A Profile of Profiles: A Meta-Analysis of the Nomological Net of Commitment Profiles

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Although the majority of empirical commitment research has adopted a variable-centered approach, the person-centered or profiles approach is gaining traction. One challenge in the commitment profiles literature is that names are attached to profiles based on the within-study comparison among profiles and their relative levels and shapes. Thus, it is possible that different studies name the same profiles differently or different profiles similarly because of the context of the other profiles in the study. A meta-analytic approach, combined with multilevel latent profile analysis (LPA) that accounts for both within- and between-sample variability, is used in this study to examine the antecedents and outcomes of commitment profiles. This helps solve the naming problem by examining multiple data sets (K = 40) with a large sample (N = 16,052), obtained by contacting commitment researchers who voluntarily supplied primary data to bring further consensus about the phenomenology of profiles. LPA results revealed 5 profiles (Low, Moderate, AC-dominant, AC/ NC-dominant, and High). Meta-analytic results revealed that high levels of bases of commitment were associated with value-based profiles whereas low levels were associated with weak commitment profiles. Additionally, value-based profiles were associated with older, married, and less educated participants than the weak commitment profiles. Regarding outcomes of commitment, profiles were found to significantly relate to focal behaviors (e.g., performance, tenure, and turnover) and discretionary behaviors (e.g., organizational citizenship behaviors). Value-based profiles were found to have higher levels of both focal and discretionary behaviors for all analyses. Implications for the commitment and profile literature are discussed.

Keywords: organizational commitment, commitment profiles, profile analysis, latent profile analysis, meta-analysis

Organizational commitment has traditionally been investigated with three mindsets: affective (AC), normative (NC), and continuance (CC) commitments; respectively, they reflect bonds based in desire, obligation, and need (Meyer & Allen, 1997; Meyer & Herscovitch, 2001). Most research to date has investigated the three mindsets of commitment in terms of the effects that each one individually has on outcomes (i.e., variable-centered approach), with the rare article examining interactions among the mindsets and their effects on outcomes (e.g., Gellatly, Meyer, & Luchak, 2006; Meyer, Stanley, & Parfyonova, 2012; Wasti, 2005). Re-

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cently, commitment research has begun to utilize person-centered approaches, whereby commitment profiles are defined by grouping individuals into homogenous subsets based on relative endorsement of AC, NC, and CC (Meyer & Parfyonova, 2010) using methods such as cluster analysis (Wasti, 2005), median splits (Gellatly et al., 2006), or latent profile analysis (LPA; Meyer et al., 2012)

Although there is growing consensus regarding the commitment profiles that occur (Meyer et al., 2012), there are a number of factors that limit the previous research on profiles. First, although many profile studies have relatively large sample sizes, profile analyses segment the sample into homogenous subgroups, oftentimes leading to comparisons between small groups. While this segmentation is the purpose of profile creation, segmented subpopulations in relatively small studies can significantly limit a researcher's ability to make inferences from the results. Second, virtually all profile studies have focused on outcomes of commitment profiles, largely ignoring predictors of commitment. As a result, a number of theoretical questions about how commitment profiles develop are left unanswered. Third, the few studies that have taken a person-centered approach to commitment have used a variety of profile-generating techniques, some of

which are based on inappropriate assumptions (Meyer et al., 2012) and could also explain the contradictory findings this nascent field has found (McLachlan & Peel, 2000).

Most important, profiles are generated within-sample and subsequently are named and interpreted within the context of one study. Profiles have both shape and level (Morin & Wang, in press), but the interpretation of the shape and level is influenced by the other profiles that are found. For example, what is "high" in one sample could easily be "moderate" in another. Although this is appropriate within-study, because the question is how do people who are relatively high on commitment behave compared with people who are relatively moderate on commitment, this also limits the ability for the commitment literature to move forward because the inconsistencies in naming

profiles across studies makes it difficult to draw clear, unambiguous conclusions about the relationship between any profile and any antecedent, correlate, or consequence of commitment.

Fortunately, the foundational tripartite commitment model has remained largely unchanged in the more than 20 years since its development by Meyer and colleagues, so any archival data set that utilized Meyer's three commitment mindset framework could be used to address current empirical questions. To that end, the purpose of this article is to use archival data provided by many commitment researchers in a meta-analysis (K=40; N=16,052; see Table 1 for a summary) to: (a) determine which profiles are phenomonologically experienced using a single analysis method across a variety of data sets; (b) examine which variables predict the various profiles found

Table 1
Relevant Sample Characteristics for Each Primary Sample

Reference	Sample number	N	% Male	Sample tenure	Industry category ^a	North American ^b	Measure ^c	Published ^d
Bergman, Benzer, & Kabins								
(2012a)	1	303	51.50%	7.63	5	1	1	0
Bergman, Benzer, & Kabins								
(2012b)	1	254	46.40%	.75	6	1	3	0
	2	131	45.70%	2.67	6	0	3	0
Bergman (2002)	1	300	38.00%	5.70	5	1	3	0
Bingham, Mitchell, Bishop, &								
Allen (2013)	1	300	NA	7.88	NA	1	1	0
	2	271	NA	2.88	6	1	1	0
Carpenter & Berry (2012)	1	241	41.90%	1.51	5	1	1	0
Kabins & Heckert (2008)	1	97	80.90%	7.83	4	1	3	0
	2	125	6.50%	9.02	4	1	3	0
Lee et al. (2001)	1	227	NA	NA	NA	0	NA	1
Markovits et al. (2007)	1	484	47.30%	11.00	5	0	3	1
Markovits et al. (2010)	1	618	50.00%	NA	5	0	3	1
Markovits et al. (2008)	1	521	48.50%	7.00	5	0	3	1
Markovits (2011)	1	643	42.40%	5.00	5	0	4	1
McInnis (2012)	1	291	41.10%	4.83	5	1	3	0
McInnis et al. (2009)	1	301	53.00%	6.80	5	1	3	1
	2	147	50.70%	5.80	5	1	3	1
McNally & Irving (2010)	1	287	57.00%	2.00	6	1	3	1
Meyer et al. (2012)	1	402	15.20%	6.63	5	1	3	1
Leiva et al. (2004)	1	530	35.00%	5.07	6	1	3'	0
Topolnytsky (2002)	1	699	32.70%	10.79	4	1	3	1
Tsoumbris & Xenikou (2010)	1	157	36.30%	NA	5	0	3	1
Lapointe et al. (2011)	1	404	46.20%	7.41	5	1	3'	1
Stinglhamber et al. (2002)	1	650	53.50%	4.75	5	0	3'	1
Vandenberghe & Peiro (1999)	1	998	58.70%	13.06	5	0	1'	1
Bentein et al. (2005)	1	578	71.50%	3.67	5	0	3	1
Vandenberghe et al. (2007)	1	133	46.60%	1.01	4	0	3'	1
Vandenberghe et al. (2001)	1	579	42.40%	11.30	4	0	6	1
Vandenberghe et al. (2011)	1	515	36.10%	3.15	4	1	3'	1
Vandenberghe & Tremblay (2008)	1	232	47.20%	10.03	4	0	3'	1
	2	221	81.40%	5.09	5	0	3'	1
Vandenberghe & Panaccio (2012)	1	211	55.70%	4.01	5	0	3	1
	2	146	67.80%	6.60	5	0	3	1
	3	301	46.50%	9.16	5	0	3	1
Wasti (2005)	1	326	82.40%	2.81	4	0	6	1
	2	906	54.70%	2.28	5	0	3	1
	3	1124	84.80%	5.66	5	0	6	1
Wasti (2002)	1	457	91.40%	8.14	NA	0	6	0
Wasti (2002)	1	350	47.20%	3.51	4	0	3	1
Wasti & Can (2008)	1	445	80.80%	3.33	4	0	5	1

a Industry category: 1 = manufacturing, 2 = healthcare, 3 = finance and insurance, 4 = other, 5 = mixed industries, 6 = student sample. b North American: 0 = not North American sample, 1 = North American sample. c Measure: 1 = Allen & Meyer (1990), 1' = revised version of Allen & Meyer (1990), 2 = Allen & Meyer (1996), 3 = Meyer, Allen, & Smith (1993), 3' = revised version of Meyer, Allen, & Smith (1993), 4 = Powell & Meyer (2004), 5 = Meyer, Barak, & Vandenberghe (1996), 6 = mixed measures. d Published: 0 = unpublished, 1 = published.

using a consistent profile nomenclature; and, (c) investigate the effects of commitment profiles on various outcomes using a consistent profile nomenclature.

Variable-Centered Versus Person-Centered Approaches to Commitment Research

Traditionally, commitment is theorized and empirically studied via variable-centered approaches in which each of the commitment mindsets is linearly related to relevant outcomes and, less frequently, predictors (Meyer & Parfyonova, 2010). This approach's primary advantage is that it allows researchers to isolate the relationships between mindsets and outcomes or predictors, an important first step in understanding cause-effect relationships (Shadish, Cook, & Campbell, 2002). Numerous important findings have come out of the variable-centered approach (Cohen, 1992; Cohen-Charash & Spector, 2001; Jaramillo, Mulki, & Marshall, 2005; Mathieu & Zajac, 1990; Meyer et al., 2002; Riketta, 2002). However, the effects of the individual commitment mindsets on relevant workplace outcomes have been modest (Meyer et al., 2002) and this could be because the mindsets interact intraindividually (Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001). Meyer and Herscovitch (2001) argued that when any of the mindsets cause an effect (e.g., the negative relationship between any of AC, NC, or CC and turnover intentions), then the ability to detect incremental effects of mindsets on outcomes would be diminished as would the simple main effects themselves.

In contrast, person-centered approaches identify differences among individuals in how variables are related to each other (Muthén & Muthén, 2000). Thus, the person-centered approach to commitment identifies subgroups who share similar patterns of various commitment mindsets (i.e., commitment profiles) and thus accommodates complex and varying combinations of commitment mindsets. The person-centered approach to commitment has gained attention since Meyer and Herscovitch (2001), which provided some general propositions about joint effects of mindsets on focal (i.e., requisite aspects of the work) and discretionary (i.e., nonrequisite aspects of the work) behaviors, using median splits as exemplars. The person-centered approach (i.e., profile approach) allows for different questions to be answered than are addressed by the variable-centered approach. In particular, the interactive effects of commitment are better understood via person-centered approaches than variable-centered approaches, because the personcentered approach allows for complex combinations among all possible commitment mindsets at all possible levels of each mindset, which is necessary to understand and detect the complex interactions that are proposed in recent developments in commitment theory (Aguinis, Gottfredson, & Wright, 2011; Meyer et al., 2013) and that cannot be accomplished using regression interactions from the variable-centered approach (Meyer et al., 2013).

The Current Study

The current study moves the profiles of commitment literature forward by taking a meta-analytic approach to understanding commitment profiles. This approach has the advantage, like all meta-analyses, of reducing the effects of sampling error, file-drawer issues, and unreliability by examining questions across multiple data sets from multiple researchers to provide an estimate of the

construct-level effects (Hunter & Schmidt, 2004). The general methodology differs here in that primary, rather than secondary, data analysis is used. This will be discussed further in the Method section. Likewise, by utilizing a single analysis method on a large archival sample, we are better able to (a) accurately model the profiles (McLachlan & Peel, 2000) and (b) utilize a single nomenclature when assessing various profile relationships.

The current study has three aims. The first is to determine which profiles most commonly emerge. Because profiles are named in the context of individual studies, it is possible, for example, that a High profile in one study looks like the Moderate profile in another study if one looks only at the mean levels of the mindsets that describe the centroid of the profile rather than the relative rankings of these means within studies. This inconsistency of profile names across studies limits the generalizability and applicability of the literature, as it is difficult to determine what effects are occurring. Although it is unlikely that, for example, an AC/NC-dominant profile from one sample would be comparable with a CC-dominant profile in another, it is easy to envision a situation in which a High profile in one sample is similar to a Moderate profile in another or in which an AC-dominant profile in one sample is equivalent to an AC/NC-dominant profile in another. Further, the inconsistency in profile names precludes a traditional secondary data meta-analysis, because profiles with comparable names cannot be assumed to be equivalent profiles across samples and, therefore, their effects should not be combined in a traditional secondary data meta-analysis. This study attempts to resolve this problem by collecting archival samples to conduct meta-analysis on primary data while simultaneously using a single nomenclature applied across studies. Consequently, both the emerged profiles and their relationships to outcomes can be consistently evaluated.

The second aim is to examine the relationships between profiles and predictors of commitment. Predictors of commitment have had significantly less research attention than outcomes of commitment (Meyer et al., 2002), especially in the person-centered approach. There is no reason why this should be the case, but the same focus on outcomes occurred in the early years of the variable-centered approach to commitment. Understanding the causes of commitment is essential for developing and sustaining commitment in the workplace. Further, predictor effects are likely to differ for the profile and variable approaches. This is because the variable approach assumes linear effects whereas the profile approach does not; this allows for the possibility of effects such as a low level of a predictor being associated, for example, with each of CC-dominant, NC-dominant, and CC/NC-dominant profiles.

The final aim is to examine the relationships between profiles and outcomes of commitment. Although there is already considerable attention to outcomes of commitment in both the variable-centered and the burgeoning person-centered commitment literature, examining the effects of profiles on outcomes in this study is important for several reasons. First, as noted above, because of the inconsistencies in profile names across samples, it is difficult to

¹ For example, we were able to reproduce the same profile results of the only published commitment latent profile analysis (LPA) article available in our dataset (Meyer et al., 2012), though our interpretation of one of the two Moderate profiles in Meyer et al. (2012) was interpreted as an AC-dominant profile, adding further credence to the nomenclature issue. AC = affective commitment.

know what effects are occurring consistently in the literature. Second, because the effects of commitment have been given considerable theoretical attention, including outcomes in this study is important to validate our work and to evaluate commitment theory. Finally, although commitment profiles have gained considerable attention in very recent years, it is still a very young literature. In fact, the 40 samples herein represent a larger number of samples submitted to LPA than has already been published in the commitment literature.

Thus, the three aims here each make important contributions to the commitment literature. These three aims are discussed in greater detail next.

Aim 1: What Profiles Are Typically Phenomenologically Experienced?

Our first research aim is to determine what profiles are typically phenomenologically experienced. Meyer et al. (2012) provided both a narrative review of profile research as well as additional empirical analyses of the consequences of commitment on focal behaviors (Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001), discretionary behaviors (Meyer & Herscovitch, 2001), and regulatory cognitions (Meyer, Becker, & Vandenberghe, 2004). Meyer et al. (2012) described the seven profiles typically found in previous empirical research (see Figure 1 for a summary) that can be categorized into three broad groups according to the effects that they typically have on positive outcomes (e.g., job performance, low turnover): (a) profiles with strong positive effects (High, AC/NC-dominant, and AC-dominant profiles); (b) profiles with weak positive effects or no effects (NC/CC-dominant and CCdominant profiles); and, (c) profiles with negative effects (low and medium profiles). The first two categories align with previously developed theory (Meyer, Becker, & Van Dick, 2006). The third category (profiles with negative effects) is emergent in the literature but can be understood via commitment theory (Meyer & Herscovitch, 2001).

