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# ABSTRACT

This study examines relationships and interactions between (1) individual values, (2) organizational and occupational commitment, and (3) organizational citizenship behavior (OCB) and in-role performance in a sample of 166 employees working for a public organization in northern China. The results show several differences between the Chinese employees and previously studied Western samples, some of them expected and others surprising. Among the notable findings, the results show a strong role for continuance commitment as both a dependent variable (affected by values) and independent variable (affecting OCB). A strong negative relationship between self-direction and all commitment forms is also interesting and quite unexpected. As one of the few studies to examine such relationships in a highly traditional, non-Western culture, the study offers a new perspective on the variables examined here. We conclude by emphasizing the need for further research on other non-Western cultures and by suggesting some directions for such research.

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# 1. Introduction

As the role of personality traits in work-related behaviors and values has received renewed interest over the past decade (Furnham, Petrides, Tsaosis, Pappas, & Garrod, 2005), researchers have begun to examine the effect of values on commitment (Cohen, 2007b; Cohen & Keren, 2008; Kirkman & Shapiro, 2001; Pearson & Chong, 1997; Wasti, 2003) and on organizational citizenship behavior (OCB) and performance (Ang, Van Dyne, & Begley, 2003; Cohen & Keren, 2008; Farh, Hackett, & Liang, 2007). Fischer and Smith (2006) highlight the importance of such an examination, arguing that employees from different socio-cultural backgrounds bring different career aspirations and value systems to their work. Their own research has shown that employees are influenced differently by justice perceptions depending on their value orientation (Fischer & Smith, 2006). But values are thought to play a functional role in all sorts of work-related processes and outcomes (Lam, Schaubroeck, & Aryee, 2002).

Most studies on values have focused on the national level of analysis, in that they have compared aggregated scales of values across countries (key examples are Hofstede, 1980; Schwartz, 1999). Few studies have examined the effect of values on attitudes and behaviors at the individual level (Fischer & Smith, 2006, discussed above, is a notable exception). Yet individuals both within and across societies may have quite different value priorities that reflect their heritage, personal experiences, socio-economic level, and acculturation (Schwartz & Bardi, 2001). Values can influence how an individual perceives and interprets a given situation and the importance he or she gives it (Schwartz, Sagiv, & Boehnke, 2000), as well as how he or

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she reacts and behaves in given circumstances (Schwartz, 1996). Further, values play a central role in determining the fit between individuals and the employment organization (Berings, De Fruyt, & Bouwen, 2004). The underlying assumption is that people will be happier and more motivated, satisfied, and committed when their values are congruent with those emphasized in the group or organization (Berings et al., 2004). All of this suggests that an understanding of individual-level differences in values may offer insights into better ways of guiding different employees (Francesco & Chen, 2004).

Commitment, the other main concept examined in this study, has also seen a shift in researchers' approach. Traditionally, the organization was regarded as the only relevant object of commitment in the workplace. However, recent years have seen growing recognition that employees in the workplace are exposed simultaneously to more than one object of commitment: not only the organization, but also the work group, the occupation, work in general, and one's particular job (Cohen, 1993, 1999, 2003, 2007a; Morrow, 1993; Randall and Cote, 1991).

This new approach has been spurred by two broad societal developments. First, as the workforce has become more educated, sophisticated, and flexible, one can no longer assume that organizational commitment – rather than, say, occupational considerations – will be the driving force behind an employee's decision to keep or leave a job (Cohen, 2003). Second, the study of commitment originated in a time of economic prosperity, and was aimed particularly at preventing voluntary turnover. Yet in a job-reduction economy, organizational commitment may be a less relevant concept (Baruch, 1998; Cohen, 2003). Employers are less interested in encouraging long-term commitment when they know they may have to break the news of layoffs to even longstanding employees during an economic crisis, whether general or specific to the given company. Employees, meanwhile, may be hesitant to commit too strongly to any given organization, knowing that their employment might be terminated at any time (Cohen, 2003). These broad patterns have made it important to better understand the origin, development and magnitude of commitment foci other than or in addition to organizational commitment. Indeed, the value of this approach has been borne out by studies showing that a multiple-commitment perspective predicts important work outcomes such as withdrawal, performance, absenteeism, and tardiness better than a single-commitment outlook (e.g., Blau, 1986; Cohen, 1993, 1999, 2003; Randall and Cote, 1991).

