otherwise, one’s behavior is controlled by external forces (e.g., rewards or approval from others; Battistelli et al., 2013). For those with a strong mindset of obligation, there is always purposeful, meaningful behavior because fulfilled obligations are in and of themselves the higher-order goals, irrespective of context or tasks (Ajzen & Fishbein, 1980). Thus, an individual’s predisposition toward a prevailing sense of obligation motivates him or her to fulfill tasks and roles; this is perceived as purposeful and meaningful behavior. Although situational characteristics would otherwise cue opportunities for meaningful, motivational experiences based on goal strivings (Barrick et al., 2013), we posit that situational cues matter less for those who have a strong mindset of obligation. By conceptualizing and empirically testing the relationships surrounding the mindset of obligation construct, we offer unique insight into employee motivation, and resulting attitudes, states, and behaviors across life domains.

**Mindset of Obligation: The Intersection of Motivation and Commitment**

Our concept of a mindset of obligation offers an integrated view, representing these two independent bodies of literature, through two dimensions - *Initiation* (i.e., informed by motivation theory; starting new obligations) and *Perseverance* (i.e., informed by commitment theory; finishing existing obligations). The intentional action represented by motivation leads us to propose a dimension regarding *initiating* new roles and responsibilities, which is a shorter-term action. In contrast, the predominance of *perseverance* in the commitment literature points to longer-term action. For example, motivation determines whether one comes to work and contributes each day, regardless of how committed one may be to stay with an employer. A mindset of obligation may motivate such behaviors.

To conceptualize this two-dimensional construct, we draw on Meyer et al. (2004) and Meyer and Morin’s (2016) efforts to integrate the motivation and commitment literatures, in which they invoke motivational mindsets to explain commitment behavior. We add to that discussion, drawing on the theory of planned behavior to posit that one’s mindset of obligation, as an antecedent of subjective norms, is a unique predictor of commitment behavior and other work and nonwork behaviors and outcomes. Therefore, we view a mindset of obligation as one type of motivational mindset, rooted in a sense of moral duty rather than any other personal dynamic or motive, geared at Initiation and Perseverance through tasks, projects, and relationships.

First, *Initiation* refers to one’s perceived obligation to take on new responsibilities, relationships, and roles. People who are high in Initiation feel guilty rejecting new requests, due to a perceived moral obligation to engage whenever called upon. In contrast, *Perseverance* refers to a sense of obligation to fulfill existing roles and tasks (i.e., not quitting). This is distinct from Initiation in that it reflects finishing what one started, versus taking on new responsibilities.

We conceptualize this mindset as a two-dimensional construct because we envision individuals scoring high on one, both, or neither of these dimensions. For example, individuals in romantic relationships who are high in both dimensions are likely to remain in the relationship, perceiving their commitment as long-term, while also trying to fulfill the day-to-day needs and requests of their partners, whereas individuals high on Initiation only would likely feel obligated to say ‘yes’ to everyday needs, but feel less obligated to follow through on meeting those needs or stay in the relationship long-term.

     Saying yes too often could lead to a risk of overcommitment, which would result in a decrease in one’s ability to complete all agreed-upon tasks, in addition to negative outcomes such as exhaustion (Preckel et al., 2005; Siegrist, 2001). In this sense, we may consider Initiation to be maladaptive. The theory of planned behavior suggests that people are more likely to commit to new requests if the requests are compatible with one’s intrinsic higher-order goals (Barrick et al., 2013). Mindset of obligation includes an inherent sense of purpose and meaning derived from devoting oneself to perceived obligations. Thus, we suggest that people high on Initiation will take on new requests, regardless of the circumstances, perhaps because their higher-order goals require them to do so. In that way, people who are high in Initiation may feel that they owe everyone a ’yes’ regardless of the current balance of the social exchange equation (Blau, 1964), or regardless of personal resources available or rewards from those efforts (Hobfoll, 1989; Siegrist, 1996). Accordingly, over time, high levels of Initiation may harm one’s own well-being and ability to focus on the truly highest priorities. In contrast, those with low to moderate levels of Initiation may set more boundaries, perhaps even at the risk of displeasing others, as they do not feel obligated to take on new responsibilities.

High levels of Perseverance should be more adaptive because this involves completing what one starts, and individuals should feel a sense of accomplishment (i.e., intrinsic rewards) when upholding an obligation to finish something. At work, these obligations may be to the employer in general, or to tasks or job roles (Klein et al., 2012). Outside of work, this may include fulfilling promises to a romantic partner, thereby fulfilling one’s own moral obligation. In contrast, those with lower to moderate levels of Perseverance may not feel obligated to follow through on responsibilities, and thus may be perceived as unreliable, unpredictable, or even lazy. Given these distinct characteristics of each dimension of mindset of obligation, we predict:

*Hypothesis 1****.*** Mindset of obligation (a) consists of two distinct dimensions: Initiation and Perseverance, (b) which are differentially associated with work and nonwork outcomes. Initiation is more maladaptive, whereas Perseverance is more adaptive.

**Distinctions of Mindset of Obligation from Established Constructs**

Mindset of obligation is distinct from many other well-known similar constructs, including loyalty and personality traits. First, a mindset of obligation likely yields loyalty, but these are distinct constructs (e.g., James, 2001). It would be possible for one to be loyal without having a mindset of obligation; for example, loyalty rooted in reciprocation or affection (e.g., Park et al., 2019). It is also possible to have a mindset of obligation without feeling loyal to the people or entities to whom one feels obligated.

Mindset of obligation is also distinct from other stable predispositions. Guilt Proneness (Tangney et al., 2000), for example is a measure of deep-seated feelings of guilt across a variety of contexts, and does not involve a feeling of obligation. Similarly, there are facets of the Big Five personality traits (Goldberg, 1999) that are similar to obligation. Altruism, a facet of Agreeableness, involves the feeling of self-fulfillment when acting in the service of others. Dutifulness, a facet of Conscientiousness, is related to the comfort one finds in rules, regulations, and order. None of these other constructs captures one’s obligation-oriented motives for initiating new roles and responsibilities or persevering to those over the long term. We should also note here that our conceptualization of Perseverance in this context is specific to following through with tasks to which one commits. This is separate and distinct from the broader conception of resilience (Caza & Milton, 2012), which involves positive growth and development in the presence of adversity.

*Hypothesis* *2*. The two dimensions of mindset of obligation (Initiation and Perseverance) will exhibit convergent and discriminant validity from other established constructs, such as normative and affective commitment, guilt proneness, altruism, and dutifulness.

**Outcomes of Mindset of Obligation**

We specify potential relationships between mindset of obligation and two categories of life outcomes: strain and withdrawal. Strain represents negative internal states, chronic depletion of valued resources (e.g., time or energy), chronic imbalance of effort invested compared to reward experienced, and/or otherwise generally negative experiences (e.g., exhaustion, disengagement, work-family conflict, dissatisfaction; Halbesleben & Buckley, 2004; Hobfoll, 1989; Siegrist, 1996). Withdrawal includes psychological detachment, including thoughts or actions involving quitting, such as voluntary job turnover or ending romantic relationships.

**Profiles of Mindset of Obligation**

Considering combinations of low, medium, and high levels of Initiation and Perseverance, which are standard cutoffs for considering categories and levels of factors across bodies of academic literature, nine different profiles of mindset of obligation could exist. See Figure 1 for a summary of five profiles that we believe may be the most interesting and relevant to our outcomes of interest. That is, based on the theory of planned behavior and our integrated application of the commitment and motivation bodies of literature, we expect these profiles will exhibit differential levels of the outcomes of interest. Although we describe here some a priori profiles that are theoretically interesting, empirically we use the person-centered approach of latent profile analysis (LPA) to uncover the profiles that may not be theoretically pre-defined but may exist in the population (Marsh et al., 2009; Meyer & Morin, 2016; Muthén & Muthén, 2000; Vermunt, 2010). This profile approach adds more insight into the ways these two dimensions may exist in combination within a person and how those nuances may affect outcomes. For example, instead of only using arbitrarily defined cutoffs at high and low levels of each dimension (as with variable-centered approaches), a person-centered approach reveals the profiles that exist in the sample at varying levels of either dimension, and then explores how the different profiles may experience the world differently in terms of outcomes of interest. We begin by theoretically describing five a priori profiles we believe may emerge and be influential for the outcomes of interest in this paper, based on the literature reviewed thus far.

First, “Reasonable and Responsible” (low Initiation, high Perseverance) individuals tend to follow through on commitments, but they do not experience distress when they reject a new request, so they are better able to manage current responsibilities. Therefore, we expect these individuals to experience positive outcomes across domains as the most adaptive profile overall. Those who are high in both Initiation and Perseverance are likely to be “Busy but Dependable.” Individuals with this profile likely experience self-induced pressure to fulfill all roles to which they have committed, as well as accept new requests and responsibilities, even when too busy or not interested. This could be adaptive in terms of low withdrawal, but could result in higher strain.

In stark contrast, individuals we describe as “Disappearing Yes” (high Initiation, low Perseverance) may feel obligated to say yes to every new request but not to see them through to completion, thus experiencing high withdrawal and strain. Individuals who instead are low or moderate in both Initiation and Perseverance (“Low Obligation” or “Moderate Obligation”) are not bothered by saying no to new requests, nor do they feel a sense of obligation to fulfill agreed-upon obligations, due to fewer higher-order goal strivings for dutiful behavior of either type (i.e., higher withdrawal). However, these individuals who report low or moderate levels of Initiation and Perseverance may have less internal clarity and therefore rely more on situational cues to determine what roles to initiate and through which to persevere. With a lack of cognitive shortcuts, devoting resources toward actively scanning and evaluating situational cues could be taxing. Thus, strain may be moderate to high among these individuals as well.