Value-Based Versus Exchange-Based Profiles

The profiles that fall into the first two categories (i.e., profiles with strong positive effects, profiles with weak positive effects or no effects) can be understood in the context of Meyer et al.'s (2006) dichotomy of value- and exchange-based commitments, respectively (see Figure 2). Value-based commitments are characterized by shared ideologies, beliefs, and deep identification between the person and the organization. In contrast, exchange-based profiles are typified by a transactional mindset, whereby the person's sense of membership is based on the fulfillment of a contract and/or performance is contingent on an exchange of goods or services (Meyer et al., 2006).

Meyer et al. (2006) argued that any profile with high AC (regardless of the other mindsets) is a value-based profile whereas exchange-based profiles are typified by the absence of AC and the presence of either high NC, high CC, or both. Value-based profiles are strongly linked with self-determined, autonomous behavior (Meyer et al., 2004) and are based in deep-seated identification with the organization because of the person's identity, values, or other important and personally central characteristics (Meyer et al., 2006). In contrast, the dominating experience of exchange-based commitments is transactional, not ideological. Exchange-based profiles still represent a commitment to the organization, but they are less internalized than value-based profiles. When the terms of the transaction are completed or change, commitment should also change. Thus, exchange-based profiles reflect a bond to the organization that recognizes that continued organizational membership is a means to an end for obtaining desired outcomes.

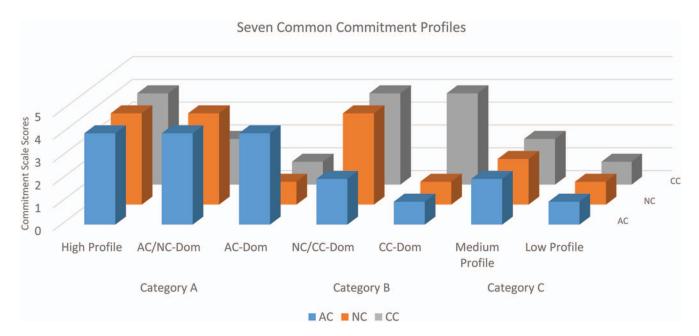


Figure 1. Common commitment profiles. AC = affective commitment; NC = normative commitment; CC = continuance commitment; Dom = dominant. See the online article for the color version of this figure.

Profiles

Value-Based Profiles
(Strong Positive Outcome Profiles)

Exchange-Based Profiles (Weak Positive Outcome Profiles)

Weak Profiles (Negative Outcome Profiles)

High AC/NC-Dominant AC-Dominant

Description

Individuals who share congruent values with the focus of their commitment, dominated by a desire to remain connected.

NC/CC-Dominant CC-Dominant

Description

Individuals whose experiences with their organizations are defined by the exchanges they make and wish for the exchange to continue. This profile is dominated by an obligation/need to remain. Low Moderate

Description

Individuals who have weak or no commitment, dominated by a desire to detach from their bond.

Figure 2. Description of profiles. AC = affective commitment; NC = normative commitment; CC = continuance commitment. See the online article for the color version of this figure.

Notably, the overall experience of commitment is driven in large part by the level of AC experienced and the other mindsets are subordinate to AC in the phenomenology of commitment (Meyer et al., 2004; Meyer & Herscovitch, 2001). Therefore, the first major factor in determining the phenomenology of a commitment profile is the presence of AC. For example, a profile that is high in both AC and CC would be value-based because of the presence of the high level of AC; the high level of CC does not reduce the experience of the commitment as rooted in values, despite the fact that a profile with high CC and low AC and NC is exchange-based. Instead, the high level of CC is experienced in the context of the high AC and, for example, might merely reflect the reality of the labor market and side bets the employee has relative to the employment relationships in the organization.

Weak Profiles

The second major factor in the phenomenology of a commitment profile is whether there is a dominating mindset at all. Whereas value- and exchange-based commitments both have at least one dominating mindset that describes the phenomenological experience of commitment, we propose that weak commitments are marked by the *absence* of a high level of any commitment mindset; instead, AC, NC, and CC are each Low to Moderate. If there is no strong experience of any mindset, then there is no bond.

Meyer et al. (2012) documented that Low profiles are common in the empirical literature and they, along with medium profiles, often have negative effects on commitment outcomes. Meyer and Herscovitch (2001) posited the presence of a Low commitment (or uncommitted) profile when describing possible profiles using median-splits as exemplars. Meyer et al. (2006) did not further describe weak commitments because they focused on strong bonds (i.e., value-based and exchange-based commitment).

Despite the fact that the nature of weak profiles has not been addressed directly in previous work, the presence of these profiles and their effect on outcomes is consistent with commitment theory. Without a bond, there is little to spur the individual to a course of action. As a result, we propose that to feel committed, at least one of the mindsets must be high; and then, the pattern of mindsets interact intraindividually to determine how the commitment bond is experienced phenomenologically. That is, a dominant mindset anchors the bond to the organization while the other mindsets further refine the commitment experience (i.e., value-based, exchange-based commitment). When there is no dominant mindset, there is no bond.

One consequence of this view is that there are phenomenologically interactive effects among the mindsets, so individuals do not add up their CC, NC, and AC to make up a "total" commitment amount. If that were true, individuals with moderate levels of all three mindsets might have a greater total

commitment than individuals with a single dominant mindset (e.g., AC-dominant), which does not appear to be the case based on theory (Meyer & Herscovitch, 2001) or the effects of profiles on outcomes (Meyer et al., 2012). Instead, the mindsets together describe the bond. If each mindset is moderate, the resultant bond is moderate at best. Likewise, the Low commitment profile has no dominating experience of commitment, resulting in a weak bond as well.

Summary of Aim 1

In summary, the commitment literature has described value-based and exchange-based profiles and implied weak profiles. We have briefly explained how weak profiles arise from commitment theory, especially when the person-centered perspective is used. Our first aim in this study is to document the different profiles using multilevel latent profile analysis in our large archival data set (K = 40; N = 16,052; see Table 1 for a summary) constructed from individual samples voluntarily shared by commitment researchers.

Aim 2: The Relationship Between Profiles and Predictors of Commitment

Our second aim is to evaluate the relationship between profiles of commitment and predictors of commitment. In the personcentered commitment literature, very little research has been conducted on the predictors of profiles; instead, most research has examined how outcomes differ across profiles. It is surprising that this is the case, as there are numerous theories regarding the causes of commitment (e.g., Becker, 1960; Eisenberger et al., 2001; Gouldner, 1960; Meyer et al., 2006; Meyer et al., 2004), some of which were developed around the time that the commitment profiles literature began to be published (Meyer et al., 2006). Although we were interested in testing these theories, like all metaanalyses we can only test portions of theories for which data are available. Thus, drawing on the theoretical literature on the causes of commitment, we used two theoretical frameworks to guide our hypotheses: (a) norm of reciprocity, social exchange, and organizational support theory and (b) job mobility principle. The specific predictors examined are listed in Table 2.

Table 2
Description of Predictor and Outcome Constructs

Construct	Definition
Predictors: Indicators of value	
Organizational identification	When a person views group membership as an integral part of his or her self-concept (Ashforth & Mael, 1989; Riketta, 2005), which creates the phenomenological experience of being part of a greater whole (Rousseau, 1998; Tajfel, 1978).
Organizational support	When a supervisor is effective and supportive, employees personify the organization as a congruent representation of their supervisor and feel supported (Eisenberger, Huntington, Hutchinson, & Sowa, 1986; Rhoades & Eisenberger, 2002; Shore & Shore, 1995).
Psychological contract fulfillment	The fulfillment of "an individual's beliefs regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party" (Rousseau, 1989, p. 123).
Pay satisfaction	An individual's evaluative satisfaction with their pay
Co-worker satisfaction	An individual's evaluative satisfaction with their co-workers
Supervisor satisfaction	An individual's evaluative satisfaction with their supervisors
Overall job satisfaction	An individual's overall satisfaction with their work
Job interest	The amount of self-described interest a person has for their job
Job stress	The amount of self-described stress a person experiences at their job
Job security	The level of security, or assurance they have that their job is secure
Predictors: Job mobility	•
Marital status	Whether or not a person is currently married (e.g., yes/no)
Parental status	Whether or not a person currently has children (e.g., yes/no)
Education	The level of education an individual has (e.g., High School, Associates Degree, Bachelors, etc.)
Idiocentrism	Idiocentrism (individualism at the individual, as opposed to group level) reflects a definition of the self that is defined <i>independently</i> of the in-group (Markus & Kitiyama, 1991; Triandis, 1995). That is, idiocentrists pursue idiosyncratic goals above group goals.
Outcomes: Focal behaviors	
Job performance	Self-rating of overall job performance
Actual turnover	The rate at which individuals actually turnover from an organization
Tenure	The length in which an individual has been employed at an organization (e.g., 3 years)
Withdrawal	Physical and psychological manifestations of disassociation and detachment from the organization (Berry, Lelchook, & Clark, 2012)
Outcomes: Discretionary behaviors	
Organizational citizenship behaviors	Discretionary aspects of the work that are not directly circumscribed to the job itself (e.g., cleaning up in the office kitchen; Organ, Podsakoff, & Podsakoff, 2010)
Additional analyses	
Age	Overall age (e.g., 19 years old)
Sex	Sex (e.g., male or female)
Organizational size	The size of the organization (e.g., small, medium, or large)
Positive affect	An inherent penchant for positive responses to stimuli or events (Brief & Weiss, 2002)
Negative affect	An inherent penchant for negative responses to stimuli or events (Brief & Weiss, 2002)

Note. Interested readers can contact the first author for the results of additional analyses.

Reciprocity, Social Exchange, and Organizational Support

The norm of reciprocity proposes that just like transactional exchanges, people are compelled to repay social exchanges (Gouldner, 1960). Unlike transactional exchanges, however, social exchanges are not repaid tit-for-tat; as social exchange partners' relationships develop and lengthen, the time between repayments also lengthens and explicit turn-taking by the partners is unnecessary, resulting in an ongoing positive relationship (Emerson, 1976; Gouldner, 1960).

Organizational support theory (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Shore & Shore, 1995) explicated how social exchanges and reciprocity occur between individual people and broad organizations. Organizational support theory proposes that employees develop global perceptions of their value in the organization based on the extent to which they believe the organization supports them and helps them become successful (Rhoades & Eisenberger, 2002). When these feelings are positive, employees feel indebted to the organization and thus have the urge to repay the organization. Although this sense of value and support can develop from impersonal policies, employees' emotions and cognitions about organizational agents (e.g., supervisors) play a large role in the sense of worth that employees develop (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). Essentially, these emotions and cognitions are transferred from the agents to the organization because the agents are perceived as acting on behalf of the organization and its values. In short, when employees experience positive social exchanges with their supervisors, employees personify the organization as a congruent representation of their supervisor and repay the organization through positive bonds and behaviors (and negative social exchanges leading to negative bonds and behaviors).

Based on the norm of reciprocity and organizational support theory, we propose that value-based profiles will be engendered when workplace experiences (a) indicate that the employee is valued and/or (b) are valuable to the person in nonmonetary or noninstrumental ways. When people have fewer of these experiences that indicate their value to the organization or the job's value to themselves, they will develop exchange-based or weak commitment profiles instead. This is because high mean levels of experiences indicating that the person is valued should (a) feel good to the person and (b) subsequently induce the positive reciprocation spiral that can occur via social exchanges (Eisenberger et al., 2001; Meyer et al., 2004; Meyer et al., 2006; Rhoades & Eisenberger, 2002).

In contrast, when people do not experience a sense of identity, support, or value from the organization, then exchange or weak profiles will occur. Moderate levels of positive workplace experiences are expected to be associated with exchange-based profiles, because moderate levels of these organizational experiences will be perceived by employees as a minimal effort strategy by the organization to provide the resources needed to obtain the needed performance from the employee. As a result, individuals will respond commensurately by taking a transactional approach to their commitment, whereby their bonds are dependent upon the continued exchange of goods. Finally, low mean levels of positive organizational experiences will elicit weak commitment profiles as the lack of organizational investment in their workforce is appar-

ent. Thus, the minimal investments made by the organization will be met with minimal attachments from the employee. Therefore,

Hypothesis 1: (a) High mean levels of positive organizational experiences will be associated with value-based profiles, (b) moderate mean levels of positive organizational experiences will be associated with exchange-based profiles, while (c) low mean levels of positive organizational experiences will be associated with weak commitment profiles.

Sufficient primary data sets were gathered for a variety of positive organizational experiences, including: perceived organizational support, coworker satisfaction, overall satisfaction, identification, and psychological contract fulfillment. Each of these will be meta-analyzed separately and evaluated relative to Hypothesis 1.

Job Mobility Principle

The second theory guiding our hypotheses regarding predictors of commitment is the job mobility principle (Mayer & Schoorman, 1998), which proposes that individual characteristics that increase employees' job mobility decrease their commitment (see also Becker, 1960). For example, Meyer et al.'s (2002) meta-analysis found that education had a slight negative relationship with CC, supporting the job mobility principle by demonstrating that individuals with more advanced educations are less likely to have CC, as the *need* to remain is weaker for more educated workers. The job satisfaction-turnover literature and the adult attachment literature provide parallel findings that people are more likely to turnover when alternatives to their current situation are attractive (Hulin & Judge, 2003; Rusbult, 1983).

Job mobility is one of several components that describe career paths and preferences (Briscoe, Hall, & Frautschy De-Muth, 2006) and is embedded in the boundaryless career literature (Arthur & Rousseau, 1996). Job mobility itself has both physical and psychological components (Arthur & Rousseau, 1996; Sullivan & Arthur, 2006; Verbruggen, 2012). Physical mobility is what is traditionally thought of as mobility and includes moves to new positions, new organizations, new geographic locations, or new industries. However, there is also psychological mobility, which encompasses perceptions of the capacity to make physical mobility changes as well as the perceived lack of boundaries between the structures of the work organization that the person is embedded in and extraorganizational structures (e.g., faculty who attend to their standing in their field rather than their standing in their university, the family career dynamic, and social networks that provide workrelated information and opportunities). In the context of this work, it is possible that commitment to a foci other than the organization (e.g., career, family) could influence the commitment to the organization (Becker, 1960), making people perceive that they are less mobile (i.e., low psychological mobility) or actually making them less mobile (i.e., low physical mobility) and affecting their commitment bond to the current organization.

Further, some people are more likely to move from job to job (Ghiselli, 1974; Judge & Watanabe, 1995; Woo, 2011). Although there is considerable interest in the personality factors that prompt

turnover, openness to mobility, and job-hopping (Woo, 2011; Zimmerman, 2008), there are also individual differences beyond personality that reflect a person's viability in the job market that influence their commitment to their organization (Hulin & Judge, 2003; Mayer & Schoorman, 1998). As above, these factors could affect both psychological and physical mobility and therefore create particular commitment dynamics.