This study spotlights two objects of commitment, the organization and the occupation—that is, the traditional focus of commitment studies, and a new focus that has been examined extensively in recent years because of its relevance to growing segments in the workforce. We chose occupational commitment rather than other possible foci (like the work group) in part because we believe that in a job-reduction economy, employees are likely to shift their commitment from the unstable focus of the organization to the more stable focus of the occupation (Cohen, 2003). It should be noted that the term "occupation" is preferable to "profession" or "career" because the former covers all employees, non-professionals as well as professionals (Lee, Carswell, & Allen, 2000). It should also be noted that most studies which have examined organizational and occupational commitment together have found a positive relationship between the two concepts (Cohen, 2003).

The current study assesses the interplay between individual values, commitment, and in-role performance and organizational citizenship behavior. We chose to look at these outcomes because such behaviors are likely to be affected by commitment whatever the economic circumstances, in contrast to other outcomes, such as voluntary turnover, that are more typical of prospering economies. Because OCB is less dependent than voluntary turnover on the state of the economy, any findings should be more stable across different economic conditions.

The study first examines the relationship between individual values and the two commitment forms spotlighted here—organizational and occupational commitment. It goes on to examine how values and commitment are related to OCB and in-role performance. The findings will clarify the relative effects of values and commitment on performance and answer a number of important questions raised in the literature. For example, in light of Baruch's (1998) argument about the relevance of commitment in explaining work outcomes, this study will help us determine the effect of commitment on performance when individual values are included in the equation.

This study makes an additional important contribution by exploring the relationship between individual values and outcomes in employees from China, a culture rarely examined in the context of this conceptual framework. Most of what we know about values and work comes from studies set in North America or Western Europe. Setting the current investigation in a culture so different from the typical Western context will expand and enhance our understanding of the conceptual relationship outlined here.

# 2. Conceptual framework and research hypotheses

#### 2.1. Schwartz's individual values model

Schwartz and Sagiv (1995) defined human values as desirable, trans-situational goals, varying in importance, that serve as guiding principles in people's lives. The crucial content aspect that distinguishes these values from one another is the type of motivational goal they express. Schwartz (1992, 1996) derived a typology of the different content of values by reasoning that values represent, in the form of conscious goals, three universal requirements of human existence: biological needs, requisites of coordinated social interaction, and demands of group functioning. Groups and individuals represent these requirements cognitively as specific values about which they communicate. Values occupy a central position in a person's cognitive system, and for this reason values influence our attitudes, decision-making processes, and in general all human behaviors (Schwartz, 1992).

Table 1

Definitions of motivational types of values in terms of their goals and the single values that represent them.

- Power: Social status and prestige, control or dominance over people and resources. (Social Power, Authority, Wealth) [Preserving My Public Image, Social Recognition]<sup>a</sup>
- Achievement: Personal success through demonstrating competence according to social standards. (Successful, Capable, Ambitious, Influential) [Intelligence, Self-Respect]
- Hedonism: Pleasure and sensuous gratification for oneself. (Pleasure, Enjoying Life)
- Stimulation: Excitement, novelty, and challenge in life. (Daring, A Varied Life, An Exciting Life)
- Self-direction: Independent thought and action-choosing, creating, exploring. (Creativity, Freedom, Independent, Curious, Choosing Own Goals) [Self-Respect]
- Universalism: Understanding, appreciation, tolerance and protection for the welfare of all people and for nature. (Broadminded, Wisdom, Social Justice, Equality, A World of Peace, A World of Beauty, Unity With Nature, Protecting the Environment)
- Benevolence: Preservation and enhancement of the welfare of people with whom one is in frequent personal contact. (Helpful, Honest, Forgiving, Loyal, Responsible) [True Friendship, Mature Love]
- *Tradition*: Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self. (Humble, Accepting My Portion in Life, Devout, Respect for Tradition, Moderate)
- Conformity: Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms (Politeness, Obedient, Self-Discipline, Honoring Parents and Elders)
- Security: Safety, harmony, and stability of society, of relationships, and of self. (Family Security, National Security, Social Order, Clean, Reciprocation of Favors) [Sense of Belonging, Healthy]

<sup>a</sup> Values in brackets were not used in computing indexes for value types.