*Hypothesis 3****.*** *(a)* Distinct profiles will emerge for mindset of obligation, and *(b)* the profiles will be differentially related to both work and nonwork outcomes, such that those with high levels of Initiation and Perseverance will experience the most adaptive outcomes, and those with high levels of Initiation and low levels of Perseverance will experience the most maladaptive outcomes.

**Overview of Studies**

We designed three studies to develop and validate a measure of mindset of obligation and test our hypotheses. In Study 1, we first adapted the traditional normative commitment scale to a nonwork domain, to seek insight on the stability of these tendencies across life domains. We used this as justification to develop a scale assessing mindset of obligation and then evaluate its validity using a sample of working professionals in an evening MBA program. In Study 2, we collect time-lagged data from a field sample of working adults from a variety of industries to replicate Study 1 and to test Hypothesis 3 using LPA and regression techniques. Finally, in Study 3, we conduct a field study of professionals to extend our validation efforts and testing.

**Study 1 Method**

Study 1 included data from 147 working adults, who were offered pizza as an incentive before their classes in an evening MBA program at a university in the southwestern United States. See Appendix A for full sample information.

**Measures**

To initially test if individuals had a stable predisposition to commit that cut across life domains, we adapted the original *normative commitment* scale to refer to romantic relationships, resulting in two normative commitment scales to use in our study. This approach to develop an additional domain specific scale from an established scale in a different domain has been used by other researchers (e.g., Carlson & Perrewe ́, 1999; Luthans, et al., 2013). See Appendix C for items and alphas of the domain-specific normative commitment scales.

Meanwhile, we also developed items that measure the overall concept of a mindset of obligation. Following DeVellis’ (2003) approach for scale development, an initial list of 35 items was created deductively by three researchers familiar with the motivation and commitment literature. Next, this list was presented to a focus group of three graduate students to test for face validity. After briefly explaining the concepts of Initiation and Perseverance, we invited them to add any other items that could be representative of these two concepts. In this step, five more items were added. Next, the three researchers independently grouped items based on whether they tapped into the Initiation dimension, the Perseverance dimension, or neither. If all raters agreed to keep any item (Item-level Content Validity Index, I-CVI, = 1; interrater agreement = 100%), it was carried forward to the next step (15 total items). For items where two out of three raters agreed to keep the items (6 total items; I-CVI = .66; interrater agreement = 66%), discussion ensued until unanimous agreement was reached to either keep or drop those items (4 were kept, 2 were dropped). All items with only one or zero votes to retain were dropped. The result of this process was a list of 19 total items to test with our first sample of participants. After cutting items for poor loading or reliability, the final scale consisted of a two-dimensional measure with six Initiation items, and six Perseverance items (12 total items). In all, this approach focused on the theoretical development of our scale per foundational and recent scale development recommendations (e.g., Hinkin, 1998; Wright et al., 2017), in addition to empirical validation. This led us to keep some items with lower loadings to ensure proper coverage of the construct. Recent recommendations on scale adaptation suggest adequate coverage of the latent factor is as important as higher factor loadings (Heggestad et al., 2019). Coefficient alphas for each measure can be found in Table 1. Items and standardized factor loadings are presented in Appendix B.

Additionally, to assess incremental and construct validity of Initiation and Perseverance, we used different measures of established constructs, including Allen and Meyer’s (1990) eight-item measures of *normative* and *affective* *commitment* (α = .68 and α = .77 respectively).

To further determine construct validity (discriminant and convergent), we also assessed *guilt proneness*, or deep-seated feelings of guilt, using the 12-item subscale of the Tangney et al. (2000) Test of Self-Conscious Affect (TOSCA-3). The scale asks participants to imagine themselves in given situations and rate the likelihood that they would react in a particular way (e.g., “You make plans to meet a friend for lunch at 5:00, and you realize that you stood your friend up. [How likely would it be that] you’d think that you should make it up to your friend as soon as possible?”). We included *Big Five* *personality* measures using 10-item subscales from the International Personality Item Pool (Goldberg, 1999). Using the NEO (Costa & McCrae, 1992), we also measured three relevant facets of the broader Big Five personality constructs: *altruism* (“I am concerned about others”), *dutifulness* (“I try to follow the rules”), and *adventurousness* (“I don’t like the idea of change”). All items used five-point response scales (5 = “strongly agree”).

In designing our study, we used a measure-centric approach to reduce the threat of common method variance (CMV; Spector et al., 2019). Across all study samples, when appropriate, we varied the presentation of scales such that conceptually similar scales were not presented in succession. This also allowed us to vary the response categories (e.g., Likert vs. non-Likert) to reduce entrained or insufficient effort responding. Whereas we present CMV analysis findings below, we note the limitation of such analyses due to high rates of false positives and negatives (i.e., result ambiguity). Accordingly, we integrated this measure-centric approach throughout the broader study.

**Study 1 Results and Discussion**

First, we examined the correlations between normative commitment across domains (work and relationships), confirming a positive relationship (*r* = .28, *p* < .01). This provides initial support that there may be a stable characteristic underlying the tendency to be normatively committed to multiple factors in one’s life.

Thus, we explored the dimensionality of the mindset of obligation scale (Hypothesis 1a). We initially conducted a confirmatory factor analysis (CFA) to determine how well the items load on the Initiation and Perseverance dimensions versus onto one latent construct. To establish the hypothesized factor structure, we modeled the Initiation and Perseverance in three ways. First, we began by loading all items on their respective dimension, and then loading those latent factors on one higher-order factor. This model failed to converge. We then modeled each dimension as independent factors, resulting in a supportive model fit (χ2(53) = 176.91, *CFI* = .91, *SRMR* = .077; Hu & Bentler, 1999). Last, we compared a single-factor structure to the two-factor structure, finding the two-factor structure provided the best fit (χ2(1) = 104.52, *CFI* = .73, *SRMR* = .119). Given these results, we proceed with the conceptualized correlated two-factor model structure. Standardized factor loadings for this model ranged from .43 to .93 and were all significant at *p* < .001 (see Appendix B). This provided support for Hypothesis 1a, suggesting that Initiation and Perseverance are distinct dimensions.

We also assessed the potential threat of CMV using the Initiation, Perseverance, and commitment (normative and relational) items from our study, limiting our analysis to these items for ease of estimation and due to increased likelihood of method bias due to conceptual similarity. We used a residualized trait and method factor approach, loading all items onto their respective latent factors as well as a single method factor (Johnson et al., 2011; Richardson et al., 2011; Spector et al., 2019). The results revealed only 13% of the variance was due to the method factor, which is below the Williams et al. (1989) 25% or less threshold.

Next, we assessed convergent and discriminant validity of mindset of obligation (Hypothesis 2) by examining the correlations between the two dimensions of mindset of obligation and domain-specific normative commitment (see Table 1). All but one of the relations between the two dimensions and the domain-specific normative commitment measures were significant, providing support for Hypothesis 2. Both Initiation and Perseverance were similarly related to the traditional normative commitment for work scale (Initiation *r* = .29, *p* < .01; Perseverance *r* = .34, *p* < .01), but Perseverance had a stronger relationship with Relationships. All correlations were weak enough to suggest a clear convergence, but also a distinction between these attitudes and mindset of obligation.

Next, we examined the association of the two dimensions of mindset of obligation to other related constructs (see Table 1; affective commitment, guilt proneness, personality; Hypothesis 1). As expected, most were significantly correlated to Initiation and/or Perseverance in the expected directions, as evidence of convergent validity. Confirming discriminant validity, all correlations were weak enough to suggest the constructs were distinct (lower than *r* = .35). Neither dimension was significantly related to extraversion nor openness to experience, providing further evidence for discriminant validity over the Big Five.

In summary, Study 1 provided evidence for consistency in normative commitment across two life domains (work and relationships), as well as a two-dimensional factor structure of mindset of obligation (i.e., Initiation and Perseverance; Hypothesis 1a). The correlations of Initiation and Perseverance with different forms of commitment and individual differences provide initial information about the convergence, yet distinctiveness of these two dimensions of mindset of obligation compared to related constructs (Hypothesis 2).

**Study 2 Method**

In Study 2, we collected a larger sample of full-time working professionals to expand external validity evidence and analyze the predictive validity of the dimensions, including the incremental validity of these dimensions over normative commitment, and to conduct a latent profile analysis. We surveyed participants across two different time points. In Wave 1, 828 employees completed the survey, and four weeks later (Wave 2), 426 (50%) responded again.

**Measures**

We used the same measures as in Study 1 for domain-specific normative commitment and mindset of obligation (see Appendices B and C). These measures were assessed in Wave 1 and Wave 2, whereas all additional outcome measures described below were assessed only in Wave 2. All measures used a 5-point response scale (5 = “strongly agree”). We included a measure of *burnout* in this study (16-item Oldenburg Burnout Inventory; Halbesleben & Demerouti, 2005), which assesses work disengagement and exhaustion. Three items from Cammann et al. (1983) assessed *job satisfaction*, and we used the Satisfaction with Life Scale (SWLS) developed by Diener et al. (1985) to measure satisfaction in each nonwork domain with one item each.We took an average of these three items to create *nonwork interpersonal satisfaction*. We measured *work-to-family* and *family-to-work conflict* using the 18-item scale by Carlson et al. (2000). We used Jaros’ (1997) three-item measure to assess work-related withdrawal in the form of *turnover intentions*. To assess the percentage of relationships voluntarily quit by the respondent, we used two items: “How many total serious relationships have you had in your life, including your current relationship (if applicable)?” and, “How many of these relationships did you voluntarily end (i.e., it was your decision to end it)?” We calculated the ratio of number quit to total number of relationships (range: 0 to 1; *M* = .40, which is 40% of relationships voluntarily quit; *SD* = .37). For analyses including this variable, we excluded participants who reported zero relationships.