In this study, we investigate marital status and parenting status (as minimal mobility due to embeddedness and side bets; Becker, 1960) and education and idiocentrism (as maximal mobility) as individual-level variables that are likely to have an impact on psychological mobility (see Zimmerman, 2008, for a discussion of the affective, cognitive, value, and behavioral influences from individual differences on turnover and turnover intentions). We propose exchange-based profiles will be associated with the lowest levels of all job mobility indicators. This is because individuals with less job mobility commit in large part because of their need to receive resources (e.g., pay, benefits) and their concerns over the inability to obtain these resources elsewhere. Thus, the basis for committing (i.e., lack of job mobility) has little intrinsic connection to the work itself. Although employees might feel a moderate amount of value fit or experienced meaningfulness, the predominating experience is transactional. In contrast, greater mobility makes individuals less dependent on their organization to provide for their transactional needs. With greater mobility, employees could still develop value-based profiles of commitment because they enjoy their work (Herrbach, 2006; Meyer et al., 2004; Meyer et al., 2006), experience value congruency (Ashforth & Mael, 1989; Meyer et al., 2006), or feel valued by the organization (Eisenberger et al., 2001; Rhoades & Eisenberger, 2002; Rhoades et al., 2001).

Predictors that reflect minimized job mobility include marital and parental status which both reflect a degree of embeddedness and preexisting attachments, while predictors that reflect maximal job mobility include education and idiocentrism (Sullivan & Arthur, 2006). Therefore, employees with value-based and weak commitment profiles are expected to have greater mean levels of mobility-enhancing predictors and lower mean levels of mobility-inhibiting predictors compared to persons with exchange-based profiles, as mobility-enhancing predictors (e.g., greater education, being single) would counter the need to have a mostly transactional bond with an organization. However, higher levels of mobility-inhibiting predictors would increase the need to continue the relationship with the organization.

Hypothesis 2: Value-based and weak commitment profiles will be associated with higher mean levels of job-mobility-enhancing predictors and lower mean levels of job-mobility-attenuating predictors, compared with exchange-based profiles.

Aim 3: The Relationship Between Profiles and Outcomes of Commitment

Meyer and Herscovitch (2001) proposed that commitment has different effects on behavior depending on whether those behaviors were focal or discretionary in the context of maintaining the relationship with the commitment focus. Meyer and Herscovitch (2001) defined focal behavior as "the behavior to

which an individual is bound by his or her commitment" (p. 311). For commitment, the focal behavior is relationship maintenance, which is typically indexed as low turnover or long tenure (Mathieu & Zajac, 1990; Meyer & Allen, 1991, 1997; Meyer & Herscovitch, 2001; Mowday, Porter, & Steers, 1979; Rusbult, 1983). Focal behaviors also include specific behaviors required by the conditions of the relationship with the commitment focus (e.g., job performance). In contrast, discretionary behaviors are "any behavior that is not clearly specified within the terms of the commitment (as might be agreed upon by neutral observers), but can be included within these terms at the discretion of the committed individual" (Meyer & Herscovitch, 2001, p. 312). Thus, discretionary behaviors are not clearly required and have less clear standards for acceptable and unacceptable levels of performance. Reflecting on the commitment literature that showed AC predicting a wider range of behaviors than either NC or CC, Meyer and Herscovitch proposed that people with high AC might consider a broader array of behaviors as focal and/or that the transactional natures of NC and CC (in the absence of AC and its autonomous selfregulation) might cause people to pay more attention to cues that indicate behaviors that are required to maintain organizational membership. The contrast between focal and discretionary behaviors in Meyer and Herscovitch (2001) is similar to Borman and Motowidlo's (1993) contrast between two broad dimensions of overall job performance: task performance and nontask/contextual performance (also often referred to as "organizational citizenship behavior"). Although this distinction is not perfect, task performance behaviors are largely focal behaviors and contextual performance behaviors are largely discretionary behaviors. Rotundo and Sackett (2002) further distinguished between two dimensions of nontask performance: organizational citizenship behaviors (OCBs) and counterproductive work behaviors (CWBs). Therefore, the types of job performance behaviors that correspond to Meyer and Herscovitch's category of focal behaviors would be task performance behaviors, whereas the discretionary category would include a broad range of nontask behaviors including OCBs and CWBs. Overall job performance measures are clearly a combination of these task/nontask or focal/discretionary behaviors. However, we argue that overall job performance ratings fit more with the definition of focal behaviors as employees' overall job performance is certainly a very salient set of behaviors "required by the conditions of the relationship with the commitment focus" (i.e., the organization). In keeping with the terminology used in the commitment literature, we will use the terms "focal" and "discretionary" to refer to these broad categories of performance-related behaviors.

Meyer and Herscovitch (2001) argued that from a variable-centered approach, all mindsets of commitment would be positively related to focal behaviors because focal behaviors must be enacted to maintain the relationship, which is the primary goal of commitment regardless of mindset. However, Meyer and Herscovitch (2001) noted that the profiles of commitment should exhibit different levels of focal behaviors, because some profiles would engender employees to meet the minimum standard of focal behaviors necessary to maintain the relationship (i.e., exchange-based profiles) whereas other profiles would encourage employees to go above and beyond the minimum standard (i.e., value-based

profiles).² Meyer and Herscovitch (2001) argued for a somewhat different pattern for discretionary behaviors, such that workers who only felt the need to meet the minimum focal behavior standards would have no motivation to engage in discretionary behaviors (i.e., exchange-based profiles) but employees who went above and beyond in focal behaviors would also do so with discretionary behavior (i.e., value-based profiles). Of course, people with weak commitment profiles would not feel compelled to produce focal or discretionary behavior because they have little interest in maintaining a relationship with the organization.

Hypothesis 3: The highest levels of both focal and discretionary behaviors will be associated with value-based profiles, while moderate levels will be associated with exchange-based profiles, and low levels will be associated with weak commitment profiles.

Method

This meta-analysis was conducted in three stages: (a) archival data sets were requested from commitment researchers; (b) a multilevel LPA was conducted on the archival data; and, (c) the standardized mean differences (*d*-values) were computed between commitment profiles on predictors and outcomes within each data set for meta-analysis across all data sets.

Archival Data Request

We first sought out researchers with access to archival commitment data sets. The only inclusion criterion was that all three mindsets of commitment must be assessed cross-sectionally using any version of Meyer and Allen's measures (e.g., Meyer & Allen, 1991, 1997; Meyer, Allen, & Smith, 1993). However, all data sets included additional outcomes and/or predictors and therefore could be used for Aims 1-3, not just Aim 1. We identified researchers by (a) using keyword searches of the PsycINFO and ABI/Inform databases, (b) examining the 2000-2010 programs for Society for Industrial and Organizational Psychology and Academy of Management conferences, and (c) examining the reference section of Meyer et al.'s (2002) meta-analysis to identify anyone overlooked by the previous two approaches. All authors on any commitment study identified through these methods with available email addresses were contacted. Additionally, snowball sampling was conducted whereby we asked researchers to forward our request to any other researchers who might have data sets relevant to this study. In total, 141 researchers were contacted (15 first authors provided samples), yielding 40 independent samples that assessed the three mindsets of commitment simultaneously as well as some of the predictors and/or outcomes (N = 16,052; see Table 1 for a summary of data sets).

Latent Profile Analysis

LPA is a model-based cluster analytic technique that attempts to classify individuals into meaningful and unique categories. It is a mixture modeling technique because it assumes the data are not sampled from a population with a single probability distribution; rather, it assumes the population being sampled is composed of a mixture of distributions with each cluster having its own set of parameters. LPA has both observed and latent variables, with the

goal of identifying latent groups of similar observations (e.g., people) that are equivalent on a variety of cluster indicators. LPAs were conducted using MPlus 7.0 Software (Muthén & Muthén, 1998–2012) with mixture and multilevel additions to complete the multilevel LPA.

In these analyses, LPAs were first conducted on each individual data set separately. These individual analyses address the number of profiles found, the mean levels of each of those profiles, as well as the consistency of those profiles at the study-level. This was done to help explain the multilevel LPA results, should aberrant or inconsistent results be found. Then, a multilevel LPA was conducted across all data sets; the multilevel analysis determines the proper classification of each individual using the substantial total sample while also accounting for the data sets in which they are nested. The results of the multilevel LPA are used for the metanalyses. We specified these models at the with-in level and adjusted the dependency at the between-level to determine the best fitting number of within-level profiles, while still accounting for dependency at the between-level.

The criteria to evaluate models included the log-likelihood estimate, Akaike's Information Criterion (AIC), Bayesian Information criterion (BIC), Sample-size Adjusted Bayesian Information Criterion (SABIC) (Schwartz, 1978), and boot-strap likelihood ratio test (BLRT) (McLachlan & Peel, 2000; Nylund, Asparouhov, & Muthén, 2007). The entropy statistic was also consulted to provide a summary of classification accuracy (Pastor et al., 2007). Higher numbers for the log-likelihood estimates reflect better fit; models that maximized log-likelihood estimates were retained. AIC, BIC, and SABIC are also used to compare models of varying clusters, where lower numbers reflect greater fit. The advantage of SABIC over log-likelihood estimates is that it has a penalty for model complexity (Pastor, Barron, Miller, & Davis, 2007). BLRT examines whether a model with k profiles demonstrates significant improvement in fit over a model with k-1 profiles. A significant p value indicates meaningful improvement in fit (Nylund et al., 2007). Finally, high values of the entropy statistic indicates higher classification utility.

Meta-Analyses of Predictors and Outcomes Between Pairs of Commitment Profiles

While our access to the primary data sets would allow the use of more complex modeling techniques that can better assess both predictor-profile or profile-outcome relationships in a single analysis (e.g., the Auxiliary command in MPlus; Morin & Wang, in press), most samples only provided a small subset of antecedent or outcome variables (in addition to the three mindsets of commitment); in our large, combined data set, this is equivalent to missing data. Thus, the full sample contained only a few data points (relative to the total sample) for the antecedent and outcome variables, so these more complex modeling technique could not

² Though Meyer and Herscovitch (2001) predicted the AC-dominant profile would be most strongly related to both focal and discretionary behaviors, most contemporary research suggests the High and AC/NC-dominant profiles are most strongly related to focal and discretionary behaviors. That said, the theoretical principle remains the same across all value-based profiles, whether referencing AC-dominant, High, or AC/NC-dominant profiles. AC = affective commitment; NC = normative commitment.

converge even when using the full information maximum likelihood command to address the missing data (FIML; Enders & Bandalos, 2001; Muthén & Muthén, 1998-2012). As a result, we took a meta-analytic approach that utilizes the full sample in a large multilevel LPA to ensure the best profile classification and is still able to assess the relationship between profiles and predictors/outcomes (Yang, 2006).

Following the identification of the commitment profiles, we calculated the mean values of the commitment predictors and outcomes for the employees in each profile. Then, the standardized mean differences (*d*-values; mean difference divided by the pooled *SD*) in predictor and outcome variables between all pairwise combinations of commitment profiles were calculated within each data set. These pairwise *d*-values were then meta-analyzed across data sets. It is important to note that some data sets did not evidence all of the profiles from the multilevel LPA. That is, any particular data set could have no members belonging to a particular profile. Additionally, data sets had different predictors and outcomes. Thus, although the overall *k* for meta-analysis was 40, any single meta-analysis has lower *k*. Over 150 meta-analyses were conducted in this study across all profiles (pairwise) for predictor and outcome variables.

Unlike most meta-analyses, we were able to calculate alpha reliabilities for multi-item variables within every dataset because we collected archival, primary data sets. Thus, we were able to conduct individual correction meta-analyses using Hunter and Schmidt's (2004) methods, whereby each individual d-value is corrected for predictor or criterion reliability using a reliability estimate from its own dataset. Each meta-analysis will provide a summarized δ value that is the reliability-corrected effect size estimate for the profile comparisons, as well as a 95% confidence interval (CI). All CIs that do not overlap with zero will be interpreted as significant (Hunter & Schmidt, 2004).

Results

Aim 1: LPA Results to Determine Profiles

Individual LPAs. Results from the individual LPAs revealed that a majority of data sets demonstrated optimal fit with five to

seven profiles, consistent with Meyer et al. (2012). Across the 40 samples, nine different profiles emerged (see Table 3). Value-based profiles included High, AC-dominant, AC/NC-dominant, and AC/CC-dominant. Exchange-based profiles included CC-dominant, NC-dominant, and NC/CC-dominant. Weak profiles included Low and Medium profiles. Table 3 provides the means and *SD*s of the three mindsets within these profiles for the 40 individual LPAs.

Multilevel LPAs. A series of multilevel LPA models were tested, requesting between two and eight clusters for each solution. The models with two- through seven-cluster solutions converged. A variety of fit statistics (see Table 4) as well as theory, sample size, and cluster uniqueness were used to determine the best fitting of the two-cluster through seven-cluster solutions (Bauer & Curran, 2003; Muthén, 2003; Pastor et al., 2007). The BLRT results were inconclusive because each of the two- through seven-cluster solutions provided a significant BLRT, suggesting that adding an additional cluster would provide better fit to the data. However, the BLRT is known to overextract clusters in large data sets (Pastor et al., 2007) like this study (N = 16,052). The log-likelihood and the SABIC fit statistics showed that both the three- and the five-cluster solution fit the data well, as reflected by the sharp shift in slope with the addition of the three- and five-cluster solutions. However, the SABIC values were lowest and entropy values were maximized with a five-cluster solution, each of which indicates optimal cluster fit. Likewise, AIC and BIC demonstrated a sharp inflection point at five clusters, indicating that adding additional profiles would provide diminishing returns (Pastor et al., 2007). Thus, the five-cluster solution was retained as the best fitting cluster structure because the preponderance of fit criteria was in favor of it, as well as theoretical support for such a cluster solution (Meyer et al., 2012).

Means for the five-cluster solution can be found in Table 5. These profiles were interpreted as: (a) Low, (b) Moderate, (c) AC-dominant, (d) High, and (e) AC/NC-dominant profiles. Thus, three profiles are considered value-based profiles (i.e., AC-dominant, High, and AC/NC-dominant), two profiles are weak-based profiles (Low and Moderate), and none are exchange-based. The majority of participants were clustered in the Low, Moderate,

Table 3
Mindset Averages and SDs for Cluster Centroids From the 40 Individual LPAs

Profile name	AC Mean (SD)	NC Mean (SD)	CC Mean (SD)	K studies this profile emerged in
Weak profiles				
Low	1.96 (.52)	1.46 (.30)	2.03 (.50)	34
Medium	2.95 (.41)	2.54 (.45)	2.70 (.38)	34
Exchange-based profiles				
CC-dominant	2.21 (.52)	1.89 (.61)	3.62 (.51)	27
NC-dominant	3.40 (.76)	3.89 (.67)	2.99 (.76)	5
NC/CC-dominant	2.65 (.98)	3.75 (.55)	3.60 (.51)	8
Value-based profiles				
AC/CC-dominant	3.46 (.67)	2.37 (.51)	3.16 (.74)	11
AC-dominant	3.54 (.46)	2.54 (.64)	2.40 (.40)	30
AC/NC-dominant	3.86 (.25)	3.70 (.33)	2.73 (.48)	32
High	4.17 (.46)	4.20 (.45)	3.53 (.45)	31

Note. SDs are computed for the centroids across the different studies. LPA = latent profile analysis; AC = affective commitment; NC = normative commitment; CC = continuance commitment.