Schwartz and Sagiv (1995) derived 10 distinct motivational types of values from the three universal requirements. Table 1 lists these 10 value types, each defined in terms of its central goal and followed, in parentheses, by specific values that most represent it.

Fig. 1 presents the patterns of conflict and compatibility that structure the value system as conceived by Schwartz and Sagiv (1995). Competing value types emanate in opposing directions from the center; compatible types appear in close proximity around the circle. As shown in Fig. 1, these dimensions are composed of higher order value types that combine the standard types. Evidence for this theoretical structure has been found in samples from 67 nations (Schwartz, 1992, 2005; Schwartz & Sagiv, 1995) as well as in recent data from 38 countries (Fontaine, Poortinga, Delbeke, & Schwartz, 2008). The findings provide substantial support for both the content and structure postulates of the theory, and specifically for the claim that 10 motivationally distinct value types are recognized across cultures and are used to express value priorities.

#### 2.2. Commitment

The study of commitment has been highly influenced by pioneering work on organizational commitment (OC) by Meyer and Allen (1984). Arguing that OC can be better understood as a multidimensional concept, Meyer and Allen proposed a



Fig. 1. Theoretical model of relations among 10 motivational types of values.

two-dimensional model of OC. They called their first dimension *affective commitment*, defined as "positive feelings of identification with, attachment to, and involvement in, the work organization" (Meyer & Allen, p. 375). They termed the second *continuance commitment*, defined as "the extent to which employees feel committed to their organizations by virtue of the costs that they feel are associated with leaving (e.g., investments or lack of attractive alternatives)" (Meyer & Allen, p. 375). Later, Allen and Meyer (1990) added a third dimension, *normative commitment*, defined as employees' feelings of obligation to remain with the organization. The three-component model of organizational commitment was later extended to occupational commitment (Meyer, Allen, & Smith, 1993) using similar definitions, albeit with some changes in the scales. As a result, the three-component approach has dominated the study not only of organizational commitment, as demonstrated in an extensive meta-analysis by Meyer, Stanley, Herscovitch, and Topolnytsky (2002), but also of occupational commitment.

# 2.3. The setting

China has the largest population of any country in the world, 1.3 billion people, nearly half of whom still live in rural areas. In 2006, the Chinese workforce comprised 7.6 hundred million, among whom 2.8 hundred million were employed in the cities. However, the implementation of China's one-child-per-family policy has had powerful demographic effects. While the death rate is declining alongside the birth rate, due to advances in medical technology, the growing number of relatively healthy older people does not compensate for the falling number of young adults. Business might be booming in China, but the workforce is shrinking. In recent years, the Chinese economy has been experiencing a labor shortage.

China's economic development has been negatively influenced by underdevelopment of its resources since the People's Republic of China (PRC) was founded in 1949. Several factors contributed to this, among them China's highly centralized economy and inadequate development in liberal and vocational education. To reverse this situation, many radical changes have been introduced, beginning with the economic reforms of late 1978 (Zhu, 1998). These reforms, which allowed joint ventures between foreign and Chinese companies within China, caused the Chinese economy to explode, with an average annual growth rate in GNP of 10% over the last decade (Jackson & Bak, 1998). But despite the economic growth, there are indications that productivity has been a problem. Many struggles and failures of international joint ventures in China have been associated with problems in the area of human resources management, and particularly in performance motivation and staff retention.

Hofstede (ITIM International, 2008) found that China has the highest long-term orientation among the Asian cultures. He also found that the Chinese rank lower than the people of any other Asian country in individualism, and attributed this to the emphasis on a collectivist society under Communist rule. Other empirical research has found that collectivistic values are still dominant in China (e.g., Ralston et al., 1996). Ralston, Holt, Terpstra, and Kai-Cheng (1997) found that the Chinese managers scored lower than American managers in individualistic values such as achievement, hedonism, stimulation, and self-direction, and higher than the Americans in traditional values such as security, conformity and tradition. China also has a significantly higher power distance ranking in comparison to most other countries, including other Asian nations—a fact attributed by Hofstede (ITIM International, 2008) to the Chinese cultural heritage.