***Analytic Strategy for Person-Centered Analysis***

A latent profile analysis is recommended to build typologies for constructs that are composed of several dimensions and when the relationship expected between them may vary in subsets of individuals (Meyer & Morin, 2016). Following guidelines from Gabriel et al. (2015), we conducted LPA in MPLUS 8.4, starting with specifying two classes and continuing to add one class at a time until there was no longer an improvement in model fit. See Table 4 for full description of the fit indices used. The best model fit is represented by lower values of LL, AIC, BIC, and SSA-BIC and higher values of entropy. Additionally, LMR and BLRT should be significant at *p* < .05. These rules of thumb should be combined with the theoretical meaning of the profiles that emerge.

     We used an automatic three-step approach to model the distal outcomes (using AUXILIARY = BCH), as recommended by Gabriel et al. (2015) and Gabriel (personal communication, February 17, 2020). Once the optimal number of profiles is found, the procedure assigns the probability of that individual belonging to the assigned class, and then the distal outcomes are assessed in relation to the profile solution. This has an advantage over traditional LPA in that the class solution fit statistics are not changed by the inclusion of the outcome variables, and these steps account for error in profile classification. The result of this procedure is a set of mean differences for each outcome included across profiles, with significance tests of those mean differences.

**Study 2 Results and Discussion**

Correlations and descriptive statistics of each mindset of obligation dimension with the domain-specific normative commitment and outcomes of interestare presented in Table 2. Using the time-lagged data, we calculated correlations between each factor measured in Wave 1 with the same factor in Wave 2, and Initiation (*r* = .73; *p* < .001) and Perseverance (*r* = .68, *p* < .001) were highly correlated across the one-month time lag, suggesting there may be stability in this mindset, and acceptable test-retest reliability. These findings provide preliminary support for the idea that mindset of obligation may be a more stable predisposition, rather than something more transient like an attitude or state.

***Internal Structure of Mindset of Obligation***

Next, we replicated the analysis for model fit of the individual factor models by conducting a CFA for the two dimensions of mindset of obligation (Initiation and Perseverance), in Waves 1 and 2. In both waves, the model fit was best for a two-factor solution allowing the two factors to correlate (see Appendix B, Table B2; Hu & Bentler, 1999). In Wave 1, standardized factor loadings for this model ranged from .39 to .85, and in Wave 2, they ranged from .44 to .82, which mostly meet the minimum factor loading of .40 as recommended by Nunnally (1978; see Appendix B, Table B1); all were significant at *p* < .001. These findings confirmed Study 1 regarding the two-factor structure of the mindset of obligation scale, providing further support for Hypothesis 1a. Last, we repeated our CMV analysis from Study 1 using the same variables collected in the respective waves of Study 2. In both waves, the method factor only accounted for 11% of the variance.

***Predictive and Incremental Validity of Mindset of Obligation***

Providing a test of Hypothesis 1b, we next explored the predictive validity of Initiation and Perseverance on employee states and work and nonwork-related outcomes using ordinary least squares hierarchical regression (see Table 3). We regressed each outcome on both Initiation and Perseverance simultaneously (as measured in Wave 1). Perseverance emerged as a consistent predictor of all outcomes, suggesting that it is indeed an adaptive mindset. Initiation was significantly associated with most of the outcomes as well, but in a maladaptive direction.

Next, we explored the incremental validity of Initiation and Perseverance on employee states and outcomes, adding normative commitment at Step 2 and the Big Five personality traits at Step 3 to the regression models (see Table 3). These effects remained when we added work-focused normative commitment as a predictor, suggesting that Initiation and Perseverance have incremental predictive validity over normative commitment for all outcomes tested. Finally, in Step 3, we added the Big Five personality traits as predictors. These models consistently accounted for more variance in the outcomes, and the effects of Initiation maintained significant levels for most outcomes, but Perseverance was no longer significant[[1]](https://mc.manuscriptcentral.com/apps?DOWNLOAD=TRUE&PARAMS=xik_eLqKz9Y15RS3wW6pjxbpdsotmF6bQDbJfHDEVzXeRu2JWBnC9eH2S3ZSgSd6RjpRW48vU7UowDaSC82t1Ck1Xe6my4kBsR4PBwuhad4urWBuDRtCKSqymo7HaVCkW2cd6okrhyzTdzC3Rgzc23FQUTsFXQ2Azn3pbkAgBPRgs7rX2o5PMrB2Z16P4rbBhcwnhApq9YimZxdfxg6s9nCncptkRpXTdHPLqfAQPW7Cg5qnvKdasN1PfLiRtbP3HLKJ6K5eBS#_ftn1). Emotional stability, agreeableness, and extraversion emerged as the strongest and most consistent predictors from the Big Five. Thus, these results provide preliminary evidence that a mindset of obligation is a distinct construct and has incremental predictive validity over and above normative commitment and personality traits.

***Person-Centered Exploration of Mindset of Obligation Dimensions: Latent Profile Analysis***

Next, we tested Hypothesis 3 using LPA[[2]](https://mc.manuscriptcentral.com/apps?DOWNLOAD=TRUE&PARAMS=xik_eLqKz9Y15RS3wW6pjxbpdsotmF6bQDbJfHDEVzXeRu2JWBnC9eH2S3ZSgSd6RjpRW48vU7UowDaSC82t1Ck1Xe6my4kBsR4PBwuhad4urWBuDRtCKSqymo7HaVCkW2cd6okrhyzTdzC3Rgzc23FQUTsFXQ2Azn3pbkAgBPRgs7rX2o5PMrB2Z16P4rbBhcwnhApq9YimZxdfxg6s9nCncptkRpXTdHPLqfAQPW7Cg5qnvKdasN1PfLiRtbP3HLKJ6K5eBS#_ftn2). The four-profile solution appeared to have the best fit (see Table 4), and both LMR and BLRT became non-significant when adding one more profile. Table 5 summarizes the means and confidence intervals for each profile, as well as the number of people in each profile. Although one profile had a small number of people in it, it was still theoretically meaningful (low Initiation and moderate Perseverance, most closely aligned with the profile we dubbed “Low Obligation”), leading us to report the results of the four-profile solution. In addition, standardized mean differences suggest that mean levels of Initiation and Perseverance for each profile were statistically significant from every other profile, thus supporting Hypothesis 3a.

Finally, we analyzed mean differences in Wave 2 outcomes across profiles (Hypothesis 3b, see Table 6). As shown there, “Reasonable and Responsible” (class 2) individuals exhibited lower levels of strain and withdrawal, including highest levels of satisfaction and commitment, in both work and nonwork domains. “Busy but Dependable” (class 4) individuals reported high satisfaction with moderate role conflict. Interestingly, the “Low Obligation” (class 1, low Initiation and low-to-moderate Perseverance) individuals reported among the lowest levels of family-to-work conflict and turnover intentions compared to any other profile. Individuals with “Moderate Obligation” reported moderate levels of withdrawal and, as predicted, showed a similar level of exhaustion as those individuals with higher Initiation (e.g., “Busy but Dependable”). This initial evidence suggests that finishing what one starts can protect from strain, and those with high levels of obligation toward both Initiation and Perseverance may have lower levels of withdrawal. Overall, we found evidence that profiles are differentially related to outcomes, providing support for Hypothesis 3b.

     In summary, Study 2 provides additional evidence for a two-factor construct reflecting a mindset of obligation, including a predisposition to Initiate and Persevere as distinct tendencies, tested in a field study of employees from a range of industries. These results also provide evidence for predictive and incremental validity of Initiation and Perseverance in relation to work and nonwork outcomes. The mean differences among the four emergent profiles of mindset of obligation in this sample suggest that individuals with lower levels of Initiation and higher levels of Perseverance (“Reasonable and Responsible”) may be the most well-adapted individuals in terms of preserving their own well-being and experiencing the high levels of work and nonwork satisfaction, but “Busy but Dependable” may join them in strong loyalty. However, the latter may also suffer from more role conflict and consider changing jobs more often, perhaps as a result of their full lives. These results also provided initial support for our assertion that individuals with lower and moderate levels of both Initiation and Perseverance may experience similar levels of strain, which we suggested could be due to lack of a clear cognitive schema on when and how to approach commitment in their lives.

**Study 3 Method**

***Participants and Procedure***

In Study 3 we aimed to build on the results of Study 2 by conducting a field survey of employees in seven private and government organizations across the US from the manufacturing, trading, and service industries. We targeted leaders of organizations who were interested in conducting an online engagement survey, inviting 709 full-time employees (274 from corporations and 435 from government organizations); 356 submitted completed surveys (50% response rate). After dropping 60 surveys with a failed attention check, we had a sample size of 296, representing 95 workgroups (an average of 3.1 individuals per workgroup), which should be sufficient for the required power for MLPA, according to Park and Yu (2017). In return for the managers’ support, we provided a report with recommendations to improve workplace engagement.

***Measures***

We used the same measures for *normative* and *affective commitment*, *mindset of obligation*, *exhaustion*, *turnover intentions*, and *job satisfaction*. *Engagement* was measured using the Utrecht Work Engagement Scale (Schaufeli et al., 2006). This scale is scored in the opposite direction as the OLBI, so high scores reflect low strain. We measured *work-to-family conflict* using the three time-related items from the Carlson et al. (2000) scale. High scores reflect high strain in this measure. We also controlled for *organization type* (0 = private sector, 1 = government) since these two types of organizations typically consist of different policies, norms, and culture, likely attracting different types of employees, including on mindset of obligation (Kjeldsen, 2014). All measures used a 5-point response scale (5 = “strongly agree”).

***Analytic Strategy***

For Study 3, we followed the same general approach, but because the data were multilevel, we added one additional step, running multilevel LPA to determine if the size of the profiles varied across workgroups. We adapted the code provided by Mäkikangas et al. (2018) in their Model 2. Following their procedure, we used start values from our initial four-profile solution found for means and variances at the individual level, setting random starting values as zero (so the level-1 profiles would remain unchanged), and specified three between-level profiles (k-1, where k is the number of classes found to be appropriate in our analyses initially reported). Significant variance at the between level would indicate that the number of people in each profile varies by workgroup.