Table 4
Fit Statistics From Multilevel LPAs

Number of classes	2	3	4	5	6	7
Log-likelihood	-60506.04	-59116.51	-58662.29	-58362.84	-58263.82	-58209.04
SABIC	121096.65	118363.13	117500.23	116946.88	116794.37	116730.35
BIC	121137.96	118426.69	117586.03	117054.93	116924.66	116882.89
AIC	121038.08	118273.02	117378.57	116793.69	116609.64	116514.08
BLRT	.00001	.00001	.00001	.00001	.00001	.00001
Entropy	.68	.74	.73	.77	.71	.68
Free parameters	13	20	27	34	41	48

Note. LPA = latent profile analysis; BIC = Bayesian Information Criterion; AIC = Akaike's Information Criterion; SABIC = Sample-size Adjusted Bayesian Information Criterion; BLRT = Boot-Strap Likelihood Ratio Test.

or AC-dominant commitment profiles, while a small minority of participants were clustered in the AC/NC-dominant and High commitment profiles (see Table 5).

Surprisingly, the CC-dominant profile was not found in the multilevel analysis, despite appearing relatively frequently among the individual-level LPAs. To better understand how profiles were interpreted in the migration from the individual LPAs to the multilevel LPA, we evaluated the percentage of individuals found in each profile in the individual LPAs (e.g., the CC-dominant profile) based on their assignment in the multilevel LPA (see Table 6). For example, 52.2% of the individuals characterized as having a CC-dominant profile had a Low commitment profile in the multilevel analysis (36.4% were categorized in the Moderate profile in the multilevel LPA).

In summary, five profiles were found in the multilevel LPA, all of which were listed by Meyer et al. (2012) as among the most common commitment profiles. Surprisingly, however, the CC-dominant profile, which was found consistently in the individuals LPAs and that was identified in Meyer et al. (2012) as a common profile, did not emerge in the multilevel analysis. Although the lack of an exchange-based profile is unexpected given how common they are in individual samples in the broader literature as well as our own analysis of individual samples (see Table 3), the emergence of different profiles for the individual and multilevel LPAs is not unexpected. Why this might have occurred is addressed further in the Discussion. Because the multilevel LPA results are used for the meta-analyses and no exchange-based profiles emerged in the multilevel LPA, Hypotheses 1, 2, and 3 can only be tested relative to value-based and weak profiles.

Aim 2: Predictors of Commitment

The second aim of this study was to examine the predictors of commitment. Sufficient data sets ($k \ge 3$) were available for 14 predictors, 10 of which were linked to positive organizational experiences, the norm of reciprocity, and social exchange (Hypothesis 1) and four of which were linked to job mobility (Hypothesis 2; see Table 2 for a description of predictors). We investigated mean predictor differences between the various profiles. A focus on standardized mean differences (d-values) also has the advantage of allowing for meta-analytic testing.

Hypothesis 1. Hypothesis 1 stated that high levels of positive organizational experiences would be associated with value-based profiles, moderate levels of positive organizational experiences would be associated with exchange-based profiles, and low levels

of positive organizational experiences would be associated with weak profiles. The preponderance of evidence supported Hypothesis 1 (see Table 7). For organizational identification, perceived organizational support (POS), psychological contract fulfillment, pay satisfaction, coworker satisfaction, supervisor satisfaction, overall job satisfaction, and job interest, higher mean levels were associated with value-based profiles and lower mean levels of these predictors were associated with weak commitment profiles. Similarly, stress was lower for value-based profiles than weak profiles. None of the CIs for comparisons between weak and value-based profiles were significantly different.

As an example, Table 7 provides the meta-analytic results for organizational identification. Four profiles (all but the High profile) could be compared.³ All δ values were larger than 1, with some values larger than 2, indicating large effect sizes (Cohen, 1992). For example, the comparison between the AC/NC-dominant profile and the Low commitment profile had a δ value of -4.77, meaning that employees who were grouped in the AC/NC-dominant profile had a mean organizational identification 4.77 SD units higher than persons grouped into the low commitment profile. Further, none of the CIs comparing the value-based and weak profiles overlapped with zero, indicating the statistical significance of such effects (Hunter & Schmidt, 2004).

Unlike the results for the other predictors associated with positive workplace experiences, results for job security did not fully support Hypothesis 1. Although the general pattern of means was consistent with Hypothesis 1, most comparisons did not significantly differ from each other. Although the comparison between the AC/NC-dominant profile and each of the Moderate, High, and AC-dominant commitment profiles resulted in a CI that did not overlap with zero, all other CIs for the remaining pairwise comparisons included zero. Therefore, the results for job security did not support Hypothesis 1.

In summary, the preponderance of evidence supported Hypothesis 1 to the extent to which it could be tested. In comparison to weak profiles, value-based profiles were associated with signifi-

³ Because the profile membership was drawn from a multilevel latent profile analysis (LPA) and the individual studies varied on the predictors and outcomes included, it is possible for particular profiles to lack sufficient predictor or outcome data to conduct a comparison. Only comparisons based on at least two independent samples were meta-analyzed (Berry, Carpenter, & Barratt, 2012; Cohen-Charash & Spector, 2001).

Table 5
Final Cluster Means for Multilevel LPA

Cluster	AC	NC	CC	N	% of sample
(1) Moderate profile	3.10	2.65	2.75	7007	44%
(2) AC-dominant profile	3.83	3.65	3.10	4619	29%
(3) Low profile	2.46	1.43	2.43	3422	21%
(4) High profile	4.30	3.92	3.46	259	2%
(5) AC/NC-dominant profile	4.78	4.53	3.52	744	5%

Note. LPA = latent profile analysis; AC = affective commitment; NC = normative commitment.

cantly better workplace experiences, such as higher identification and satisfaction and lower stress. Because no exchange-based profiles emerged in the multilevel LPA, propositions about exchange-based profiles relative to value-based or weak profiles could not be tested.

Hypothesis 2. Hypothesis 2 proposed that exchange-based profiles would have lower levels of job-mobility enhancing predictors and higher levels of job-mobility attenuating predictors, relative to value-based and weak profiles. Because an exchange-based profile did not emerge in the LPA, Hypothesis 2 was untestable. However, in the spirit of providing full meta-analytic results where possible, we meta-analyzed the differences between value-based and weak commitment profiles on variables representing the job mobility principle (see Table 8): marital status, parental status, education, and idiocentrism.

As examples of the results found for the job mobility principle, Table 8 contains the results for the marital status metanalyses. Most effects were moderately large, with a majority of effect sizes larger than 0.25. The High and AC/NC-dominant profiles contained the highest proportion of married participants compared with the Low commitment profile (d=.48, d=.60, respectively). Likewise, the AC-dominant profile contained significantly more married participants than either the Low or Moderate commitment profiles (d=.33, d=.19, respectively). Thus, there is a tendency for married people to be more likely to have value-based than weak organizational commitment profiles. A similar pattern was found regarding Education where those with less education (i.e., less mobility) were more likely to have value-based, as opposed to weak, organizational commitment profiles.

In contrast, the meta-analytic results for idiocentrism indicated that although the weak commitment profiles had higher levels of idiocentrism than the value-based profiles, δs were small. Like-

wise, nearly all CIs overlapped with zero. These results suggest little utility of this predictor in differentiating between value-based and weak profiles.

Aim 3: Outcomes of Commitment

Hypothesis 3 predicted that value-based profiles would be associated with higher levels of both focal and discretionary behaviors, followed by exchange-based, then weak profiles. Meta-analyses could be conducted for five outcomes: four focal (job performance, turnover, tenure, and withdrawal; Table 9) and one discretionary (OCBs, Table 10; see Table 2 for construct definitions).

All value-based profiles had higher levels of job performance than the weak-commitment profiles, although not all of these differences were significant (see Table 9). The AC/NC-dominant profile had significantly higher job performance than the Low and Moderate commitment profiles while the AC-dominant profile had significantly higher job performance than the Moderate commitment profile. There were insufficient data to make any comparisons with the High commitment profile. Thus, Hypothesis 3 was generally supported for job performance, to the extent it could be tested

For turnover (see Table 9), Hypothesis 3 proposes that value-based profiles should have lower turnover rates than weak profiles. Results supported this proposition. Value-based profiles all had lower turnover rates than the weak profiles and these differences were significant for all but one comparison (Moderate vs. High). Further, Hypothesis 3 was fully supported for tenure (see Table 9), withdrawal (see Table 9), and OCB (see Table 10), such that value-based profiles were associated with longer tenure, less withdrawal, and more OCB than the weak commitment profiles. Effect

Table 6
Profile Comparison: Individual and Multi-Level Profiles

		Individual LPA percent											
Multi-level LPA	Low	Moderate	NC	CC	NC/CC	AC/CC	AC	AC/NC	High				
Low	65.7%	6.6%	49.0%	52.2%	.0%	1.8%	2.7%	.0%	.0%				
Moderate	11.7%	63.4%	1.9%	36.4%	83.7%	88.3%	44.9%	12.4%	19.0%				
AC	20.6%	25.9%	15.8%	10.5%	1.6%	2.6%	26.5%	.9%	.3%				
High	1.9%	4.0%	21.0%	1.0%	14.7%	7.3%	25.8%	72.6%	62.5%				
AC/NC	.0%	.0%	12.3%	.0%	.0%	.0%	.1%	14.0%	18.2%				

Note. NC, CC, NC/CC, AC/CC, AC, and AC/NC all refer to their respective dominant profiles. Percentages reflect column percent's (i.e., what percentage of each individual profile factored onto each multilevel profile). LPA = latent profile analysis; AC = affective commitment; NC = normative commitment; CC = continuance commitment.

Table 7
Meta-Analysis Results for the Mean Difference on Predictors Indicating Value or Values Between Commitment Profiles