#### 2.4. Research hypotheses

#### 2.4.1. Values and commitment

Schwartz described several possible processes that might link people's value priorities to their attitudes and behaviors. To start with, high-priority values are enduring goals that guide people to look for and to pay attention to value-relevant aspects of a situation (Schwartz et al., 2000). Values can influence the attention given to, the perception of, and the interpretation of various situations; these, in turn, can affect attitudes such as commitment. Schwartz (1996) argued that to develop specific hypotheses regarding the relationship between values and attitudes and behaviors, one should closely analyze the consequences of a behavior or attitude for the expression or attainment of the motivational goals of the value types, leading to the identification of the most relevant type (Schwartz, 1996).

Lydon (1996) advanced an explanation as to why values should be related to commitment. He contended that people feel especially committed to goals, projects and life tasks that express their core values as well as their beliefs and identities. Lydon explained this relationship by arguing that core values define who we are in an important way. They serve as a bridge from the self to life experiences by informing us about the meaning that life experiences have for us. Meaning may fulfill epistemic concerns about life experiences, but meaning then seeks expression in a "motivational process" of commitment that energizes the person to pursue a goal in the face of adversity. Thus, we are most committed to goals that affirm who we are—that give meaning to our lives.

Lydon's explanation is somewhat general and bears some resemblance to the theory of person-organization fit (O'Reilly & Chatman, 1986). Furnham et al. (2005) also discuss the relationship between values and work attitudes, in a way that is more relevant to commitment. They propose two possible mechanisms for this relationship. First, they suggest that affective disposition may have a pervasive influence on how people view the world, including their job. Put differently, individuals with different personalities may react to different aspects of their work environment. Second, it is possible that dispositions influence job-related choices, whereby people with a negative outlook seek or accept less appealing jobs than

those with a positive disposition. Under this reasoning, people with different personalities sort themselves into different jobs. The former possibility goes farther in explaining the considerable variability found among people in the same work environment, although it is uncertain whether this reflects personality or demographic differences or some combination of the two (Furnham et al., 2005).

The research hypotheses in the current study are based on two main premises: first, that even within a given culture people vary in the extent to which they hold particular values; and second, that despite this, certain sets of values can be described as more "traditional" and others as more "Western." We expect that in China, a highly traditional society, values that are more typical of traditional cultures will be more strongly related to commitment and other outcomes than values which are more typical of Western societies. In traditional societies, commitment is a complex attitude influenced by the norms, sanctions, and pressures of the small group, family, and community (Pines & Zaidman, 2003). Members of such groups tend to feel comfortable with more personal ties to supervisors, more paternalistic treatment, and a sense that power relationships should be hierarchical. For employees in traditional societies, the greater weight given traditional values may result in greater commitment to the firm and to the occupation.

Traditional values are expected to be positively related to organizational commitment because they are informed by norms that favor in-group embeddedness, security, duty, in-group harmony, interdependence, and personalized relationships (Cohen & Keren, 2008). All of these are goals that are inherent in organizational commitment. Because those who value tradition base their self-understanding on the value their in-group places on their actions, behavior for a collectivist will always favor the group. In contrast, those who emphasize more individualistic values such as achievement and self-direction are characterized by attitudes favoring independence from in-groups, freedom, autonomy, and fairness (Clugston, Howell, & Dorfman, 2000). For employees with higher levels of such values, the emphasis is on getting ahead and the ideal is to be a good leader, whereas for collectivists, the emphasis is on belonging and the ideal is to be a good member (Hickson & Pugh, 1995). Employees with higher levels of individualistic values, more typical to Western societies, view their relationship with the organization from a calculative perspective, whereas for those who value tradition, the ties between the individual and organization have a moral component (Clugston et al., 2000).