**Study 3 Results and Discussion**

First, we replicated Studies 1 and 2, validating the factor structure and model fit of the mindset of obligation scale (see Appendix B). We also repeated our CMV analysis, less the relational commitment scale due to survey length limitations, and the method factor accounted for only 12% of the variance. Next, the correlations and descriptive statistics for Study 3 constructs and outcomes of interestprovided full support for Hypothesis 1a; the two dimensions of mindset of obligation were significantly associated with each other but distinct (*r* = .29; see Table 7). Study 3 also replicated the direction of the correlation and regression coefficients of Study 2, providing support for Hypothesis 1b in that Initiation was maladaptive and Perseverance was adaptive. Although we found fewer significant relationships between the two factors of mindset of obligation and outcomes compared to the larger sample in Study 2, the direction of the relationships was consistent. Additionally, the Study 3 results mirror Studies 1 and 2 regarding significant or near-significant associations with normative commitment (Initiation; *r* = .11, *p* < .10 and Perseverance: *r* = .28, *p* < .01), supporting Hypothesis 2.

To provide a more robust test of Hypothesis 1a and 1b, we conducted mixed effects multilevel modeling in SAS v9.4 Proc Mixed to account for workgroup membership while testing the incremental predictive validity of each individual dimension of mindset of obligation, Initiation and Perseverance, over normative commitment, on the hypothesized outcomes. We conducted the analyses in two steps for each outcome. First, we entered the control variable organization type and the two predictors, Initiation and Perseverance (Step 1). Then, we entered normative commitment to see if the effects of the predictors held, supporting incremental validity (Step 2). We tested the random intercept fixed slopes models first, which holds constant the relationship between our predictors (Initiation and Perseverance) and the outcomes across teams, then we tested the random intercept random slopes models to assess whether these relationships between Initiation and Perseverance with each outcome varied across teams (Aguinis et al., 2013)[[3]](https://mc.manuscriptcentral.com/apps?DOWNLOAD=TRUE&PARAMS=xik_eLqKz9Y15RS3wW6pjxbpdsotmF6bQDbJfHDEVzXeRu2JWBnC9eH2S3ZSgSd6RjpRW48vU7UowDaSC82t1Ck1Xe6my4kBsR4PBwuhad4urWBuDRtCKSqymo7HaVCkW2cd6okrhyzTdzC3Rgzc23FQUTsFXQ2Azn3pbkAgBPRgs7rX2o5PMrB2Z16P4rbBhcwnhApq9YimZxdfxg6s9nCncptkRpXTdHPLqfAQPW7Cg5qnvKdasN1PfLiRtbP3HLKJ6K5eBS#_ftn3). We report the results of the latter in Table 8, including Pseudo *R2* for each model following recommendations of Snijders and Bosker (1994).

Initiation was significantly associated with exhaustion, engagement, job satisfaction, and affective commitment; higher levels of Initiation had more detrimental effects. In contrast, Perseverance was significantly associated with engagement, job satisfaction, affective commitment, and normative commitment; higher levels of Perseverance had beneficial effects. These effects held even when normative commitment was added as a predictor in Step 2. Overall, these results are consistent with the bivariate correlations and with Study 2, lending further insight into the relative adaptiveness of Initiation versus Perseverance (Hypothesis 1b), as well as convergent and discriminant validity of these factors from normative commitment (Hypothesis 2), and incremental validity over normative commitment. Replicating Study 2, perseverance was positively related to affective and normative commitment to their employing organization. In contrast to Study 2, initiation was only significantly associated with normative commitment, but not affective commitment.

***Person-Centered Exploration of Mindset of Obligation: LPA***

  Next, we tested Hypothesis 3a using LPA (see Table 4)[[4]](https://mc.manuscriptcentral.com/apps?DOWNLOAD=TRUE&PARAMS=xik_eLqKz9Y15RS3wW6pjxbpdsotmF6bQDbJfHDEVzXeRu2JWBnC9eH2S3ZSgSd6RjpRW48vU7UowDaSC82t1Ck1Xe6my4kBsR4PBwuhad4urWBuDRtCKSqymo7HaVCkW2cd6okrhyzTdzC3Rgzc23FQUTsFXQ2Azn3pbkAgBPRgs7rX2o5PMrB2Z16P4rbBhcwnhApq9YimZxdfxg6s9nCncptkRpXTdHPLqfAQPW7Cg5qnvKdasN1PfLiRtbP3HLKJ6K5eBS#_ftn4). A four-profile solution again exhibited the best fit according to most of the indices, and LMR became non-significant when adding one more profile. As shown in Table 5, two of the four profiles were identical to those in Study 2 (i.e., “Moderate Obligation” and “Busy but Dependable”) and the other two had similar means. The standardized mean differences for both Initiation and Perseverance were significantly different across most profiles, supporting Hypothesis 4a that distinct profiles would emerge.

Due to the multilevel data, we also took one additional step, using multilevel LPA, in that we specified the workgroup as the cluster variable. The variances were not significant at the between level, suggesting these profile results are not influenced by workgroup membership (Class #1: Variance = .27, SE = 2.14, p = .90; Class #2: Variance = 1.57, SE = 1.75, p = .37; Variance = .24, SE = .40, p = .56). Furthermore, mean levels were similar to the levels reported in Table 5, so we only report those individual-level LPA results.

Testing Hypothesis 3b, we again tested mean differences in outcomes across profiles (see Table 6). As shown there, individuals with moderate levels of Initiation and high levels of Perseverance (class 2), who represented 60% of the sample, exhibited moderate levels of strain and withdrawal, with high levels of satisfaction, and engagement. Yet “Busy but Dependable” reported the highest levels of engagement and satisfaction, and lower turnover intentions. All four profiles represented in this sample exhibited similar levels of exhaustion (moderate) and role conflict (moderate), perhaps because all these profiles had moderate to high levels of Initiation. “Moderate Obligation” reported moderate levels in all outcomes. Overall, the levels of strain and withdrawal in the profiles “Moderate Obligation” and “Busy but Dependable” were consistent across Studies 2 and 3. Surprisingly, similar levels of exhaustion were experienced by individuals with “Moderate Obligation” and “Busy and Dependable” profiles, providing some insight that strain is not only experienced by individuals that initiate many tasks, but also by those who do not finish what they start. These results further support Hypothesis 3b.

         In conclusion, Study 3 provides further support for our propositions that Initiation and Perseverance are two distinct aspects of a mindset of obligation with incremental validity over normative commitment. The person-centered approach proved to be valuable in understanding the combined effect of different levels of each domain. as it provides a more accurate description of what to expect from individuals in terms of profiles that exist and outcomes that are associated with each profile. The overall message seems to be that people who feel obligated to finish what they start can experience the most beneficial outcomes (Perseverance), whether or not one feels obligation to start new responsibilities (Initiation).

**General Discussion**

Drawing theoretical insights from both the organizational commitment and work motivation bodies of literatures, building on recent work using a person-centered approach (Meyer & Morin, 2016), and reconceptualizing organizational commitment (Cohen, 2007; Klein et al., 2012), we applied the theory of planned behavior to propose a stable predisposition, *mindset of obligation*. Over three studies, we found evidence for our conceptualization of  a mindset of obligation, with relevance for both work and nonwork outcomes. All studies contribute empirical evidence for convergent, discriminant, incremental, and predictive validity of the scale we developed across different industries and organizations, and consistently support a two-factor structure. The moderate positive correlations between work- and relationship-focused normative commitment further support the idea that this attitude may be rooted in a stable disposition, such as a mindset of obligation.

Our results broadly suggest that high levels of Initiation may be maladaptive, whereas high levels of Perseverance may be adaptive for reducing strain and withdrawal. We also describe four distinct profiles of a mindset of obligation that emerged using LPA and the outcomes experienced by individuals with those profiles. Consistent with our theorizing, “Reasonable and Responsible” and “Busy but Dependable” experience the most beneficial work and nonwork outcomes. Two of our theorized profiles (i.e., “Low Obligation” and “Disappearing Yes”) were not clearly present in any sample, which indicate that individuals with those profiles might not be prevalent in the work environments represented in our samples, or at least to the extent we theorized in conceptualizing them. Three other profiles (i.e., Moderate Initiation, Low Perseverance; Low Initiation, Moderate Perseverance; and Moderate Initiation, High Perseverance) also emerged, which may not as neatly fit into our proposed categories, and only appeared in one study each.

Because some differences did emerge across studies in the profiles, it may be useful to consider those differences in more detail. Profiles from Study 2 may be more representative of the general population, since we included professionals from across industries and professions in that sample, without focusing on any specific organization in our recruitment, as we did in Study 3. If so, this might suggest that the dominant profile in the population is Moderate Obligation (middle levels of both dimensions, with slightly higher perseverance (3.58) than obligation (3.08), 73% of sample 2, but only 11% of sample 3). The Moderate Initiation, High Perseverance group in Study 3 may be more similar to this Study 2 Moderate Obligation group than we thought (we considered this closer to the “Reasonable and Responsible” profile originally), and it was the largest profile in that study (60%; I = 3.28, P = 4.01). Outcomes were moderately worse for both of these groups in each respective study than the “Reasonable and Responsible” (Study 2) and “Busy but Dependable” (Studies 2 and 3) profiles. Although LPA is an exploratory method, and therefore differences are expected across samples, these particular differences suggest that even “established” profiles may vary across settings in their intensity (i.e., their particular level of each dimension). However, the general findings for each dimension in relation to outcomes across life domains remain important to consider both theoretically and practically.