High profile		N	k	\overline{d}	$SD_{\rm d}$	δ	SD_{δ}	% var	90% CV	95% CI
Low profile										
AC dominant profile		630	4	83	37	1.04	44	20%	48.1.60	70:1 34
ACNC-dominant profile										
High profile										
Low profile AC-dominant profile AC A A A A A A A A										
AC-dominant profile										
ACNC-dominant profile AC-dominant profile AC-dominant profile ACNC-dominant profile High profile ACNC-dominant profile High profile ACNC-dominant profile High profile ACNC-dominant profile High profile ACNC-dominant profile High profile ACNC-dominant profile LOSP profile AC-dominant profile AC-dominant profile AC-dominant profile AC-dominant profile AC-dominant profile AC-dominant profile High profile AC-dominant profile High profile ACNC-dominant profile High profile ACNC-dominant profile High profile ACNC-dominant profile ACNC-dominant profile High profile ACNC-dominant profil		630	4	-1.45	.45	-2.00	.72	26%	1.09:2.92	1.65:2.50
Migh profile AC-dominant profile 453 3 -96 23 -128 00 100% -1.28:-1.28 -1.74:-9.5 -1.										
AC-Geominant profile ACNR-dominant profile High profile ACNR-dominant profile High profile ACNR-dominant profile High profile ACNR-dominant profile High profile High profile High profile High profile ACNR-dominant profile High profile High profile High profile High profile ACNR-dominant profile High pr			_						_	_
AC/NC-dominant profile High profile Command profile High profile Low profile L										
ACNC-dominant profile		453	3	96	.23	-1.28	.00	100%	-1.28:-1.28	-1.74:92
High profile	High profile	_	_	_	_	_	_	_	_	_
High profile	AC/NC-dominant profile									
Moderate profile 1.215 3 5.77 1.4 6.7 1.2 5.4% 5.2:.82 5.3:.82 AC-dominant profile 1.039 3 5.65 1.3 5.70 0.9 73% -8.7:-64 -9.3:55 AC-Moderniant profile 736 2 -1.50 1.2 -1.92 0.0 100% -1.92:-1.92 -2.32:-1.6 High profile		_	_	_	_	_	_	_	_	_
Low profile	Perceived organizational support									
AC/C-dominant profile 1,039 3 65 13 76 .09 73% 87;64 93;55 .12 .12 .193 .106 .1	Moderate profile									
AC/NC-dominant profile		1,215	3	.57	.14	.67	.12	54%	.52:.82	.53:.82
High profile Cov profile AC-dominant profile AC-MC-dominant profi	AC-dominant profile	1,039	3	65	.13	76	.09	73%	87:64	93:59
Low profile	AC/NC-dominant profile	736	2	-1.50	.12	-1.92	.00	100%	-1.92:-1.92	-2.32:-1.6
AC-dominant profile		_	_	_	_	_	_	_	_	_
AC/NC-dominant profile AC-dominant profile Bigh profile AC-dominant profile AC-dominant profile Bigh profile Coverage AC-dominant profile AC-domin										
High profile										
AC-loominant profile	1	424	2		.18	-2.60	.16		-2.81:-2.40	-3.35:-2.1
AC/NC-dominant profile High profile Contract Moderate profile High profile AC/NC-dominant profile High profile Comprofile AC/NC-dominant profile High profile Comprofile AC/NC-dominant profile AC/NC-dominant profile Comprofile Compr	High profile	_	_	_	_	_		_	_	_
High profile										
ACNC-dominant profile High profile Solution of the High profile High profile High profile High profile Low profile Low profile ACAC-dominant profile High profile How profile High profile High profile How profile High profile High profile High profile High profile How profile High profile How profile High profile How profile High profile High profile High profile How profile High profile High profile High profile How profile High profil									-1.04:-1.04	-1.05:68
High profile		_	_	_	_	_	_	_	_	_
Psychological contract Moderate profile Low profile A33 3 .53 .06 .66 .00 100% .66:.66 .41:.95 AC-dominant profile .559 3 .82 .04 -1.04 .00 100% -1.04:-1.04 -1.32:-8 .84 .00 .00 .00% .66:.66 .41:.95 AC-MC-dominant profile .330 3 -1.36 .28 -1.84 .00 .00 .100 -1.84:-1.84 -2.57:-1.3 .100 .257:-1.3 .200 .257:-1.3 .200 .2	AC/NC-dominant profile									
Moderate profile	High profile	_	_	_	_	_	_	_	_	_
Low profile										
AC-dominant profile		122	2	5 2	0.6		00	1000		41.05
AC/NC-dominant profile High profile AC-dominant Profile AC-dominan										
High profile Low profile AC-dominant profile ACNC-dominant profile ACNC-dominant profile ACNC-dominant profile ACNC-dominant profile ACNC-dominant profile Bigh profile Composite			3						-1.04:-1.04	-1.32:81
Low profile			_						1 04. 1 04	2.57. 1.2
AC-dominant profile AC/NC-dominant profile AC/NC-dominant profile High profile AC/NC-dominant profile High profile By satisfaction Moderate profile Low profile AC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC-dominant profile		330	3	-1.36	.28	-1.84	.00	100	-1.84:-1.84	-2.57:-1.5
AC/NC-dominant profile		272	2	_1.29	00	_1.77	00	100%	1 77.1 77	1 20.2 20
High profile 143 3 -1.80 23 -2.74 .00 100% -2.74:-2.74 -5.09:-1.8 AC-dominant profile 231 296 .23 -1.23 .38 49% -1.72:75 -1.86:75 High profile 269 351 .1665 .00 100%65:65 -1.14:25 AC/NC-dominant profile High profile 264 2 .3 .38 .3 .4 .32%82:.2171:.07 Pay satisfaction Moderate profile Low profile				-1.28					1.//:1.//	1.39.2.30
AC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile Low profile AC-dominant profile AC-do										
AC/NC-dominant profile 231 296 23 -1.23 .38 49% -1.72:75 -1.86:75 High profile 269 351 .1665 .00 100%65:65 -1.14:25 AC/NC-dominant profile High profile 264 2 .3 .38 .3 .4 .32%82:.2171:.07 Pay satisfaction Moderate profile Low profile 1,057 4 .12 .15 .15 .06 89% .08:.2301:.32 AC-dominant profile 932 420 .1725 .09 81%36:1443:08 AC/NC-dominant profile 731 450 .2962 .27 .51%97:2892:36 High profile		143	3	1.60	.23	2.74	.00	100 /6	2.74. 2.74	3.09. 1.00
High profile 269 351 .1665 .00 100%65:65 -1.14:25 AC/NC-dominant profile High profile 264 2 .3 .38 .3 .4 .32%82:.2171:.07 Pay satisfaction Moderate profile Low profile 1,057 4 .12 .15 .15 .06 .89% .08:.2301:.32 AC-dominant profile 932 420 .1725 .09 .81%36:1443:08 AC/NC-dominant profile 731 450 .2962 .27 .51%97:2892:36 High profile		231	2	- 96	23	-1 23	38	10%	−1 72· − 75	−1 86: − 70
AC/NC-dominant profile High profile 264 2 .3 .38 .3 .4 .32%82:.2171:.07 Pay satisfaction Moderate profile Low profile 1,057 4 .12 .15 .15 .06 .89% .08:.2301:.32 AC-dominant profile 932 420 .1725 .09 .81%36:1443:08 AC/NC-dominant profile 731 450 .2962 .27 .51%97:2892:36 High profile										
High profile 264 2 .3 .38 .3 .4 .32%82:.2171:.07 Pay satisfaction Moderate profile Low profile 1,057 4 .12 .15 .15 .06 89% .08:.2301:.32 AC-dominant profile 932 420 .1725 .09 81%36:1443:08 AC/NC-dominant profile 731 450 .2962 .27 .51%97:2892:36 High profile		20)	3	.51	.10	.03	.00	10070	.0303	1.1723
Pay satisfaction Moderate profile Low profile Low profile 1,057		264	2	3	38	3	4	32%	- 82· 21	- 71:07
Moderate profile		201	-	.5	.50	.5	• • •	3270	.0221	.,10,
Low profile	5									
AC-dominant profile 932 420 .1725 .09 81%36:1443:08 AC/NC-dominant profile 731 450 .2962 .27 51%97:2892:36 High profile		1.057	4	.12	.15	.15	.06	89%	08: 23	01:32
AC/NC-dominant profile 731 450 .2962 .27 51%97:2892:36										
High profile Low profile AC-dominant profile 737 426 .3433 .36 .28%13:.79 .12:.55 AC/NC-dominant profile 536 454 .4366 .48 .32% -1.27:06 -1.02:36 High profile	1									
Low profile AC-dominant profile AC-dominant profile AC-dominant profile AC-dominant profile 536 4 54 .43 66 .48 32% 13:.79 .12:.55 AC/NC-dominant profile High profile AC/dominant profile AC/dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile High profile AC/NC-dominant profile High profile Coworker satisfaction Moderate profile Low profile Low profile 2,522 8 .19 .38 .25 .42 .15% 29:.79 .13:.38 AC-dominant profile AC/NC-dominant profile 2,266 8 46 .35 59 .38 .26% -1.07:11 75:44										
AC/NC-dominant profile 536 454 .4366 .48 32% -1.27:06 -1.02:36 .41 .43 profile										
High profile AC-dominant profile AC/NC-dominant profile High profile Coworker satisfaction Moderate profile Low profile AC-dominant profile 3,755 AC-20 31 AC/NC-dominant profile 2,266 AC-35 AC-35 AC/NC-dominant profile AC-35 AC-	AC-dominant profile	737	4	26	.34	33	.36	28%	13:.79	.12:.55
AC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile High profile Coworker satisfaction Moderate profile Low profile 2,522 8 .19 .38 .25 .42 .15%29:.79 .13:.38 AC-dominant profile 3,755 820 .3127 .35 .11%72:.1835:18 AC/NC-dominant profile 2,266 846 .3559 .38 .26% -1.07:1175:44	AC/NC-dominant profile	536	4	54	.43	66	.48	32%	-1.27:06	-1.02:36
AC/NC-dominant profile 411 415 .1418 .00 100%18:1848:.11 High profile		_	_	_	_	_	_	_	_	_
High profile										
AC/NC-dominant profile High profile Coworker satisfaction Moderate profile Low profile AC-dominant profile AC-dominant profile AC-dominant profile AC/NC-dominant profile		411	4		.14		.00	100%	18:18	48:.11
High profile — — — — — — — — — — — — — — — — — — —		_	_	_	_	_	_	_	_	_
Coworker satisfaction Moderate profile Low profile 2,522 8 .19 .38 .25 .42 15% 29:.79 .13:.38 AC-dominant profile 3,755 8 20 .31 27 .35 11% 72:.18 35:18 AC/NC-dominant profile 2,266 8 46 .35 59 .38 26% -1.07:11 75:44										
Moderate profile Low profile 2,522 8 .19 .38 .25 .42 15% 29:.79 .13:.38 AC-dominant profile 3,755 8 20 .31 27 .35 11% 72:.18 35:18 AC/NC-dominant profile 2,266 8 46 .35 59 .38 26% -1.07:11 75:44		_	_	_	_	_	_	_	_	_
Low profile 2,522 8 .19 .38 .25 .42 15% 29:.79 .13:.38 AC-dominant profile 3,755 8 20 .31 27 .35 11% 72:.18 35:18 AC/NC-dominant profile 2,266 8 46 .35 59 .38 26% -1.07:11 75:44										
AC-dominant profile 3,755 820 .3127 .35 11%72:.1835:18 AC/NC-dominant profile 2,266 846 .3559 .38 26% -1.07:1175:44		2.522	0	10	20	25	42	1501	20: 70	12. 20
AC/NC-dominant profile 2,266 846 .3559 .38 26% -1.07:1175:44										
	ACINC-dominant prome	∠,∠∪0	0	40	.53	39	.30	20%	-1.07:11	/5:44 (table continues

Table 7 (continued)