Cohen (2007a) compared individual value levels between Israeli teachers who were defined as members of traditional groups (orthodox Jews, Arabs and Druze) and Israeli teachers defined as less traditional or more Westernized (secular Jews and kibbutz teachers). The findings strongly supported the expectation that the more traditional groups would demonstrate higher levels of masculinity, collectivism, power distance, and uncertainty avoidance, all of which represent traditional values. Moreover, Cohen (2007b) also found that for the more traditional groups – that is, the orthodox Jews, Arabs, and Druze – the amount of variance in OCB, conscientiousness, and in-role performance explained by commitment forms was higher than for the other groups. These results support the notion that values relate to commitment more strongly for members of traditional cultures than for more Westernized individuals.

The following hypotheses expect a strong relationship between all commitment forms and the values of tradition, conformity, security, power, benevolence and universalism. They expect no relationship or a weak relationship between commitment and the values of achievement, stimulation, hedonism, and self-direction. The specific rationale for these patterns follows, in general, Schwartz's typology as shown in Fig. 1. Schwartz's first dimension – openness to change versus conservation - juxtaposes values emphasizing independent thought and action and favoring change (self-direction, hedonism, and stimulation) with those emphasizing submissive self-restriction, preservation of traditional practices, and protection of stability (security, conformity, and tradition). The second group, representing traditional values, is expected to be related to commitment more strongly than the first group. This makes sense, as commitment implies development of a long-term relationship, a goal also inherent in values such as conformity and security; likewise, commitment implies concern for the collective (Cohen & Keren, 2008), a goal incompatible with hedonism and self-direction. The second dimension – self-transcendence versus self-enhancement – juxtaposes values emphasizing acceptance of others as equals and concern for their welfare (universalism and benevolence) with those emphasizing the pursuit of personal success and dominance over others (achievement and power). Here, the first group, also representing more traditional values, is expected to be related more strongly to commitment than the second. Again, the reasons are self-evident. People with higher levels of achievement are likely to invest less in helping their colleagues or others in the organization or field, a tendency suggesting low commitment.

With regard to power, the formulation of a clear hypothesis is more complex. High power distance is considered in many typologies as characteristic of more traditional societies (Hofstede, 1980). According to Schwartz, this value has a strong individualistic focus that contradicts the collectivist nature of commitment. However, accepting a power hierarchy can increase commitment because the idea of hierarchy is built into many commitment foci in the workplace. Therefore, the expectation here is that employees who value power highly will be more committed than those who do not. The positive relationship found in previous studies between power and organizational commitment (Clugston et al., 2000; Cohen, 2007b) provides support for this hypothesis.

We can expect that the relationships between values and commitment will be similar for the two commitment foci, the organization and the occupation. We can also expect that these relationships will hold true for all three dimensions of commitment—affective, continuance and normative. These expectations are based on previous findings showing similarities in the relationships between correlates and both normative and affective organizational and occupational commitment (Meyer et al., 1993), and on findings showing that continuance organizational commitment is also related to Schwartz's values (Glazer, Daniel, & Short, 2004).

**Hypothesis 1a.** Affective organizational commitment will be positively related to higher levels of tradition, conformity, power, security, benevolence, and universalism. It will have a weak or negative relationship with hedonism, stimulation, achievement, and self-direction.

**Hypothesis 1b.** Continuance organizational commitment will be positively related to higher levels of tradition, conformity, power, security, benevolence, and universalism. It will have a weak or negative relationship with hedonism, stimulation, achievement, and self-direction.

**Hypothesis 1c.** Normative organizational commitment will be positively related to higher levels of tradition, conformity, power, security, benevolence, and universalism. It will have a weak or negative relationship with hedonism, stimulation, achievement, and self-direction.

**Hypothesis 2a.** Affective occupational commitment will be positively related to higher levels of tradition, conformity, power, security, benevolence, and universalism. It will have a weak or negative relationship with hedonism, stimulation, achievement, and self-direction.

**Hypothesis 2b.** Continuance occupational commitment will be positively related to higher levels of tradition, conformity, power, security, benevolence, and universalism. It will have a weak or negative relationship with hedonism, stimulation, achievement, and self-direction.