**Theoretical Contributions**

This work bridges the bodies of literature on commitment and motivation by specifying a mindset of obligation construct and conducting initial validation on a cross-domain measure. By taking an integrated approach that considers theory on both commitment and motivation, we offer theoretical insight into the higher-order goal strivings, or motivational mindset, that individuals may have, and how these may trigger obligation-oriented behavior, including both short-term initiation and longer-term perseverance. This insight alone may be valuable to commitment theories in social psychology (e.g., Rhoades et al., 2010; Rusbult et al., 1998; Stanley & Markman, 1992) and organizational psychology to better conceptualize and expand the relevance of commitment (Cohen, 2007; Klein et al., 2012; Meyer & Herscovitch, 2001; Mowday et al., 1982). The theory of planned behavior was useful for elucidating these dynamics, which we posited are fostered over a lifetime of exposure to social norms and evolving motivation to comply with those social norms (Ajzen & Fishbein, 1980; Barrick et al., 2013). Thus, the measure of mindset of obligation developed here provides scholars with a tool to assess the mindset of obligation and how it relates to different commitment and motivation concepts and work and nonwork outcomes.

We further contribute to the commitment literature by advancing an ongoing effort to improve upon the TCM (Bergman, 2006; Cohen, 2007; Klein et al., 2012; Le et al., 2010; Meyer & Morin, 2016). Specifically, our conceptualization of a mindset of obligation focuses on a predisposition developed prior to entering an organization, is relevant to nonwork domains, and avoids use of any antecedents or outcomes in its definition. We also shed theoretical insight into how some affective aspects could be inherently part of the mindset of obligation, since socialized norms are often embraced by an individual as one’s own values. Thus, people who possess a mindset of obligation may behave in certain ways not only begrudgingly because they “ought to,” but may genuinely *want* to, as a result of a lifetime of socialization toward such behavior. Our research suggests that positive benefits may be associated with Perseverance, but Initiation may carry more risks. Future research is needed to further elucidate the particulars of each profile, the role of socialization in developing a mindset of obligation, and the long-term implications. Combining this line of research with the relationship commitment literature in social psychology may also reveal further useful insights into how and why people commit to targets across life domains (e.g., Murray et al., 2017; Park et al., 2019).

Finally, we also provide insight into a gray area where both extrinsic and intrinsic motivation are relevant in predicting behavior. Whereas extrinsic motivation may be relevant for obligation because it is defined by a perceived sense of duty to others, intrinsic higher-order goal-strivings may intrinsically motivate one to act on their mindset of obligation. Our results suggest that positive benefits may be associated with Perseverance, but the potential detrimental effects of Initiation cannot be ignored. Perhaps these differences emerged because Perseverance is most focused on attaining existing goals and obligations, to which one has already committed internally, rather than the external focus involved in initiating new obligations. The theory of planned behavior is useful for understanding how combinations of distinct levels of Perseverance and Initiation predict different outcomes, but more research is needed into the underlying processes, to better understand how and why a mindset of obligation may affect specific outcomes. Linking research findings on intrinsic versus extrinsic regulation may be one avenue for exploring these processes.

**Practical Contributions**

Our work also has practical implications in the selection, training, and management of personnel within organizations. Management with a better understanding of how different levels of Initiation and Perseverance may impact work outcomes and with means to identify the levels of Initiation and Perseverance in individuals, can be more effective in tailoring training curriculum and selecting management tools that improve work outcomes like socialization team building, team effectiveness, engagement, and citizenship behavior. For example, managers can perhaps rely on team members with a “Reasonable and Responsible” profile and focus resources to manage the strain and withdrawal of individuals who have moderate and low levels of Initiation. When individuals have a “Busy but Dependable” mindset, managers might help these engaged employees by ensuring they have sufficient resources to complete all commitments and still maintain their well-being. Finally, when individuals reveal a “Moderate Obligation” profile, managers could be more hands-on to coach or redistribute tasks that might not be completed.

These results also have practical implications outside the work domain, much like other individual differences and personality traits. Results for nonwork-related interpersonal satisfaction and relationship withdrawal suggest that the most well-adapted profile for one’s personal life could be “Reasonable and Responsible” – those who do not feel obligated to commit to everyone and every role, but feel it is important to fulfill one’s existing commitments. By better understanding individual levels of Initiation and Perseverance, counselors, coaches, and even one’s friends and family members can communicate more effectively together, understanding each other, and encouraging individuals in areas where they may naturally struggle by helping them understand the mindset of obligation and the effects it may have across situations.

**Limitations and Future Directions**

The present research is not without limitations, and we encourage future research to build upon the studies we have presented. Although we demonstrated preliminary evidence of stability with our time-lagged data across one month (Study 2), we did not have longitudinal data to make robust statements about stability in the mindset of obligation (Mowday et al., 1979). We encourage further study of mindset of obligation across time to understand its long-term effects on work and nonwork outcomes, including self- and other-rated outcomes, as well as explicit study of lifelong socialization experiences and priorities of various life domains, perhaps in conjunction with other socialized traits (e.g., self-confidence; Tharenou et al., 1994). We also encourage further multilevel field studies with larger samples and subsamples to ensure appropriate power for MLPA analyses. Although we had a reasonable number of participants and workgroups, larger sized workgroups would enhance confidence in the MLPA results (Park & Yu, 2017). Measurement invariance analyses would also be valuable in future studies with more participants to further understand the factor structure of mindset of obligation across time and samples (Marsh et al., 2018; Munck et al., 2018; Yuan & Chan, 2016).  Joint studies of strong situational factors, such as leadership and conflict, would also shed insight on the “Moderate Obligation” profile and on the strength of the mindset of obligation across situations.

Another limitation is that a few of our standardized factor loadings fell slightly below the typical cutoff of .40 across studies. This suggests these items may not tap into the latent construct as well as items with higher factor loadings. However, in developing this measure, we maintained two important implicit goals. First, we sought to avoid developing a measure that featured too many items and too many dimensions. Excessive factors and items open the door to weak definitions and redundancy (Flora & Flake, 2017). Second, we wanted to ensure the latent construct was well-covered. Whereas selecting only the items with the highest factor loadings may result in better model fit, doing so risks underrepresentation of the latent construct (Heggestad et al., 2019).

Additionally, it is necessary for future research to position this mindset in its appropriate context with respect to organizational commitment. Normative commitment can undoubtedly occur without the mindset of obligation; it is likely also influenced by post-entry evaluations of one’s organization, whereas mindset is likely more stable. Further untangling the conceptualization and effects of commitment and motivation constructs with a mindset of obligation would add valuable theoretical insight (Bergman, 2006). Additional research can also reveal which profiles are more prevalent in different types of populations.  It is our hope that scholars interested in commitment, motivation, and individual differences will use this work to continue to integrate these literatures, shedding light on motives for commitment, the source of those motives, and how motives interact with other important individual and situational factors to affect important cross-domain outcomes.

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**Table 1**

***Correlations of Mindset of Obligation Dimensions with Covariates – Study 1 (N = 147)***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Factor | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1. Initiation | (.86) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Perseverance | .24\*\* | (.69) |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. NC – Work | .29\*\* | .34\*\* | (.79) |  |  |  |  |  |  |  |  |  |  |  |
| 4. NC – Relationships | .11 | .47\*\* | .28\*\* | (.76) |  |  |  |  |  |  |  |  |  |  |
| 5. Guilt Proneness | .15 | .32\*\* | .22\* | .14 | (.82) |  |  |  |  |  |  |  |  |  |
| 6. Openness  | -.11 | .09 | -.03 | -.18 | -.02 | (.74) |  |  |  |  |  |  |  |  |
| 7. Agreeableness | -.06 | .23\*\* | .24\*\* | .38\*\* | .17\* | .32\*\* | (.70) |  |  |  |  |  |  |  |
| 8. Conscientiousness | -.18\* | .34\*\* | .14 | .04 | .29\* | .12 | .17\* | (.86) |  |  |  |  |  |  |
| 9. Emotional Stability | -.20\* | .21\*\* | -.01 | .08 | .21\* | .22\* | .26\*\* | .34\*\* | (.83) |  |  |  |  |  |
| 10. Extraversion | -.11 | .16 | .07 | .02 | .05 | .33\*\* | .22\* | .31\*\* | .38\*\* | (.88) |  |  |  |  |
| 11. Altruism | .05 | .31\*\* | .09 | .29\*\* | .40\*\* | .15 | .43\*\* | .11 | .16 | .11 | (.59) |  |  |  |
| 12. Dutifulness | .02 | .41\*\* | .26\*\* | .38\*\* | .48\*\* | .08 | .37\*\* | .41\*\* | .26\*\* | .13 | .42\*\* | (.79) |  |  |
| 13. Adventurousness | -.18\* | .02 | -.16 | .04 | .04 | .45\*\* | .30\*\* | .11 | .37\*\* | .46\*\* | .11 | .13 | (.79) |  |
| 14. Affective Commitment | .24\*\* | .15 | .42\*\* | .19\* | .07 | -.07 | .19\* | .01 | .10 | .09 | .04 | .21\* | .02 | (.83) |
| Mean | 3.36 | 3.92 | 3.04 | 4.07 | 4.18 | 3.52 | 3.85 | 3.84 | 3.77 | 3.50 | 3.63 | 4.14 | 3.37 | 3.18 |
| SD | .67 | .48 | .70 | .58 | .58 | .54 | .44 | .58 | .60 | .69 | .35 | .44 | .59 | .74 |

*Note.* Coefficient alphas appear in diagonal. NC = Normative Commitment; NC-Work represents the traditional Normative Commitment scale. \*\* *p* < .01; \* *p* < .05; † *p* < .10.