Moderate profile Low profile 1,323 6 .62 .36 .81 .41 24% .029:1.34 .64:1.01 AC-dominant profile 1,229 6 54 .21 70 .24 47% -1.01:.40 90:53 AC/NC-dominant profile 766 4 -1.13 .60 -1.52 .82 19% -2.56:47 -1.98:-1.17 High profile - - - - - - - - Low profile AC-dominant profile 760 6 -1.04 .46 -1.41 .71 22% .50:2.32 1.14:1.75	Cluster comparison	N	k	\overline{d}	$SD_{\rm d}$	$\overline{\delta}$	SD_{δ}	% var	90% CV	95% CI
AC-dominant profile		1,469	5	52	.27	63	.27	39%	97:29	83:45
ACNC-dominant profile		2.311	8	- 42	.69	52	.82	5%	53:1.58	39: 66
High profile ACN-Comman profile 2,055 8 - 26 1.9 - 33 50% - 1.4848 - 1.37:-67 AC-dominant profile 2,055 8 - 26 1.9 - 33 .08 85%44:-2248:-20 High profile ACN-Comman profile 2.055 8 - 26 1.933 .08 85%44:-2248:-20 ACN-Comman profile 2.055 826 1.9 .37 .34 .20 78%44:-2238:-03 ACN-Comman profile 2.25 2.1 .37 .23 .20 78%48:.0257:.09 Supervisor satisfaction Moderate profile 3.743 824 .3432 .41 8%20:.91 .23:48 ACN-Commant profile 3.743 824 .3432 .41 8%84:.2140:-23 ACN-Commant profile 1.460 558 .43 .71: .49 17% - 1.34:-0892:-52 .20 ve profile 2.207 853 .74 .64 .95 .45*51:.86 .50:.78 ACN-Commant profile 317 853 .74 .64 .95 .45*51:.86 .50:.78 ACN-Commant profile 317 853 .74 .64 .95 .45*51:.86 .50:.78 ACN-Commant profile 317 820 .34 .24 .35 .26%60:.2242:-06 ACN-Commant profile 347 820 .34 .24 .35 .26%60:.2242:-06 ACN-Commant profile 318 520 .34 .24 .35 .26%60:.2242:-06 ACN-Commant profile 4.90 5 .45*50:.23 .40 .24 .35 .26%60:.2242:-06 ACN-Commant profile 4.90 5 .24%55:.33 .40 .24 .35 .26%60:.2242:-06 ACN-Commant profile 4.90 5 .24%58:.33 .24%24 .35 .26%60:.2242:-06 ACN-Commant profile 4.90 5 .24%58:.33 .24%24 .35 .26%60:.2242:-06 ACN-Commant profile 4.90 5 .24%20:.34 .24 .24%58:.33 .26%60:.2242:-06 ACN-Commant profile 4.90 5 .24%20:.34 .24 .24%58:.33 .26%60:.2251:.16 Overall job satisfaction Moderate profile 4.90 5 .										
AC-dominant profile										-1 37:- 67
ACNC-dominant profile 2,055 8 -2,26 19 -33 0.8 85% -44:-22 -48:-20 ACNC-dominant profile 1,402 5 2,11 37 23 2.0 78% -48:.02 -57:.09 Supervisor satisfaction Moderate profile 2,214 8 27 37 23 2.0 78% -48:.02 -57:.09 Supervisor satisfaction Moderate profile 2,214 8 27 37 25 43 15% -20:.91 23:.48 48 -8:.21 -30:.23 48 48 -3:.23 48 -3:.23 48 -3:.24 48 -3:.23 48 -3:.23 48 48 -3:.23 48 -3:.23 48 48 -3:.23 48 -3:.23 48 48 -3:.23 48 -3:.23 48 48 -3:.23 48 -3:.23 48 48 -3:.23 48 -3:.23 48 48 -3:.23 48 -3:.23 48 48 -3:.23 48 -3:.23 48 48 -3:.23 48 -3:.23 48 48 -3:.23 -3:.23 -3:		510	5	.00	. 12	.,,	.57	5070	1.1010	1.5707
High profile ACNC-dominant profile High profile September Satisfaction Moderate profile Low profile ACA-dominant profile High profile September Satisfaction Moderate profile Low profile ACA-dominant profile ACA-dominant profile High profile September Septe		2.055	8	- 26	19	_ 33	08	85%	<i>− 44</i> · <i>−</i> 22	- 48·- 20
ACNC-dominant profile Low										
High profile		1,102	5	.17	.51	.20	.51	2070	.0123	.5005
Supervisor satisfaction Moderate profile Low profile Cov profile		242	5	21	37	23	20	78%	- 48: 02	- 57: 09
Moderate profile Low profile AC-dominant profile 3,743 8		2.2	5	.21	.57	.23	.20	7070	.1002	.5707
Low profile										
AC-dominant profile		2.514	8	.27	.37	.35	.43	15%	20:.91	.23:.48
ACNC-dominant profile										
High profile										
Low profile AC-dominant profile B17 8 -64 95 -75 1.21 7% -2.30.80 -1.00: -53 AC-dominant profile 817 8 -64 95 -75 1.21 7% -2.30.80 -1.00: -53 AC-dominant profile 345 5 -82 80 -97 1.06 12% -2.30.38 -1.03: -65 AC-dominant profile 1.345 5 -82 80 -97 1.06 12% -2.30: 38 -1.36: -65 AC-dominant profile 1.344 5 -2.20 .34 -2.4 .35 26% -69:.22 -42: -14 High profile 1.349 5 -2.0 .34 -2.4 .35 26% -69:.22 -42: -16 AC/NC-dominant profile 1.323 6 -6.2 .36 .81 .41 24% -66:.32 -51:.16 Overall job statisfaction Moderate profile 1.229 6 -5.4 .21 -7.0 .24 47% -1.01:.40 -90: -53 AC/NC-dominant profile 1.229 6 -5.4 .21 -7.0 .24 47% -1.01:.40 -90: -53 AC/NC-dominant profile 766 4 -1.13 .60 -1.52 .82 19% -2.56: -47 -1.98: -1.15 .00 -1.52 .82 19% -2.56: -47 -1.98: -1.15 .00 -1.52 .82 .19% -2.56: -27 -2.32: -1.25 .141:.1.5 .00 -1.52 .82 .19% -2.56: -27 -2.32: -1.25 .141:.1.5 .00 -1.52 .82 .19% -2.56: -27 -2.32: -1.25 .141:.1.5 .00 -1.52 .82 .19% -2.56: -27 -2.32: -1.25 .141:.1.5 .00 -1.52 .82 .19% -2.56: -27 -2.32: -1.25 .141:.1.5 .00 -1.52 .82 .19% -2.56: -27 -2.32: -1.25 .141:.1.5 .00 -1.52 .82 .19% -2.56: -27 -2.32: -1.25 .141:.1.5 .00 .152 .141:.1.5 .00 .152 .141:.1.5 .152: .15										
AC-dominant profile		-,				., -				
AC/NC-dominant profile 817		2.307	8	53	.74	64	.95	4%	57:1.86	.50:.78
High profile								7%		
AC-dominant profile AC/NC-dominant profile High profile CAC/NC-dominant profile High profile AC-dominant profile High profile CAC/NC-dominant profile AC-dominant profile Bigh profile AC-dominant profile AC-dominant profile AC-dominant profile Bigh profile AC-dominant profile AC-dominant profile Bigh profile AC-dominant profile Bigh pro										
AC/NC-dominant profile 1,394 5	C 1									
High profile AC/NC-dominant profile High profile AC/NC-dominant profile Low profile Low profile Low profile Low profile Low profile AC/NC-dominant profile Low profile AC-dominant profile Low profile Low profile AC-dominant profile Low profile AC-dominant profile AC-dominant profile AC-dominant profile AC-dominant profile Low profile AC-dominant profile AC-dominant profile Low profile AC-dominant profile Low profile AC-dominant profile AC-dominant profile Low profile AC-dominant profile Low profile AC-dominant profile AC-dominant profile Low profile AC-dominant profile Low profile AC-dominant profile AC-domina		2.046	8	22	.26	28	.24	42%	58:.03	42:14
ACNC-dominant profile 1,323 6 6.62 3.6 8.1 4.1 24% 0.29:1.34 0.41:1.01 0.40:1.01										
High profile		,								
Overall job satisfaction Moderate profile Low profile 1,323 6 6.2 3.6 .81 .41 24% .029;1.34 .64;1.01 AC-dominant profile 1,229 6 .54 .21 .770 .24 47% .710;1.40 .790;53 AC/NC-dominant profile .760 4 .711 .60 .71.52 .82 .19% .72.56; .47 .719%;11.75 .718 .		240	5	.13	.46	.17	.38	49%	66:.32	51:.16
Low profile	Overall job satisfaction									
Low profile										
AC/NC-dominant profile High profile Low profile AC-dominant profile AC/NC-dominant profile AC-NC-dominant profile		1,323	6	.62	.36	.81	.41	24%	.029:1.34	.64:1.01
High profile Low profile AC-dominant profile AC-MC-dominant profile Bigh profile AC-MC-dominant profile Bigh profile AC-MC-dominant profile Bigh profile AC-MC-dominant profile AC-MC-dominant profile AC-MC-dominant profile AC-MC-dominant profile Bigh profile AC-MC-dominant profile AC-MC-domina	AC-dominant profile	1,229	6	54	.21	70	.24	47%	-1.01:.40	90:53
Low profile AC-dominant profile 760 6 -1.04 4.6 -1.41 .71 22% 5.0;2.32 1.14:1.75 AC/NC-dominant profile 425 4 -1.18 .53 -1.66 .86 28% -2.75; -57 -2.32; -1.22 High profile AC-dominant profile AC/NC-dominant profile Low profile Low profile AC-dominant profile 1,900 8 -7.5 .94 -8.9 1.26 .3.33% -2.51; -3 -1.06: -41 AC/NC-dominant profile AC-dominant profile AC-MC-dominant profile A	AC/NC-dominant profile	766	4	-1.13	.60	-1.52	.82	19%	-2.56: 47	-1.98:-1.17
AC-dominant profile		_	_	_	_	_	_	_	_	_
AC/NC-dominant profile AC-dominant profile AC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile High profile AC/NC-dominant profile High profile AC/NC-dominant profile High profile AC/NC-dominant profile AC/NC-dominant profile High profile Low profile Low profile Low profile Low profile Low profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile Low profile Low profile AC/NC-dominant profile AC-dominant profile AC-domin										
High profile				-1.04		-1.41	.71		.50:2.32	1.14:1.75
AC-dominant profile		425	4	-1.18	.53	-1.66	.86	28%	-2.75:57	-2.32:-1.22
AC/NC-dominant profile High profile AC/NC-dominant profile High profile High profile High profile High profile High profile AC/NC-dominant profile High profile Low profile Low profile AC-dominant profile Low profile AC-dominant profile Low profi		_	_	_	_	_	_	_	_	_
High profile										
AC/NC-dominant profile High profile Low profile Low profile AC/NC-dominant profile High profile 1,900 8		334	4	82	.57	-1.03	.63	33%	-1.84:22	-1.55: 64
High profile		_	_	_	_	_	_	_	_	_
Moderate profile										
Moderate profile		_	_	_	_	_	_	_	_	_
Low profile 2,078 8 .28 .56 .37 .65 .7.73%										
AC-dominant profile 3,348 839		2.070	0	20	5.0	27	65	7.726	46.1.0	24.50
AC/NC-dominant profile										
High profile 1,470 556 .4968 .61 11.01% -1.46:.188:50 Low profile AC-dominant profile 2,012 866 1.0981 1.33 2.41%89:2.51 .67:.96 AC/NC-dominant profile 564 894 1.44 -1.06 1.82 4.92% -3.39:1.27 -1.37:79 High profile 347 575 1.2083 1.44 5.94% -2.68:1.02 -1.18:53 AC-dominant profile AC/NC-dominant profile 1,834 839 .4851 .56 14.27% -1.22:.2167:35 High profile 1,398 504 .2005 1.11 78.57% -1.19:.09 -23:.14 AC/NC-dominant profile High profile 240 5 .61 .43 .72 .32 63.48% -1.12:32 -1.13:38 Job stress Moderate profile Low profile 1,569 518 .3125 .32 24.84%66:.1642:09 AC-dominant profile 2,847 5 .24 .28 .32 .33 10% -1.11:.75 .22:.42 AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78%18:1.22 .36:.70 High profile 1,281 402 .2803 .27 34.15%38:.3222:.16 Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.474:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21%32:1.89 .51:1.31										
Low profile AC-dominant profile 2,012 866 1.0981 1.33 2.41%89:2.51 .67:.96 AC/NC-dominant profile 564 894 1.44 -1.06 1.82 4.92% -3.39:1.27 -1.37:79 High profile 347 575 1.2083 1.44 5.94% -2.68:1.02 -1.18:53 AC-dominant profile 1,834 839 .4851 .56 14.27% -1.22:.2167:35 High profile 1,398 504 .2005 .11 78.57%19:.0923:.14 AC/NC-dominant profile High profile 240 5 .61 .43 .72 .32 63.48% -1.12:32 -1.13:38 Job stress Moderate profile Low profile 2,847 5 .24 .28 .32 .33 10%11:.75 .22:.42 AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78%18:1.22 .36:.70 High profile 1,281 402 .2803 .27 34.15%38:.3222:.16 Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.474:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21%32:.89 .5:1.13										
AC-dominant profile 2,012 866 1.0981 1.33 2.41%89:2.51 .67:.96 AC/NC-dominant profile 564 894 1.44 -1.06 1.82 4.92% -3.39:1.27 -1.37:79 High profile 347 575 1.2083 1.44 5.94% -2.68:1.02 -1.18:53 AC-dominant profile AC/NC-dominant profile 1,834 839 .4851 .56 14.27% -1.22:.2167:35 High profile 1,398 504 .2005 .11 78.57% -1.9:.0923:.14 AC/NC-dominant profile High profile 240 5 .61 .43 .72 .32 63.48% -1.12:32 -1.13:38 Job stress Moderate profile Low profile 1,569 518 .3125 .32 24.84%66:.1642:09 AC-dominant profile 2,847 5 .24 .28 .32 .33 10% -11:.75 .22:.42 AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78% -1.81:.22 .36:.70 High profile 1,281 402 .2803 .27 34.15%38:.3222:.16 Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.474:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21%32:1.89 .5:1.13		1,470	3	56	.49	08	.01	11.01%	-1.46:.1	88:50
AC/NC-dominant profile High profile AC-dominant profile AC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile AC/NC-dominant profile High profile Low profile Low profile AC-dominant profile Low profile Low profile Low profile 1,559 518 .3125 .32 24.84%66:.1642:09 AC-dominant profile AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78%18:1.22 .36:.70 High profile Low profile Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.474:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21%32:1.89 .5:1.13		2.012	0		1.00	0.1	1.22	2.416/	00.2.51	(7.06
High profile 347 575 1.2083 1.44 5.94% -2.68:1.02 -1.18:53 AC-dominant profile 1,834 839 .4851 .56 14.27% -1.22:.2167:35 High profile 1,398 504 .2005 .11 78.57%19:.0923:.14 AC/NC-dominant profile High profile 240 5 .61 .43 .72 .32 63.48% -1.12:32 -1.13:38 Job stress Moderate profile Low profile 2,847 5 .24 .28 .32 .33 10%11:.75 .22:.42 AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78%18:1.22 .36:.70 High profile 1,281 402 .2803 .27 34.15%38:.3222:.16 Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.474:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21%32:1.89 .5:1.13						81				
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Job stress Moderate profile Low profile 1,569 5 18 .31 25 .32 24.84% 66:.16 42:09 AC-dominant profile 2,847 5 .24 .28 .32 .33 10% 11:.75 .22:.42 AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78% 18:1.22 .36:.70 High profile 1,281 4 02 .28 03 .27 34.15% 38:.32 22:.16 Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.4 74:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21% 32:1.89 .5:1.13	-	2.10	_		40		22	62 100	4.40	4.42
Moderate profile Low profile 1,569 5 18 .31 25 .32 24.84% 66:.16 42:09 AC-dominant profile 2,847 5 .24 .28 .32 .33 10% 11:.75 .22:.42 AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78% 18:1.22 .36:.70 High profile 1,281 4 02 .28 03 .27 34.15% 38:.32 22:.16 Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.4 74:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21% 32:1.89 .5:1.13		240	5	.61	.43	.72	.32	63.48%	-1.12:32	-1.13:38
Low profile 1,569 5 18 .31 25 .32 24.84% 66:.16 42:09 AC-dominant profile 2,847 5 .24 .28 .32 .33 10% 11:.75 .22:.42 AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78% 18:1.22 .36:.70 High profile 1,281 4 02 .28 03 .27 34.15% 38:.32 22:.16 Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.4 74:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21% 32:1.89 .5:1.13										
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AC/NC-dominant profile 1,553 5 .42 .46 .52 .55 10.78%18:1.22 .36:.70 High profile 1,281 402 .2803 .27 34.15%38:.3222:.16 Low profile AC-dominant profile 1,674 5 .43 .62 .57 .76 5.95% -1.54:.474:41 AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21%32:1.89 .5:1.13										
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AC/NC-dominant profile 380 5 .65 .72 .79 .86 14.21%32:1.89 .5:1.13								_		
High profile 268 4 .26 .30 .30 .17 77.82% .08:.5301:.64										
	High profile	268	4	.26	.30	.30	.17	77.82%	.08:.53	01:.64

Table 7 (continued)

Cluster comparison	N	k	\overline{d}	$SD_{\rm d}$	$\overline{\delta}$	SD_{δ}	% var	90% CV	95% CI
AC-dominant profile									
AC/NC-dominant profile	1,658	5	.20	.18	.26	.14	61.46%	.08:.45	.1:.42
High profile	1,317	4	40	.38	48	.43	17.82%	-1.03:.07	68:29
AC/NC-dominant profile									
High profile	231	4	98	.44	-1.23	.59	37.5%	.48:1.98	.84:1.77
Job Security									
Moderate profile									
Low profile	984	4	22	.30	26	.31	32%	66:.14	48:.05
AC-dominant profile	2,046	4	03	.32	04	.39	8%	54:.45	16:.06
AC/NC-dominant profile	1,039	4	32	.48	39	.58	10%	-1.13:.35	59: 21
High profile	772	3	.02	.68	01	.73	7%	94:.92	24:.22
Low profile									
AC-dominant profile	1,258	4	.19	.60	.19	.70	7%	-1.08:.70	38:.00
AC/NC-dominant profile	251	4	14	.71	20	.78	15%	-1.20:.80	54:.13
High profile	145	3	.14	.91	.07	.81	17%	97:1.10	36:.49
AC-dominant profile									
AC/NC-dominant profile	1,313	4	32	.18	41	.16	57%	61:21	59: 23
High profile	978	3	.08	.33	.09	.35	25%	35:.53	13:.32
AC/NC-dominant profile									
High profile	178	3	.41	.12	.52	100.00	100%	52:52	97:13

Note. Dashes indicate that there were not sufficient samples (K > 2) to make this meta-analytic comparison; positive d values indicates that the reference group means were higher; \overline{d} = mean sample size-weighted d value; \overline{SD}_d = sample size-weighted observed standard deviation of d values; $\overline{\delta}$ = mean sample size-weighted d value corrected for measurement error using α reliability; SD_{δ} = corrected standard deviation of α -corrected d values; θ var. = percentage of variance attributable to artifacts; 90% CV = 10% and 90% credibility values, respectively; 95% CI = lower and upper bounds of the 95% confidence interval around the corrected mean d value; d = affective commitment; d = normative commitment; d = continuance commitment.

sizes were relatively small for tenure but ranged from small to relatively large for withdrawal and OCB.

In summary, results supported Hypothesis 3 by demonstrating that value-based profiles consistently had higher levels of job performance, tenure, and OCB and lower levels of both turnover and withdrawal. Although a few comparisons were not significant, the vast preponderance of comparisons evidenced significant differences, indicating that the differences between value-based and weak profiles on focal and discretionary behaviors are not trivial.⁴

Discussion

This study addressed three aims. The first aim was to determine which commitment profiles are phenomenologically experienced. This was examined via a multilevel LPA on a large data set composed of primary, archival data sets voluntarily supplied by generous commitment researchers. Results revealed that a fivecluster solution provided the best fit to the multilevel data; the five clusters were interpreted as (a) Moderate, (b) AC-dominant, (c) Low, (d) AC/NC-dominant, and (e) High commitment profiles. Surprisingly, no exchange-based profiles were found in the multilevel analysis. The second aim was to determine whether commitment profiles differed in levels of commonly researched predictors of commitment. Fourteen predictors were available to be meta-analyzed from the provided archival data sets. Across nearly all predictors of commitment, value-based profiles had higher levels of the given predictor than weak profiles. These results supported Hypothesis 1; Hypothesis 2 was not testable because of the lack of an exchange-based profile in the sample. The third aim was to determine the relationship between outcomes of commitment and profiles of commitment. Results supported Hypothesis 3, such that value-based profiles had higher job performance, OCB, and tenure as well as less withdrawal and actual turnover than weak profiles. In the following, we further address these aims.

Aim 1: Profiles and the Nature of Commitment

One of the complicating factors in profile research is that different profiles emerge in different studies, as evidenced here with different profiles emerging in the 40 individual sample LPAs, both across samples as well as compared with the multilevel LPA that contained the same 40 samples. Five profiles were found in the multilevel LPA; however, the individual LPAs conducted on 40 samples separately resulted in a variety of cluster solutions across samples, indicating that samples differ as to which and how many profiles emerge. Further, these individual LPA results revealed nine different profiles in total. The individual LPAs included exchange-based profiles, which were absent from the multilevel LPA.

We used multilevel LPA rather than individual LPAs for each sample because the data structure (i.e., individuals are nested in 40 archival data sets) for the current study violates the assumption that observations are independent of one another for conducting individual LPAs (i.e., local independence; Vermunt, 2003, 2008). The nested data structure requires multilevel statistical techniques to account for this dependence to avoid inaccurate parameter estimates, biased *SE*s, and increased Type I error (Vermunt, 2003, 2008). By accounting for within-sample variability as well as between-sample variability, the multilevel LPA is very likely to

⁴ Data were also available for age, sex, organizational size, and positive (PA) and negative (NA) affectivity. Results examining the relationship between the five commitment profiles and these variables are available by request from the first author.