**Hypothesis 2c.** Normative occupational commitment will be positively related to higher levels of tradition, conformity, power, security, benevolence, and universalism. It will have a weak or negative relationship with hedonism, stimulation, achievement, and self-direction.

While as noted above, we can expect the general pattern to hold true for both commitment foci, some differences in the relationships between the independent variables and the two foci can be expected. Lawler's (1992) principle of proximal rules may help us here, as it explains why "actors develop stronger affective ties to subgroups within a social system rather than to the social system, to local communities rather than to states, to work organizations, and so forth" (p. 334). Interpersonal attachment produces a stronger commitment to subgroups than to the larger group because the credit for positive results from interpersonal bonds is likely to be attributed to the proximal subgroups, while the blame for negative effects is likely to be attributed to the larger group (Lawler, 1992). This logic can explain why one might develop a stronger personal attachment to one's organization, which is a proximal target in terms of providing the immediate work unit, than to one's occupation, which is a much more distant target.

Gregerson (1993) and Mueller and Lawler (1999) argue that proximal variables exert the most significant influence on employees' actions because proximity provides more opportunities for exchange relationships. Following from this argument, in the workplace context values will be more strongly related to commitment foci that provide more opportunities for exchange relationships, because these exchange relationships provide more opportunities for the attainment of motivational goals, as argued by Schwartz (1996). The organization is a more proximal focus than the occupation as it provides the immediate work setting, and so offers room for more intensive exchange relationships. We can thus expect individual values to be related more strongly to organizational than to occupational commitment.

A few words about the setting of this study are in order here. First, we described above how in a job-reduction economy, employees are likely to shift their loyalty from the organization to the occupation—a more stable focus of commitment when employees know their jobs are not necessarily secure. However, that is true primarily for professional or highly skilled employees, who are more educated, sophisticated, and flexible (Cohen, 2003). The current setting is a public organization whose employees are largely not professionals. Second, given China's highly collectivist culture (ITIM International, 2008; Ralston et al., 1996, 1997), it is likely that any shift in commitment away from the organization will involve a much slower, more measured societal trend. Third, our data were collected in 2007, when the current global recession had not yet taken root.

**Hypothesis 3.** Individual values will be related to organizational commitment more strongly than to occupational commitment. This will be demonstrated in higher explained variance of organizational commitment by individual values and by more values related to organizational commitment than to occupational commitment.

## 2.4.2. Values, commitment and work outcomes

We expect that in the current study, values that are more typical of traditional societies such as China will have a stronger effect on the outcome variables of OCB and in-role performance as well as on commitment. One reason for this – as noted above – is that values play a key role in determining the fit between employees and the organization, meaning that people will be more motivated, satisfied, and committed when their values are congruent with those of the organization or group (Berings et al., 2004). Because organizational culture is strongly affected by national culture, employees whose value system has a better fit with national values will adjust better to their work environment, and will perform better. Therefore, we can expect that in the current sample, subjects who show higher levels of tradition, conformity, security, benevolence, and universalism will score higher in OCB and in-role performance than those who place greater value on self-direction, achievement, stimulation, power, and hedonism.

**Hypothesis 4.** Employees who have higher levels of tradition, conformity, security, benevolence, and universalism will score higher in OCB and in-role performance than those who have higher levels of hedonism, achievement, self-direction, power, and stimulation.

Another expectation is that commitment will be related to OCB and in-role performance. It seems logical that commitment to the organization will improve job performance (Somers & Birnbaum, 1998). One explanation for this expected pattern is the congruity effect advanced by Sagiv and Schwartz (2000). According to their thesis, a congruity between the value system of a given group and their work setting, represented here by organizational and occupational commitment, will have a favorable effect on work outcomes such as OCB and performance.