**Table 2**

***Correlations of Mindset of Obligation Dimensions with Outcomes – Study 2 (N = 426)***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Factor | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1. Initiation | (.86) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Perseverance | .09\* | (.74) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. NC Work | .22\*\* | .38\*\* | (.74)/(.75) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. NC Relationships | .07† | .46\*\* | .29\*\* | (.80)/(.81) |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Exhaustion | .27\*\* | -.27\*\* | -.14\*\* | -.09† | (.82) |  |  |  |  |  |  |  |  |  |  |  |
| 6. Disengagement  | .03 | -.33\*\* | -.34\*\* | -.06 | .57\*\* | (.80) |  |  |  |  |  |  |  |  |  |  |
| 7. Work-Family Conflict | .30\*\* | -.21\*\* | .04 | -.17\*\* | .71\*\* | .31\*\* | (.92) |  |  |  |  |  |  |  |  |  |
| 8. Job Satisfaction | -.08 | .33\*\* | .33\*\* | .15\*\* | -.59\*\* | -.71\*\* | -.45\*\* | (.88) |  |  |  |  |  |  |  |  |
| 9. Non-work Satisfaction | -.01 | .31\* | .22\*\* | .22\*\* | -.24\*\* | -.27\*\* | -.17\*\* | .25\*\* | (.73) |  |  |  |  |  |  |  |
| 10. Percent Relationship Quit | -.04 | -.09\* | .00 | -.17\*\* | .11\* | -.00 | .19\*\* | -.01 | -.09\* | - |  |  |  |  |  |  |
| 11. Turnover Intentions  | .16\*\* | -.28\*\* | -.32\*\* | -.17\*\* | .47\*\* | .52\*\* | .41\*\* | -.66\*\* | -.25\*\* | -.12\* | (.86) |  |  |  |  |  |
| 12. Conscientiousness | -.10\*\* | .49\*\* | .19\*\* | .23\*\* | -.32\*\* | -.25\*\* | -.29\*\* | .27\*\* | .25\*\* | -.07 | -.19\*\* | (.88) |  |  |  |  |
| 13. Emotional Stability | -.24\*\* | .45\*\* | .12\*\* | .21\*\* | -.51\*\* | -.39\*\* | -.38\*\* | .34\*\* | .39\*\* | -.05 | -.33\*\* | .44\*\* | (.87) |  |  |  |
| 14. Extraversion | -.06 | .30\*\* | .18\*\* | .05 | -.28\*\* | -.29\*\* | -.14\*\* | .17\*\* | .29\*\* | .05 | -.06 | .33\*\* | .41\*\* | (.87) |  |  |
| 15. Agreeableness | -.05 | .38\*\* | .19\*\* | .27\*\* | -.35\*\* | -.34\*\* | -.29\*\* | .32\*\* | .31\*\* | -.06 | -.23\*\* | .41\*\* | .50\*\* | .26\*\* | (.82) |  |
| 16. Openness to Experience | -.03 | .14\*\* | -.01 | -.04 | -.14\*\* | -.15\*\* | -.14\*\* | .05 | .05 | -.02 | .09 | .26\*\* | .18\*\* | .29\*\* | .28\*\* | (.73) |
| Mean | 3.09 | 3.76 | 3.06 | 3.77 | 2.71 | 2.69 | 2.65 | 3.70 | 3.83 | 0.43 | 2.58 | 3.86 | 3.51 | 3.12 | 3.78 | 3.51 |
| SD | 0.74 | 0.55 | 0.64 | 0.70 | 0.69 | 0.67 | 0.88 | 0.92 | 0.80 | 0.53 | 1.08 | 0.61 | 0.68 | 0.68 | 0.57 | 0.56 |

*Note.* Coefficient alphas appear in diagonal, with Wave 1 appearing first and Wave 2 appearing second, where applicable. Sample size for Wave 1, *N* = 828. NC = Normative Commitment; NC Work represents the traditional Normative Commitment scale. \*\* *p* < .01; \* *p* < .05.

**Table 3**

***Predictive and Incremental Validity of Mindset of Obligation Dimensions for Outcomes - Study 2 (N = 426)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent variable | Independent variable | *Step 1* | *Step 2* | *Step 3* |
|  |  | *b (SE)* | *b (SE)* | *b (SE)* |
| Exhaustion | Intercept | 2.72\*\* (.03) | 3.05\*\* (.17) | 5.33\*\* (.34) |
|  | Initiation | .26\*\* (.04) | .28\*\* (.04) | .14\*\* (.04) |
|  | Perseverance | -.34\*\* (.06) | -.29\*\* (.06) | .03 (.07) |
|  | NC |  | -.11\* (.05) | -.09† (.05) |
|  | Conscientiousness |  |  | -.10 (.06) |
|  | Emotional Stability |  |  | -.37\*\* (.06) |
|  | Extraversion |  |  | -.05 (.05) |
|  | Agreeableness |  |  | -.13\* (.06) |
|  | Openness to Experience |  |  | -.00 (.06) |
|  | *R2* | .14 | .15  | .30 |
| Disengagement | Intercept | 2.69\*\* (.03) | 3.60\*\* (.16) | 5.44\*\* (.34) |
|  | Initiation | .03 (.04) | .07 (.04) | -.02 (.04) |
|  | Perseverance | -.40\*\* (.06) | -.29\*\* (.06) | -.07 (.07) |
|  | NC |  | -.30\*\* (.05) | -.28\*\* (.05) |
|  | Conscientiousness |  |  | .03 (.06) |
|  | Emotional Stability |  |  | -.22\*\* (.06) |
|  | Extraversion |  |  | -.09† (.05) |
|  | Agreeableness |  |  | -.18\*\* (.06) |
|  | Openness to Experience |  |  | -.07 (.06) |
|  | *R2* | .11 | .17 | .26 |
| Work-Family Conflict | Intercept | 2.66\*\* (.04) | 2.32\*\* (.22) | 4.67\*\* (.46) |
|  | Initiation | .37\*\* (.06) | .36\*\* (.06) | .25\*\* (.06) |
|  | Perseverance | -.34\*\* (.07) | -.38\*\* (.08) | -.07 (.09) |
|  | NC |  | .11 (.07) | .11 (.07) |
|  | Conscientiousness |  |  | -.20\* (.08) |
|  | Emotional Stability |  |  | -.30\*\* (.08) |
|  | Extraversion |  |  | .08 (.07) |
|  | Agreeableness |  |  | -.17† (.07) |
|  | Openness to Experience |  |  | -.03 (.08) |
|  | *R2* | .13 | .13 | .21 |
| Job Satisfaction | Intercept | 3.71\*\* (.04) | 2.52\*\* (.23) | 0.62 (.49) |
|  | Initiation | -.11† (.06) | -.15\* (.06) | -.07 (.06) |
|  | Perseverance | .54\*\* (.08) | .40\*\* (.08) | .14 (.09) |
|  | NC |  | .39\*\* (.07) | .38\*\* (.07) |
|  | Conscientiousness |  |  | .11 (.09) |
|  | Emotional Stability |  |  | .22\*\* (.08) |
|  | Extraversion |  |  | -.05 (.07) |
|  | Agreeableness |  |  | .26\*\* (.09) |
|  | Openness to Experience |  |  | -.03 (.08) |
|  | *R2* | .11 | .17 | .21 |
| Non-work Satisfaction | Intercept | 3.83\*\* (.03) | 3.34\*\* (.15) | 1.63\*\* (.31) |
|  | Initiation | -.04 (.04) | -.07† (.04) | .03\* (.04) |
|  | Perseverance | .46\*\* (.05) | .40\*\* (.06) | .12 (.06) |
|  | NC |  | .16\*\* (.05) | .12\* (.05) |
|  | Conscientiousness |  |  | .03 (.06) |
|  | Emotional Stability |  |  | .28\*\* (.05) |
|  | Extraversion |  |  | .18\*\* (.05) |
|  | Agreeableness |  |  | .17\*\* (.06) |
|  | Openness to Experience |  |  | -.13\* (.05) |
|  | *R2* | .10 | .11 | .21 |
| Dependent variable | Independent variable | Step 1 | Step 2 | Step 3 |
|  |  | *b(SE)* | *b(SE)* | *b(SE)* |
| Intentions to Quit | Intercept | 2.58\*\* (.05) | 4.12\*\* (.27) | 4.77\*\* (.57) |
|  | Initiation | .24\*\* (.07) | .30\*\* (.07) | .23\*\* (.07) |
|  | Perseverance | -.56\*\* (.09) | -.36\*\* (.09) | -.16 (.11) |
|  | NC |  | -.50\*\* (.09) | -.49\*\* (.09) |
|  | Conscientiousness |  |  | -.06 (.10) |
|  | Emotional Stability |  |  | -.35\*\* (.09) |
|  | Extraversion |  |  | .18\*(.08) |
|  | Agreeableness |  |  | -.17 (.11) |
|  | Openness to Experience |  |  | .25\*\* (.09) |
|  | *R2* | .10 | .17 | .22 |
| Percent Relationships Quit | Intercept | .43\*\* (.02) | .31\*\* (.11) | .46† (24) |
|  | Initiation | -.02 (.03) | -.03 (.03) | -.03 (.03) |
|  | Perseverance | -.09\* (.04) | -.11\*\* (.04) | -.09† (.05) |
|  | NC |  | .04 (.04) | .03 (.04) |
|  | Conscientiousness |  |  | -.05 (.04) |
|  | Emotional Stability |  |  | -.02 (.04) |
|  | Extraversion |  |  | .08\* (.04) |
|  | Agreeableness |  |  | -.02 (.05) |
|  | Openness to Experience |  |  | -.02 (.04) |
|  | *R2* | .01 | .01 | .01 |
| Affective Commitment | Intercept | 3.19\*\* (.04) | 1.73\*\* (.19) | 0.66 (.41) |
|  | Initiation | -0.02 (.05) | -0.08 (.05) | -0.001 (.05) |
|  | Perseverance | 0.42\*\* (.07) | 0.24\*\* (.07) | 0.08 (.08) |
|  | NC |  | 0.48\*\* (.06) | 0.45\*\* (.06) |
|  | Conscientiousness |  |  | -0.07 (.07) |
|  | Emotional Stability |  |  | 0.23\*\* (.07) |
|  | Extraversion |  |  | 0.08 (.06) |
|  | Agreeableness |  |  | 0.13† (.08) |
|  | Openness to Experience |  |  | -0.05 (.07) |
|  | *R2* | .08 | .20 | .25 |
| Normative Commitment | Intercept | 3.06\*\* (.02) | - | 2.82\*\* (.23) |
|  | Initiation | 0.17\*\* (.03) | - | 0.17\*\* (.03) |
|  | Perseverance | 0.42\*\* (.04) | - | 0.37\*\* (.05) |
|  | Conscientiousness |  | - | 0.04 (.04) |
|  | Emotional Stability |  | - | -0.07 (.04) |
|  | Extraversion |  | - | 0.12\*\* (.04) |
|  | Agreeableness |  | - | 0.11\* (.05) |
|  | Openness to Experience |  | - | -0.13\*\* (.04) |
|  | R2 | .18 | - | .19 |