Table 8
Meta-Analysis Results for the Mean Difference on Job Mobility Predictors Between Commitment Profiles

Cluster comparison	N	k	\overline{d}	$SD_{\rm d}$	$\overline{\delta}$	SD_{δ}	% var	90% CV	95% CI
Marital status									
Moderate profile									
Low profile	2,925	10	.09	.14	.10	.06	87%	.02:.18	.00:.20
AC-dominant profile	4,194	10	17	.14	19	.11	55%	33:5	27:12
AC/NC-dominant profile	2,314	7	37	.17	43	.06	87%	051:35	55:31
High profile	2,414	8	28	.33	33	.30	28%	71:.06	47:20
Low profile	2.205	10	20	10	22	00	1000	22 22	22 44
AC-dominant profile	2,305	10	29	.12	33	.00	100%	.33:.33	.22:.44
AC/NC-dominant profile	667 654	7 8	52	.16 .29	60	.00	100% 81%	60:60	80:41 69:28
High profile	034	8	42	.29	48	.14	81%	66:30	09:28
AC-dominant profile AC/NC-dominant profile	1,929	7	23	.17	27	.07	86%	37:18	40:15
High profile	1,929	7	23 23	.17	27 27	.07	86%	37:18 37:18	40:15 40:15
AC/NC-dominant profile	1,929	/	23	.17	27	.07	80%	5716	4013
High profile	410	7	.12	.24	.14	.00	100%	14:14	38:.08
Parenting status ^a	410	,	.12	.24	.14	.00	100 /6	.1414	.5606
Moderate profile									
Low profile	1,339	4	.29	.19	.36	.13	57%	.18:.53	.21:.51
AC-dominant profile	1,793	4	07	.24	07	.27	15%	41:.29	17:.05
AC/NC-dominant profile	1,793	4	14	.11	17	.00	100%	17:17	34:.01
High profile	1,185	4	28	.17	32	.12	72%	47:16	51:13
Low profile	1,103	4	26	.17	32	.12	1270	4710	5115
AC-dominant profile	952	4	35	.10	40	.00	100%	.40:.40	.24:.58
AC/NC-dominant profile	381	4	42	.13	51	.00	100%	51:51	78:26
High profile	344	4	58	.08	69	.00	100%	69:69	-1.01:42
AC-dominant profile	344	4	56	.00	09	.00	100%	0909	-1.0142
	025	4	07	22	10	16	6001	21. 10	20.00
AC/NC-dominant profile	835			.22	10	.16	60%	31:.10	30:.09
High profile	798	4	22	.09	27	.00	100%	27:27	49:07
AC/NC-dominant profile	227	4	1.4	1.4	1.5	00	1000	15 15	17, 40
High profile	227	4	14	.14	15	.00	100%	.15:.15	17:.48
Education									
Moderate profile									
Low profile	4,119	17	09	.28	10	.26	30%	.42:.23	18:02
AC-dominant profile	5,756	18	.21	.28	.23	.27	20%	11:.58	.17:.29
AC/NC-dominant profile	3,478	15	.20	.25	.22	.19	56%	02:.46	.11:.33
High profile	3,270	15	.04	.32	.05	.28	36%	32:.41	06:.15
Low profile									
AC-dominant profile	3,310	17	.37	.58	.37	.54	11%	-1.06:.31	46:29
AC/NC-dominant profile	1,255	14	.27	.45	.28	.35	40%	17:.73	.13:.43
High profile	1,142	14	.05	.44	.04	.36	39%	42:.50	11:.19
AC-dominant profile									
AC/NC-dominant profile	2,722	15	.00	.21	.00	.08	88%	10:.10	11:.11
High profile	2,420	15	15	.26	17	.18	62%	40:.05	29:06
AC/NC-dominant profile									
High profile	602	14	16	.26	17	.00	100%	.17:.17	02:.37
Idiocentrism									
Moderate profile									
Low profile	2,085	8	19	.31	.25	.39	25%	76:.25	42:09
AC-dominant profile	3,458	8	.03	.22	.03	.30	19%	35:.41	07:.13
AC/NC-dominant profile	1,873	5	.07	.26	.10	.26	49%	23:.43	09:.30
High profile	1,478	5	.02	.26	.01	.27	44%	34:.36	21:.22
Low profile	1,770	3	.02	.20	.01	.21	1770	.5 150	.2122
AC-dominant profile	2,009	8	.26	.51	.36	.73	10%	-1.30:.58	53:19
AC/NC-dominant profile	496	7	.23	.50	.30	.58	34%	45:1.04	01:.62
-									
High profile	352	5	.17	.45	.19	.50	36%	45:.83	13:.53
AC-dominant profile	1.040	7	0.4	1.4	00	00	1000	00.00	10.07
AC/NC-dominant profile	1,840	7	.04	.14	.08	.00	100%	.08:.08	12:.27
High profile	1,416	5	06	.25	07	.26	49%	40:.25	30:.14
AC/NC-dominant profile		_					400	21.51	
High profile	243	5	17	.33	24	.00	100%	.24:.24	16:.66

a Some samples indicated whether the respondent was a parent whereas others included the respondent's number of children. This latter information was dichotomized to equate all data sets—either with or without children. Positive d values indicates that the reference group means were higher; \overline{d} = mean sample size-weighted d value; SD_d = sample size-weighted observed standard deviation of d values; $\overline{\delta}$ = mean sample size-weighted d value corrected for measurement error using α reliability; SD_δ = corrected standard deviation of α-corrected d values; % var. = percentage of variance attributable to artifacts; 90% CV = 10% and 90% credibility values, respectively; 95% CI = lower and upper bounds of the 95% confidence interval around the corrected mean d value; d = affective commitment; d = normative commitment; d = continuance commitment.

Table 9
Meta-Analysis Results for the Mean Difference on Focal Behaviors Between Commitment Profiles

Cluster comparison N K \overline{d} SD_d $\overline{\delta}$ SD_δ % var Job performance	90% CV	95% CI
IOD Detrormance		
Moderate profile		
Low profile 765 609 .3410 .30 40%	49:.29	30:.10
AC-dominant profile 1,128 622 .1526 .00 100%	26:26	40:11
AC/NC-dominant profile 652 45161 .12 82%	76:45	87:37
High profile — — — — — — — —	.7043	.0757
Low profile		
AC-dominant profile 655 607 .4007 .37 34%	40:.54	14:.28
AC/NC-dominant profile 260 439 .4242 .24 68%	73:12	79:09
High profile — — — — — — — —	.7312	.//0/
AC-dominant profile		
AC/NC-dominant profile 620 435 .1941 .00 100%	41:41	65:18
High profile — — — — — — —	.7171	.0510
AC/NC-dominant profile		
High profile — — — — — — — —		
Actual turnover	_	_
Moderate profile		
Low profile 1,148 519 .3319 .30 21.05%	57:.19	33:06
AC-dominant profile 975 5 .16 .35 .17 .34 19.23%	27:.61	.03:.32
AC-dominant profile 973 3 .10 .33 .17 .34 19.23% AC/NC-dominant profile 276 2 1.68 2.22 .73 1.42 3.52%	-1.09:2.54	.38:1.15
High profile 191 230 .6231 .57 25.71%	-1.03:.42	81:.14
6 1	-1.05:.42	6114
Low profile AC-dominant profile 843 5 .40 .55 .39 .52 11.17%	1.05, 20	55. 22
	-1.05:.28	55:23
AC/NC-dominant profile 222 2 1.07 2.23 .30 1.10 6.01%	-1.11:1.71	08:.71
High profile 73 2 .54 1.02 .53 1.05 15.6%	81:1.86	06:1.27
AC-dominant profile	06.2.17	75 1 71
AC/NC-dominant profile 196 2 1.44 1.27 1.16 1.57 4.3%	86:3.17	.75:1.71
High profile 172 240 .0146 .00 100%	46:46	-1.02:.01
AC/NC-dominant profile		
High profile — — — — — — —	_	_
Tenure		
Moderate profile	12.11	04.05
Low profile 6,237 27 .04 .19 .01 .10 58.48%	13:.14	04:.05
AC-dominant profile 7,036 2714 .1713 .09 61.16%	25:01	17:08
AC/NC-dominant profile 4,401 2337 .4822 .41 14.27%	74:.31	28:15
High profile 1,782 1025 .3228 .27 44.81%	62:.06	43:13
Low profile		
AC-dominant profile 4,703 2719 .3012 .21 30.67%	15:.4	.07:.18
AC/NC-dominant profile 2,316 2335 .6612 .45 14.94%	7:.46	19:04
High profile 565 1030 .4032 .26 63.91%	66:.02	55:11
AC-dominant profile		
AC/NC-dominant profile 3,067 2316 .3807 .27 34.06%	42:.28	15:.01
High profile 1,542 1016 .3017 .22 55.39%	45:.1	32:02
AC/NC-dominant profile		
High profile 308 9 .14 .39 .14 .05 98.28%	21:07	41:.13
Withdrawal		
Moderate profile		
Low profile 2,179 825 .9229 1.04 3.27%	-1.62:1.05	42:16
AC-dominant profile 3,582 8 .85 .35 1.11 .51 8.97%	.47:1.76	1.01:1.23
AC/NC-dominant profile 2,061 8 1.24 .69 1.56 1.03 8.79%	.25:2.88	1.36:1.81
High profile 1,633 6 .97 .41 1.25 .52 21.23%	.59:1.91	1.05:1.48
Low profile		
AC-dominant profile 2,035 8 1.01 1.57 .80 1.70 1.54%	-2.97:1.37	95:66
AC/NC-dominant profile 514 8 2.13 1.35 2.70 2.76 11.78%	84:6.23	2.13:3.66
High profile 368 6 1.46 .75 1.92 1.20 23.3%	.38:3.46	1.47:2.59
AC-dominant profile		
AC/NC-dominant profile 1,917 8 .72 .25 .94 .28 45.42%	.59:1.29	.77:1.12
High profile 1,466 6 .20 .56 .22 .64 10.34%	6:1.04	.05:.4
AC/NC-dominant profile		
High profile 251 678 .5494 .60 39.52%	.17:1.71	.58:1.39

Note. Dashes indicate that there were not sufficient samples (K > 2) to make this meta-analytic comparison; positive d values indicates that the reference group means were higher; \overline{d} = mean sample size-weighted d value; \overline{SD}_d = sample size-weighted observed standard deviation of d values; $\overline{\delta}$ = mean sample size-weighted d value corrected for measurement error using α reliability; SD_{δ} = corrected standard deviation of α -corrected d values; θ var. = percentage of variance attributable to artifacts; 90% CV = 10% and 90% credibility values, respectively; 95% CI = lower and upper bounds of the 95% confidence interval around the corrected mean d value; d = affective commitment; d = normative commitment; d = continuance commitment.

Table 10
Meta-Analysis Results for the Mean Difference on OCBs Between Commitment Profiles

Cluster comparison	N	k	\overline{d}	SD_d	$\overline{\delta}$	SD_{δ}	% var	90% CV	95% CI
Moderate profile									
Low profile	2,209	12	.21	.33	.26	.33	30%	16:.68	.13:.38
AC-dominant profile	3,262	12	39	.30	48	.34	18%	91:04	57:39
AC/NC-dominant profile	2,015	12	-1.08	.77	-1.23	1.04	8%	-2.56:.09	1.42:1.07
High profile	1,117	6	75	.31	91	.32	42%	-1.31:50	-1.14:70
Low profile									
AC-dominant profile	1,851	12	47	.57	56	.65	12%	27:1.39	.42:.70
AC/NC-dominant profile	674	11	-1.07	.88	-1.14	1.00	17%	-2.43:.15	-1.43:89
High profile	334	6	97	.50	-1.17	.52	44%	-1.84:50	-1.60:83
AC-dominant profile									
AC/NC-dominant profile	1,698	11	57	.50	69	.54	19%	-1.37:.00	85:53
High profile	715	6	24	.25	28	.11	86%	43:13	51:06
AC/NC-dominant profile									
High profile	153	6	.51	.22	.61	0	100%	61:61	-1.08:22

Note. Positive d values indicates that the reference group means were higher; \overline{d} = mean sample size-weighted d value; SD_d = sample size-weighted observed standard deviation of d values; $\overline{\delta}$ = mean sample size-weighted d value corrected for measurement error using α reliability; SD_{δ} = corrected standard deviation of α -corrected d values; α var. = percentage of variance attributable to artifacts; 90% CV = 10% and 90% credibility values, respectively; 95% CI = lower and upper bounds of the 95% confidence interval around the corrected mean d value. OCB = organizational citizenship behaviors; d = affective commitment; d = normative commitment; d = continuance commitment.

generate results different from those from individual LPAs, as well as increase accuracy.

Factors affecting the emergence of profiles within samples. It is likely that some sample-level characteristics engender some profiles of commitment more so than others. Indeed, the results of both multilevel LPA and individual LPAs indicated that some profiles did not emerge in some data sets (e.g., the AC/NC profile emerged in 90% of the samples in the multilevel LPA, while only emergent in 80% of the individual LPA samples). Because individual samples in the commitment literature usually come from single or very few organizations, organizational factors underlie many of these sample characteristics. Some of these characteristics are personality traits, demographics, and other individual characteristics within samples; these characteristics accrue and become constrained because of attraction, selection, and attrition processes (Schneider, 1987), so samples differ from each other on organizationally important individual characteristics.

Thus, sampling across organizations can change that profiles emerge (as well as affect the variable-centered relationships between mindsets and predictors and/or outcomes through range restriction). Consequently, it seems unlikely that any organizationally based sample, no matter how large it may be, would be able to accurately determine a "final" profile solution that is true and applicable to all employees because each sample has a unique set of characteristics that define its profile structure. Unfortunately, there was not enough sample information from the archival data sets to test this prediction.

Exchange-based profiles. Even though the multilevel analysis did not evidence any exchange-based profiles, it seems highly probable that exchange-based profiles do phenomonologically occur. Analyses showed that a vast majority of individuals who were classified into the CC-dominant profile in individual sample analyses were recategorized in the Low or Moderate profile in the multilevel LPAs. This peculiar finding could be an example of a Simpson's Paradox, whereby the compilation of various variables results in a counterintuitive finding (Simpson, 1951). That is, at the

individual study-level, the CC-dominant profile emerges in many profiles; however, after averaging across all data sets, the profile disappears.

This does not question the accuracy of the multilevel LPA findings (i.e., a CC-dominant profile "should have" emerged); examining both the between- and within-study variance provides a more complete understanding of the samples. Thus, individuals identified as CC-dominant in the individual study analyses are actually more correctly categorized as Low or Moderate. It could also be the case that the profiles that appear to be CC-dominant in individual studies appear to be Low or Moderate in the multilevel LPA because of the context of the other profiles in each analysis. The profile centroids differ between samples and within-samples in the multilevel LPA analysis. These relatively small differences in the profile means could cause rather large shifts in interpretation. For example, an individual level study could have a CCdominant profile with means of: AC-2.0, NC-2.0, and CC-3.5 while the Moderate profile in the multilevel LPA could have means of: AC-2.5, NC-2.5, and CC-3 (see Tables 3 and 5).5 Depending on the location of the means of the Low profile, the High profile, and the AC and AC/NC-dominant profiles, these relatively small differences in profile means could have major effects on interpretation of the profile (in this example, as either CC-dominant or Moderate), highlighting the importance of taking a multilevel approach.