Another explanation as to why commitment forms should be related to outcomes follows the exchange approach. Employees who experience positive exchanges with the organization will reciprocate with higher levels of commitment, which will motivate them to contribute to the organization in other ways, through, for example, better performance or higher levels of OCB (Cohen, 2003; Cohen & Keren, 2008; O'Reilly & Chatman, 1986). Currently, researchers are calling for a re-examination of the relevance of commitment to the current workforce (Baruch, 1998). Studying the relationship of commitment to extra-role behaviors is one way of responding to this call. It should be noted that we do not advance a specific relationship for each commitment form because we believe that the pattern of relationships as presented here will be similar for all commitment forms (Cohen, 2007). Following the logic of Hypothesis 3, we also expect that dimensions of organizational commitment will have a stronger effect on outcomes than dimensions of occupational commitment.

**Hypothesis 5.** All commitment forms will be related positively to in-role performance and OCB. Organizational commitment will have a stronger effect on outcomes than occupational commitment.

Another expectation that will be examined here is that commitment forms will explain variations in OCB and in-role performance above and beyond the variance explained by individual values. That is, commitment will contribute to the explained variance of the three performance variables when the relationships are controlled for the effect of the individual values. The rationale behind this hypothesis is that values are acquired early in life during the socialization process. They are expected to affect behaviors in the workplace based on the explanations outlined above. However, the commitment attitudes examined here are mainly acquired through experiences in the workplace. As values that are more related to the employee's current experiences in life, they are expected to affect OCB and in-role performance regardless of and in addition to the effect of individual values, which will serve here as control variables.

**Hypothesis 6.** Commitment forms will explain variations in OCB and in-role performance above and beyond the variance already explained by individual values.

## 3. Method

#### 3.1. Subjects and procedure

The sample was drawn from employees at three different branches of one public organization located in northern China (not in Beijing). These branches belong to a large water conservancy organization which, as a public body, is managed by the government and funded through the national treasury. All personnel are considered government employees, equivalent to civil servants. It should be noted that over the past 30 years, public organizations in China (including this one) have been undergoing a transition toward a market orientation. Such organizations currently have more control over the management of their human resources, operations, and finances than they once did. Nevertheless, while these organizations are becoming more market-oriented, they continue to operate under the control of the central government as state-owned enterprises.

The water conservancy organization has 1000 employees divided among three branches, with 250–400 employees in each branch. The three branches are located in different cities in the same region. While each branch operates as an independent business unit, the branches are functionally similar. The organization is not a knowledge-intense entity. More than 60% of the 1000 employees are front-line workers, and most have technical jobs.

Two hundred individuals were asked to participate in the survey, randomly selected from the three branches in proportion to the number of employees in each. Questionnaires were returned by 166 individuals representing a variety of functions (primarily manufacturing, management, technology, and customer service), a response rate of 83%. We attribute the high return rate to the strong support of top management for the study, which was communicated to the employees. Given that China is a society with high power distance (Hofstede, 1980), the publicizing of management support was apparently very effective. Supervisors of these 166 employees provided data on OCB and in-role performance; a code was assigned to each survey before distribution so the data could be matched. Surveys were administered on-site to employees and required about 15 min to complete; no compensation was provided. All questionnaires were printed in Chinese. The sample included 49% men and 51% women with a mean age of 33.

# 3.2. Scales

#### 3.2.1. Individual values

The Portrait Values Questionnaire (PVQ) was applied to measure the 10 basic values (Schwartz, 2005; Schwartz, Melech, Lehmann, Burgess, & Harris, 2001). The PVQ consists of short verbal portraits of 40 different people, gender-matched with the respondent. Each portrait highlights goals and aspirations that point implicitly to the importance of a value. The portraits describe each person in terms of what is important to him or her; thus, they capture the person's values without explicitly identifying values as the topic of investigation. The number of portraits for each value ranges from three (stimulation, hedonism, and power) to six (universalism), reflecting the conceptual breadth of the values. Respondents are asked to answer "How much like you is this person?" on a 6-point scale, with 1 = not similar at all and 6 = very similar. The score for the importance of each value is the average rating given to these items, all designated a priori as markers of a value. All the value items have demonstrated near equivalence of meaning across cultures in analyses using multidimensional scaling (Schwartz, 2005). A Chinese version of the PVQ available from Schwartz was applied in this study.