*Note.* Adjusted *R2* is reported. Interactions between initiation and perseverance (grand-mean centering of these predictors before creating the interaction terms) were tested and all were non-significant. All predictors were measured in Wave 1, and all outcomes were measured in Wave 2, except family-work conflict and non-work satisfaction. \*\* *p* < .01; \* *p* < .05; † *p* < .10.

**Table 4**

***Fit Statistics for Profile Structures in Studies 2 and 3***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. of profiles | LL | FP | AIC | BIC | SSA-BIC | LMR (p) | BLRT (p) | Entropy |
| Study 2 (*N* = 426) |
| 2 | -1362.05 | 7 | 2738.09 | 2770.05 | 2747.82 | .0039 | .0000 | 0.812 |
| 3 | -1341.25 | 10 | 2702.49 | 2748.14 | 2716.39 | .0194 | .0000 | 0.624 |
| **4** | **-1331.38** | **13** | **2688.75** | **2748.10** | **2706.82** | **.0170** | **.0000** | **0.690** |
| 5 | -1313.93 | 16 | 2659.85 | 2732.89 | 2682.09 | .0642 | .0000 | 0.818 |
| Study 3 (*N* = 296) |
| 2 | -573.87 | 7 | 1161.73 | 1188.20 | 1165.99 | .0082 |  | 0.377 |
| 3 | -563.76 | 10 | 1147.52 | 1185.32 | 1153.60 | .2106 |  | 0.758 |
| **4** | **-588.35** | **13** | **1142.69** | **1191.84** | **1150.61** | **.0216** |  | **0.812** |
| 5 | -555.48 | 16 | 1142.95 | 1203.44 | 1152.69 | .3826 |  | 0.752 |
| *Note.* LL = log-likelihood; FP = free parameters; AIC = Akaike information criteria; BIC = Bayesian information criteria; SSA–BIC = sample-size adjusted BIC; LMR = Lo, Mendell, and Rubin (2001) test; BLRT = bootstrapped log-likelihood ratio tests. Bolded rows indicate best fitting models. |

**Table 5**

***Descriptive Information per Latent Profile for Studies 2 and 3***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Class number | % of Sample (n) | Initiation | Perseverance | Standardized mean differences |
|  |  |  |  | 1 | 2 | 3 | 4 |
|  |  | M | 95% CI | M | 95% CI | I | P | I | P | I | P | I | P |
| Study 2  |
| 1 Low I Moderate P | 1% (5) | 1.33 | [0.81, 1.85] | 2.72 | [1.93, 3.51] | - | - | -0.66\* | -1.72\* | -1.84\* | -0.97\* | 2.81\* | -1.71\* |
| 2 Reasonable and  Responsible | 10% (72) | 2.06 | [1.75, 2.36] | 4.18 | [3.79, 4.57] |  |  | - | - | -1.18\* | 0.75\* | -2.15\* | 0.02 |
| 3 Moderate Obligation | 73% (517) | 3.08 | [2.90, 3.25] | 3.58 | [3.45, 3.71] |  |  |  |  | - | - | -0.98\* | -0.74\* |
| 4 Busy but Dependable | 16% (116) | 3.86 | [3.52, 4.19] | 4.16 | [3.86, 4.46] |  |  |  |  |  |  | - | - |
| Study 3 |
| 1 Moderate I Low P | 1% (3) | 3.16 | [2.44, 3.88] | 2.39 | [2.14, 2.63] | - | - | -0.12 | -1.62\* | 0.21 | -0.89\* | -0.49 | -2.36\* |
| 2 Moderate I High P | 60% (193) | 3.28 | [3.17, 3.39] | 4.01 | [3.97, 4.04] |  |  | - | - | 0.33\* | 0.73\* | -0.36\* | -0.75\* |
| 3 Moderate Obligation | 11% (37) | 2.95 | [2.74, 3.16] | 3.27 | [3.20, 3.34] |  |  |  |  | - | - | -0.70\* | -1.48\* |
| 4 Busy but Dependable | 28% (91) | 3.64 | [3.50, 3.79] | 4.75 | [4.70, 4.80] |  |  |  |  |  |  | - | - |

*Note.* Standardized mean differences (effect sizes) are presented for each study, with each number representing the standardized difference in Initiation (I) or Perseverance (P) between the class in each row and the class in each column (positive differencesindicate that the mean for the row class is higher than the column class). For Study 2, we used ANOVA with post-hoc Tukey tests generate mean difference significance tests. For Study 3, we used Proc Mixed in SAS with LSMEANS to generate least mean square difference significance tests, which allowed us to take the multilevel data into consideration. CI = confidence interval. \* *p* < .05.

**Table 6**

***Three-Step Results for Distal Outcomes for Studies 2 and 3***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Outcomes | Class 1*Low I Moderate P* | Class 2*Reasonable and Responsible* | Class 3*Moderate Obligation* | Class 4*Busy but Dependable* | Chi-Square |
| Study 2 (*N* = 426) |
| Exhaustion | 2.82 | 2.0134 | 2.802 | 2.822 | 18.41\*\* |
| Disengagement | 3.09 | 2.353 | 2.8224 | 2.373 | 12.28\*\* |
| Affective Commitment | 3.01 | 3.713 | 3.0224 | 3.553 | 16.51\*\* |
| Normative Commitment | 2.3424 | 3.25134 | 2.8424 | 3.67123 | 63.60\*\* |
| Work-family Conflict | 2.47 | 1.7134 | 2.742 | 2.922 | 24.96\*\* |
| Family-work Conflict | 1.5634 | 1.3634 | 2.4212 | 2.6012 | 154.54\*\* |
| Job Satisfaction | 4.44 | 4.543 | 3.4724 | 4.143 | 30.22\*\* |
| Non-work Satisfaction | 2.752 | 4.39134 | 3.812 | 3.822 | 11.50\*\* |
| Percentage Relationships Quit | 0.79 | 0.35 | 0.46 | 0.37 | 5.93 |
| Turnover Intentions | 1.3134 | 1.5934 | 2.7812 | 2.4412 | 59.94\*\* |
| Outcomes | Class 1*Moderate I Low P* | Class 2*Moderate I**High P* | Class 3*Moderate Obligation* | Class 4*Busy but Dependable* | Chi-Square |
| Study 3 (*N* = 296) |
| Exhaustion | 2.62 | 2.55 | 2.68 | 2.55 | 1.11 |
| Engagement | 3.55 | 3.6434 | 3.1824 | 3.8423 | 32.29\*\* |
| Affective Commitment | 2.87 | 3.5434 | 3.0524 | 3.7923 | 23.80\*\* |
| Normative Commitment | 2.5424 | 3.15134 | 2.8924 | 3.46123 | 33.41\*\* |
| Work-family Conflict | 2.33 | 2.35 | 2.59 | 2.39 | 1.03 |
| Job Satisfaction | 3.33 | 4.093 | 3.5524 | 4.183 | 17.24\*\* |
| Turnover Intentions | 2.33 | 2.323 | 2.7924 | 2.173 | 9.04\* |
| *Note.* All analyses were run utilizing the BCH procedure in MPlus. The values for all outcomes are means. In Study 2, data were available for 710 participants. Subscripts indicate which profiles were significantly different from that profile at *p* < .05. \**p* < .05; \*\**p* < .01. |

**Table 7**

***Average Within-Group Correlations of Mindset of Obligation Dimensions with Outcomes – Study 3* (*N* = 296)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Factor | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Initiation | (.74) |
| 2. Perseverance | .29\*\* | (.65) |
| 3. Normative Commitment | .11† | .28\*\* | (.76) |
| 4. Exhaustion | .11† | .01 | -.14\* | (.84) |
| 5. Engagement | -.01 | .18\*\* | .33\*\* | -.51\*\* | (.91) |
| 6. Work-family conflict | .07 | .02 | -.12\* | .28\*\* | -.09 | (.93) |
| 7. Job satisfaction | -.06 | .11† | .36\*\* | -.57\*\* | .69\*\* | -.19\*\* | (.82) |
| 8. Intentions to quit | .01 | -.08 | -.37\*\* | .43\*\* | -.44\*\* | .16\*\* | -.66\*\* | (.84) |
| Mean | 3.34 | 4.12 | 3.2 | 2.56 | 3.64 | 2.34 | 4.04 | 2.37 |
| SD | 0.68 | 0.51 | 0.58 | 0.66 | 0.60 | 0.96 | 0.79 | 0.98 |

*Note.* Coefficient alphas appear in diagonal. Correlation coefficients represent the average of all within-workgroup correlations in the sample for each pair of variables.