Finally, these findings (see Table 6) suggest that certain profiles are lass malleable to interpretational shifts. Specifically, two-thirds of those individuals characterized in the Low profile in the individual LPAs stayed in the Low profile in the multilevel LPA. However, only 26.5% of the individuals characterized in the AC-

⁵ Although these values were not exact to our findings in this study (Tables 3 and 5), it is largely parallel, and as the CC-dominant profile did not appear in all individual study latent profile analysis (LPAs), the shift would be less pronounced making CC less dominant in the Moderate profile, as our results found. CC = continuance commitment.

dominant profile in the individual LPAs remained in the ACdominant profile in multilevel analysis. Virtually all individuals in the AC/NC-dominant and the High profile stayed within those two profiles, though a significant number of individuals shifted between the AC/NC-dominant and High profiles in the multilevel analysis. This is logical given that more extreme scores are more likely to remain in the same profile (or similar profile types), whether analyses are multilevel or not. In the individual LPAs, the Low, AC/NC-dominant, and the High commitment profiles had the most extreme (High or Low) mean centroid scores. However, individuals with more moderate ranged scores in the individual LPAs (i.e., CC-dominant, AC-dominant, and Moderate commitment profiles) were more likely to shift, based on the context within which they were investigated in (i.e., study-level means and profiles). As a result, less extreme mindset averages may result in greater interpretational shifts for profiles, both within this study as well as across studies investigating commitment profiles. Future commitment profiles research could use the results of the present, large-scale, multisample study for benchmarking purposes when choosing profile labels.

Role of NC and CC in commitment research. Because of the failure to find an exchange-based profile in the multilevel LPA and the predominance of AC in the phenomenology of commitment profiles, researchers might question the utility of retaining both NC and CC for future commitment research (see Rhoades, Eisenberger, & Armeli, 2001). Despite these results, abandoning the NC and CC mindsets is not recommended. First, NC and CC both have important effects on outcomes in variable-centered research (Meyer et al., 2002), although many of the effects of NC mimic those of AC (Bergman, 2006) and CC seems to be related to narrow, focal behaviors only (Becker, Klein, & Meyer, 2009; Meyer et al., 2002). Second, it seems highly probable that an exchange-based profile does exist because of the rate at which exchange-based profiles emerged in the individual analyses; exchange-based profiles are differentiated from weak profiles based on the presence of NC and CC. Finally, it is necessary to retain NC and CC because there is emerging theory and evidence that the three mindsets are arranged hierarchically (see also Meyer & Parfyonova, 2010) and qualify the experiences of the other mindsets. In fact, our study provides further evidence of this hierarchical arrangement: not only does the presence versus absence of AC matter, but also profiles within the value-based commitment category were distinguished by NC (i.e., AC dominant and AC/NC dominant profiles) and/or by CC (i.e., High commitment profile) and that these differences were meaningful for a number of predictor and outcome variables in the metaanalyses.

Our results suggest that a person needs a high level of some mindset—any mindset—to be committed. This is the differentiation between weak profiles and others. Our research also shows that NC and CC both qualify the experience of AC and thus both are important to retain in order to understand the nature and experience of commitment. Despite Meyer and Herscovitch's (2001) early proposition that "pure AC" (i.e., AC-dominant profiles) would be the most beneficial profile in terms of focal and discretionary behavior, our research suggests that CC and NC do not harm but actually improve focal and discretionary behavior. Consistent with previous studies (e.g., Gellatly et al., 2006; Meyer et al., 2012; Sinclair, Tucker, Cullen, & Wright, 2005; Wasti,

2005), our meta-analytic results largely indicated that the three commitment mindsets have multiplicative effects on discretionary and focal behaviors, supporting the existence of a context effect (Gellatly et al., 2006).

Aim 2: Predictors of Commitment

Two theoretical positions were described to explain the relationships between predictors of commitment and commitment profiles. The first, described in Hypothesis 1, argued that reciprocity and exchange patterns as well as organizational support would result in higher levels of positive workplace experiences for value-based profiles, followed by exchange-based profiles, and then weak profiles. This proposition was supported for nine of the 10 predictors, including POS, identification, psychological contract fulfillment, and satisfaction variables. Hypothesis 2 proposed that exchange-based profiles would be associated with lower levels of job mobility enhancing predictors; unfortunately, Hypothesis 2 could not be tested because of the lack of exchange-based profiles in the multilevel LPA. However, results of the analyses for the variables indicating job mobility generally showed that people who had more job mobility (both psychological and physical) had weaker commitment than people who had more job mobility.

What mindsets of commitment do people reciprocate? Although theory has suggested how value-based, exchange-based, and weak profiles develop, theory has yet to specify how the various profiles within category differentiate. For example, considering the norm of reciprocity and social exchange theory (Hypothesis 1), theory suggests that high levels of positive workplace experiences that indicate organizational support will lead to valuebased profiles. However, it is unknown what distinguishes a positive experience from being repaid with a High commitment profile versus an AC-dominant profile. Perhaps a constellation of predictors—that is, a profile of predictors—are associated with profiles of commitment. Like commitment, the full phenomenological experience of these predictors might be untapped by taking a variable-focused approach and a combination of certain predictors might engender certain profiles. That is, it might be that positive workplace experiences that indicate the organization values the individual are likely to engender value-based profiles, and these particular instances of positive workplace experiences are likely to correlate, but it is the pattern of particular experiences leads to the specific profile that develops.

Criticality of organizational identification. Across all predictors, organizational identification had the strongest relationship with profile membership. The value-based profiles had the highest levels of organizational identification, with the AC/NC-dominant profile being associated with the highest levels of identification. Although some researchers couch organizational commitment in largely affective terms (e.g., Herrbach, 2006), whereby organizational commitment merely reflects an overall positive evaluation of one's work, the results here suggest that identification—not affect (e.g., positive affect, satisfaction)—is the factor most related to commitment profiles. While a positive evaluation of one's work will help increase positive organizational bonds, organizational identification shapes the bond in a more fundamental way. The criticality of organizational identification supports the key contention of Meyer et al.'s (2006) arguments about the relationship

between identification and the development of commitment mindsets and profiles.

Further, Rousseau (1998) distinguished between situated and deep structure identities, where the former refers to temporary, transactional identities that are extinguished once the identityrelevant cues are removed (i.e., leave the organization), while the latter refers to longer lasting identities based on value congruency and shared experiences. Value-based profiles are theorized to develop from deep identification while exchange-based profiles are theorized to develop from situated identification (Meyer et al., 2006). In this study, only "overall" measures of organizational identification were available, which typically reflect deep identification more than situated identification (and many of these measures predate the Rousseau [1998] distinction). For example, an item might read "The relationship I have with my organization is an important part of my self-concept," which clearly reflects the integral role the organization fills for a person. Thus, the results presented here might be best interpreted as representing deep identification. If that is true, these results are consistent with Meyer's propositions, in that all value-based profiles demonstrated the strongest organizational identification, with the moral imperative profile (i.e., AC/NC-dominant) being associated with the highest levels of identification. Future research should distinguish between the two types of identification, which could shed some light on causes of exchange-based and value-based profiles as well as the nature of and role that NC plays in the commitment domain (Meyer et al., 2006; Meyer & Parfyonova, 2010).

Job mobility principle. Across a number of antecedent variables, individuals who had less job mobility tended to have value-based profiles whereas individuals who had more job mobility had weak commitments. Specifically, value-based profiles were associated with individuals who were married, had children, and had less formal education. Marriage and children represent physical constraints that inhibit a person's mobility (Becker, 1960), whereas education reflects a knowledge and skill base that could make an employee more marketable across various organizations and is a psychological mobility enhancing construct.

Unfortunately, Although Hypothesis 2 could not be tested because no exchange-based profiles emerged in the multilevel LPA, our results did demonstrate that some level of turnover is expected for individuals with greater education and fewer location-specific ties, consistent with side-bet theory (Becker, 1960). However, our results also suggest that aspects of people's lives that bind them to a specific place (e.g., spouse, children, etc.) relate to *positive* organizational attachments, not just the "golden handcuffs" in which it is too costly to leave. Thus, organizations should consider creating programs that help tie their employees to the area (e.g., housing assistance, social networking). Further, such programs might serve not only to increase ties but also increase the sense of support that employees feel from the organization.

Surprisingly, idiocentrism failed to be the robust predictor of commitment that many suggested (Bergman, 2006; Meyer et al., 2012; Arzu Wasti, 2003; Wasti & Onder, 2009). It may be that there are few reasons to expect mean differences in idiocentrism between weak and value-based profiles because idiocentrism means that people might not be as sensitive to exchange-based cues, so either a person develops value-based commitment or no commitment; however, both might differ

from exchange-based profiles. Because this study was unable to investigate relationships with exchange-based profiles, the potential significant differences between exchange-based profiles and weak/value-based profiles might be undetected. Many have proposed the importance of understanding cultural syndromes when investigating obligatory and need-based attachments (Bergman, 2006; Meyer et al., 2013), future work should seek to further understand these relationships in samples that are likely to elicit exchange-based profiles.

Aim 3: Outcomes of Commitment Profiles

Aim 3 was to examine the relationships between profiles and focal and discretionary behaviors implicated in the commitment bond. Hypothesis 3 proposed that more desirable outcomes would be found for value-based profiles, followed by exchange-based profiles, and then weak profiles. This could be tested for value-based and weak profiles for five behaviors and the results strongly supported the hypothesis.

These results for the associations between commitment profiles and desirable organizational outcomes show that the arguments against the three-component commitment model (simplified, it is: AC is good, NC is "AC light," and CC is good for preventing turnover and irrelevant or bad for everything else, and therefore, there is no need for anything but AC) do not capture the complex effect of commitment on outcomes. For example, strong CC is not bad or irrelevant when it is combined with strong AC and NC. In fact, strong CC coupled with high AC and NC (i.e., the High profile) appears to elicit positive organizational behavior. Similarly, NC does not merely mimic the effects of AC; instead, NC augments the effects of AC.

Because the High and AC/NC-dominant profiles offer the greatest benefits to organizations (e.g., associated with highest means for OCBs) compared with even the "pure" AC profile, management practice should promote these more beneficial patterns of commitment. That is, management should not attempt to create only AC and prevent CC or NC; all three are desirable, so long as AC is present. One additional benefit—although not testable here, but consistent with theory—is that should AC waver, high CC and NC might be able to help employee retention until AC can be rebuilt. Thus, our research and broader theory show that bonds strictly based in desire do not have the same lasting impact as those that are composed of a more complex and deeper attachment that combine desire, obligations, and needs into a single driving force.

Practical Implications

Beyond the implications discussed above, a number of additional practical implications can be gleaned from this study. First, value-based profiles are associated with higher levels of organizationally desirable behaviors and organizational identification appears to be a key factor related to value-based commitment profiles. Therefore, increasing employees' identification with the organization may help to increase positive attachments to the organization, and subsequently greater retention (Meyer et al., 2002). Further, value-based profiles were associated with the highest levels of all forms of workplace satisfaction (e.g., job, pay, leader, etc.). Therefore, providing a greater number of positive workplace experiences may increase work-related satisfaction, which in turn may increase value-based commitments.

Our analyses also provide indirect support for the position that there are numerous factors outside the organization's purview that influence turnover (Hom, Mitchell, Lee, & Griffeth, 2012; Russell, 2013). Our analyses regarding the job mobility principle revealed value-based commitment is less common among people with more education and fewer location-specific ties. This suggests that the nature of positions within some organizations (e.g., tech firms) could be contributing to the turnover experienced there because of the characteristics of people that must be hired for the work; that is, it might be that there is little that some organizations can do to stem turnover. This does not mean that organizations should ignore opportunities to develop value-based commitments, as they are also associated with job performance and OCBs; however, some churn in the organization is organic and uncontrollable.

Limitations and Future Directions

Although our research has a number of positive features, there are some limitations that should be acknowledged. First, several meta-analyses had relatively small K's and N's. This is potentially problematic because it can cause second-order sampling error (Hunter & Schmidt, 2004). Like traditional sampling error, second-order sampling error refers to biased estimates because of an insufficient sampling of the entire sampling domain. This tends to occur in small meta-analyses where the few samples provided are biased in a given direction, resulting in biased effect sizes. However, even in these small K and N analyses, most credibility intervals were quite small. Thus, although second-order sampling error is a potential problem, the magnitude and consistency of effects minimize those concerns.

Second, the analyses involving predictors and outcomes of commitment simply test whether these variables are associated with commitment, not whether they are causally related to commitment. Reverse causation, reciprocal causation, or common relationships with a third variable could all explain these mean differences; this should be kept in mind while interpreting results. Of course, this is a limitation of most nonexperimental research, but there is still value in summarizing relationships commitment has with its predictors and outcomes, even if causality cannot be assumed.

Third, it may be fruitful for commitment researchers to model profiles of both commitment and predictors of commitment, which is now possible with recent developments in LPA statistics (Pastor et al., 2007). Such analyses could cluster individuals not only on their relative endorsement of the three mindsets of commitment (i.e., commitment profile), but also on their levels of identification, POS, education, and the like. Unfortunately, the nature of the samples and nonoverlapping sets of predictors precluded this more complex LPA from being conducted here.

Fifth, whereas some commitment profiles emerge more frequently across studies (e.g., AC-dominant profile), one critical and overlooked assumption is that the commitment profiles that share the same labels are qualitatively and quantitatively equivalent. We extracted the profiles from all 40 samples to ensure the quantitative and qualitative equivalence of the profiles. This is critical, as the nonequivalence of commitment profiles may impact the heterogeneous patterns of relationships between commitment profiles and outcomes across studies (cf., Dello Russon et al., 2013; Somers, 2009, 2010; Stanley et al., 2013). That is, we saw large ranges for

each profile centroid mean across samples in the individual LPAs. As a result, further efforts should be placed on delineating consistency in both qualitative and quantitative definitions of each profile. Although this supports a more cohesive analysis approach like the one taken in this article, we encourage researchers to cross-reference previous empirical work and this meta-analysis before labeling profiles to help ensure accuracy and consistency in defining profiles.

Finally, this study is the first of its kind to collect archival data to address contemporary theoretical and empirical issues in overarching latent and meta-analyses. Specifically, meta-analyses often seek to quantify the magnitude of relationships, and LPA is used to assess the number of homogenous probability distributions that exist in a population. Both of these analyses support a research platform that involves collecting archival data sets and combining them into comprehensive analyses. For example, there is a long history of personality traits associated with performance (Barrick, Mount, & Judge, 2001), though there is a dearth of research investigating a holistic approach to personality (e.g., person-focused approach). Researchers need not wait for 20 more years of new empirical person-focused research to be combined in a meta-analysis; these data are available for (re-)analysis right now to answer questions debated in the literature.

Conclusion

The findings of this study shed light on the relationship between a number of predictors and outcomes of profiles of commitment. This study utilized archival samples allowing for a large sample size ($K=40,\ N=16,052$). Organizational identification was found to have the strongest association with organizational commitment profiles, and value-based profiles (i.e., both the AC/NC-dominant profile and the High commitment profile) were found to be associated with most positive organizational experiences. Value-based profiles were associated with higher levels of discretionary and focal outcomes relative to the weak commitment profiles, and such effects were more pronounced for discretionary behaviors. Implications for these findings were made relevant to a number of organizational theories, including the norm of reciprocity and job mobility theories.

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*Indicates the paper was used as part of the archival sample.

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