*\*\* p<.01; \* p<.05;*† *p<.10.*

**Table 8**

***Predictive and Incremental Validity of Mindset of Obligation for Outcomes – Study 3* (*N =* 296)**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | *Step 1* | *Step 2* |
| Dependent variable | Independent variable | *γ (SE)* | *γ (SE)* |
| Exhaustion | Intercept | 2.59\*\* (.38) | 2.99\*\* (.40) |
|  | Org Type | -0.40\*\* (.08) | -0.41\*\* (.08) |
|  | Initiation | 0.19\*\* (.06) | 0.19\*\* (.06) |
|  | Perseverance | -0.11 (.08) | -0.05 (.08) |
|  | Normative Commitment |  | -0.19\*\* (.06) |
|  | *Pseudo R2* | .09 | .12 |
| Engagement | Intercept | 2.73\*\* (.32) | 2.14\*\* (.33) |
|  | Org Type | 0.43\*\* (.07) | 0.42\*\* (.07) |
|  | Initiation | -0.18\*\* (.05) | -0.16\*\* (.05) |
|  | Perseverance | 0.30\*\* (.07) | 0.19\*\* (.07) |
|  | Normative Commitment |  | 0.31\*\* (.05) |
|  | *Pseudo R2* | .05 | .13 |
| Work-Family Conflict | Intercept | 2.61\*\* (.73) | 2.97\*\*(.78) |
|  | Initiation | -0.13 (.14) | -0.14 (.13) |
|  | Perseverance | 0.09 (.18) | 0.24 (.17) |
|  | Normative Commitment |  | -0.30\* (.14) |
|  | *Pseudo R2* | .00 a | .05 |
| Job Satisfaction | Intercept | 3.20\*\* (.39) | 2.49\*\* (.41) |
|  | Org Type | 0.46\*\* (.09) | 0.44\*\* (.07) |
|  | Initiation | -0.20\*\* (.07) | -0.28\*\* (.06) |
|  | Perseverance | 0.31\*\* (.09) | 0.18† (.11) |
|  | Normative Commitment |  | 0.46\*\* (.06) |
|  | *Pseudo R2* | -.01 a | .25 |
| Intentions to Quit | Intercept | 3.00\*\* (.49) | 4.34\*\* (.51) |
|  | Org Type | -0.31\* (.13) | -0.37\*\* (.11) |
|  | Initiation | 0.10 (.09) | 0.13 (.08) |
|  | Perseverance | -0.19 (.12) | -0.03 (.12) |
|  | Normative Commitment |  | -0.65\*\* (.09) |
|  | *Pseudo R2* | .03 | .14 |
| Affective Commitment | Intercept | 2.40\*\* (.32) | 1.42\*\* (.31) |
|  | Org Type | 0.59\*\* (.10) | 0.60\*\* (.09) |
|  | Initiation | -0.13† (.07) | -0.17\*\* (.05) |
|  | Perseverance | 0.29\*\* (.08) | 0.16\* (.07) |
|  | Normative Commitment |  | 0.51\*\* (.06) |
|  | *Pseudo R2* | .08 | .19 |
| Normative Commitment | Intercept | 1.86\*\* (.28) | - |
|  | Org Type | -0.02 (.08) | - |
|  | Initiation | 0.06 (.06) | - |
|  | Perseverance | 0.28\*\* (.07) | - |
|  | Normative Commitment | - | - |
|  | Pseudo R2 | .16 | - |

*Note.* Fixed effects are reported from random intercepts random slopes models (RIRSM), except where *R2* value is denoted by a, in which results from random intercepts fixed slopes models (RIFSM) are reported, due to lack of convergence for RIRSM (Aguinis et al., 2013). Pseudo *R2*is calculated as the proportional reduction of level 1 and level 2 error variances resulting from adding predictors (compared to a null-model with no predictors). The cluster variable was group ID, represented by workgroup led by the one common supervisor who completed the surveys on behalf of employees. Org Type reflects type of employer (0=private or publicly-traded company, 1=government organization).

\*\* *p* < .01; \* *p* < .05; † *p* < .10.

**Appendix A**

**Sample Details for each Study**

**Study 1:** This sample included 57% male, 42% White; 16% Hispanic; 19% Asian American; 7% African American). The participants were on average 29 years old (*SD* = 9.3), worked 35 hours per week (*SD* = 17.8), and had worked in their current jobs for two years (*SD* = 3.0).

**Study 2:** Participants in this sample were recruited via SurveyMonkey Audience, an online service that allows its panel members to collect points to contribute to charities in return for completing online surveys. The final sample included 40% White; 2% Hispanic/Latino; 3% Asian/Asian American; 2% African American/Black; 53% male; M age = 48.7 years, *SD* = 6.3; M = 29 hours worked per week, *SD* = 41.4; and M tenure = 39 months, *SD* = 12.7.

**Study 3:** The sample was 58% male, 40% White (15% Hispanic, 9% Asian American, 23% African American), with an average age of 33.6 years of age (SD = 12.4) and average tenure of 5.3 years (SD = 6.4).

**Appendix B**

**CFA Statistics for Mindset of Obligation**

**Table B1**

**Standardized Factor Loadings from CFA for Mindset of Obligation Dimensions**

|  |  |
| --- | --- |
| Initiation | Perseverance |
| Item | Study 1(*N* = 147) | Study 2 Wave 1 (*N* = 828) | Study 2 Wave 2(*N* = 426) | Study 3(*N* = 296) | Item | Study 1(N = 147) | Study 2 Wave 1 (N = 828) | Study 2Wave 2(N = 426) | Study 3(*N* = 296) |
| 1. I find myself saying “yes” to requests more often than I say “no”. | .61 | .62 | .57 | .69 | 1. I am not a quitter. | .63 | .69 | .71 | .69 |
| 2. I have no problem saying “no” to requests. (Reversed) | .56 | .62 | .62 | .30 | 2. I was taught that it is important to stay loyal. | .45 | .45 | .55 | .51 |
| 3. I feel obligated to say “yes” to most requests. | .81 | .76 | .67 | .67 | 3. Quitting is incongruent with my belief system. | .55 | .54 | .48 | .57 |
| 4. I feel guilty when saying “no” to a request made of me. | .81 | .80 | .77 | .72 | 4. In general, I do not voluntarily quit. | .63 | .65 | .63 | .65 |
| 5. I am disappointed with myself when I do not commit to a request. | .54 | .74 | .71 | .65 | 5. I tend to quit when things are not going well. (Reversed) | .42 | .46 | .40 | .61 |
| 6. I am not happy with myself when I have to say “no” to requests made of me. | .63 | .74 | .76 | .76 | 6. I feel obligated to see things through to the end. | .51 | .67 | .60 | .63 |

**Table B2**

**Model Fit Comparisons for Mindset of Obligation in Studies 1, 2, and 3**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | χ2 | df | *p* | CFI | SRMR |
| Study 1 | 176.91 | 53 | <.001 | .91 | .077 |
| Study 2 Wave 1 | 699.72 | 53 | <.001 | .90 | .075 |
| Study 2 Wave 2 | 304.24 | 53 | <.001 | .93 | .068 |
| Study 3 | 228.36 | 53 | <.001 | .91 | .062 |
| *Note.* Weighted least squares (WLSMV) estimator used for all models. Study 1, *N* = 147; Study 2, Wave 1, *N* = 828; Study 2, Wave 2, *N* = 426; Study 3. *N = 296.*  *df* = degrees of freedom; CFI = Comparative Fit Index; SRMR = Standardized Root Mean Square Residual. |

**Appendix C**

**Scales for Normative Commitment across Domains**

***Work (Items represent the original normative commitment scale of organizational commitment; Allen & Meyer, 1990)***

1. I think that people these days move from company to company too often.
2. I do not believe that a person must always be loyal to his or her organization (R).
3. Jumping from organization to organization does not seem at all unethical to me. (R).
4. If I got another offer for a better job elsewhere, I would not feel it was right to leave my organization.
5. One of the major reasons I continue to work for my current organization is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.
6. I was taught to believe in the value of remaining loyal to one organization.
7. Things were better in the days when people stayed with one organization for most of their careers.
8. \* I do not think that wanting to be a “company man” or “company woman” is sensible anymore (R).

***Relationships***

1. I think that people these days give up on their marriages too easily.
2. I do not believe that a person must always be loyal to his or her marriage (R).
3. Divorce does not at all seem unethical to me (R).
4. I believe that married people have a moral obligation to remain married.
5. I was taught to believe in the value of remaining loyal to one’s marriage.
6. Things were better in the days when people stayed married for life.
7. I do not think that wanting to be a fully dedicated husband or wife is sensible anymore (R).

***Notes:*** (R) Item was reverse-coded. Response scale: 5 = “strongly agree.” Alphas: Study 1: coefficient alpha = .79 and .76 for work and relationships, respectively; Study 2 Wave 1: .74 and .80 for work and relationships, respectively; Study 2 Wave 2: .75 and .81 for work and relationships, respectively.

\* Item was not used, due to poor reliability in a pilot study

[1] As seen in Table 4, Perseverance is correlated at .49 and .45 with conscientiousness and emotional stability, respectively, which could explain this decrease in significance.

[2] We also tested the two-way interaction between Initiation and Perseverance predicting the same outcomes, but it was not significant in any model. LPA gives more nuanced information about the way these dimensions may exist and work together using person-centered analysis.

[3] Variance in slopes across teams could result from selection, culture, or other group-level factors that result in similar individuals working within a workgroup. Although we could have also conducted the analyses using organization membership as a third analysis level (workgroups clustered within organizations), we opted to use organization type as a control variable. This was a dummy code that allowed us to preserve power and still control for variance attributed to differences in governmental versus private sector organizations.

[4] We also tested the interaction of Initiation and Perseverance in predicting all outcomes using regression, but again none were significant.