Table 1 shows that for only two values (tradition = .57; self-direction = .59) do reliabilities (Cronbach's alpha) fall below .60. This is a positive indication, considering Schwartz et al.'s (2001) warning not to expect high internal reliabilities for the values; this is both because the indices include only a few items and because many values have conceptually broad definitions. As Schwartz et al. (2001) noted, reliabilities below .60 are not unusual in their studies. Therefore, we decided not to omit any of the individual-value items to increase reliability, as doing so might affect the generalizability of Schwartz's scales.

It should be noted that we chose to measure the 10 value types rather than the four superordinate dimensions to give the measures greater sensitivity. China is a culture that has rarely been examined using Schwartz's scales. For this reason, it is important to look at each specific value in comparison to the others. Relying on the four larger dimensions would have simplified our analyses, but at the cost of reduced sensitivity to differences in the importance of particular values.

Organizational and occupational commitments were measured using Meyer et al. (1993). These scales are based on three dimensions for each of the commitment foci – affective, continuance and normative – and include six items for each. All the commitment constructs are measured on a 7-point scale (1 = strongly disagree to 7 = strongly agree). A forward-backward translation procedure was performed for the commitment scales. As reported in Table 1, the reliabilities (Cronbach's alpha) of all commitment scales were above .70, accept for normative occupational commitment, which was .65. These reliabilities can be defined as acceptable following DeVellis's (1991) criterion of .60 and above.

# 3.2.2. Organizational citizenship behavior (OCB) and in-role performance

The Williams and Anderson (1991) scale, a 21-item list, was applied in this study. The employees' unit managers were asked to evaluate each of the respondents in the final sample on these items. The 21 items represent three dimensions, where seven items measure in-role performance (reliability of .82), seven measure organizational OCB (impersonal OCB directed towards the organization in general; reliability of .78), and seven measure altruistic OCB (helping a specific person; reliability of .83). Each item is measured on a 5-point scale, from 1 = never to 5 = always. A forward-backward translation procedure was performed for all items.

Table 2 presents the basic statistics of the variables and the inter-correlations among them. The correlations among the independent variables were in general not high, with only a few exceeding .60. While these correlations introduce the possibility of multicollinearity, it should be noted that such figures are quite common in research on individual values (Schwartz et al., 2001) and in organizational commitment research (Meyer et al., 2002).

To test the discriminant validity of the scales, we performed a second-order confirmatory factor analysis. Accordingly, the three organizational commitment dimensions, the three occupational commitment dimensions, and the three performance dimensions (in-role performance, organizational OCB and altruistic OCB) were defined as indicators for three latent variables that represent the two commitment foci, organizational and occupational, and performance. The expectation was that the three-factor model would provide a better fit than the one-factor model. The findings indeed showed that the fit indices for the three-factor model ( $X^2 = 108.28$ ; df = 24;  $X^2$ /df = 4.51; CFI = 0.84; IFI = 0.85; NFI = .82; and RMSEA = .145) were superior to those of the one-factor model ( $X^2 = 277.17$ ; df = 27;  $X^2$ /df = 10.27; CFI = 0.54; and IFI = 0.55; RMSEA = .24). The superiority of the three-factor model was also supported by the chi-square difference test (chi-square difference = 168.9; df = 3;  $P \le .000$ ).

It is the convention that a standard of 0.90 be used to judge the overall fit of a model. However, the subjectiveness of this standard has been acknowledged (e.g., McDonald & Marsh, 1990). Hadjistavropoulos, Frombach, and Asmundson (1999) cite Raykov (1998) in contending that the 0.90 criterion has been criticized as being too stringent. Hadjistavropoulos et al. also cite MacCallum and Hong (1997, p. 209), who wrote that the "0.90 cutoff for GFI and AGFI (as well as for several other fit measures) [is] clearly inadequate, leading to under-rejection of correct models in some conditions and over-rejection in other conditions." Stevens (1996) has likewise suggested that less restrictive criteria may be appropriate, depending on the level of empirical and theoretical development in the area of study. For these reasons, and because the scales applied in the current study were developed in the context of Western culture (to which the Chinese setting is perhaps the antithesis), we believe the 0.90 standard is too stringent for the purposes of this study. We therefore consider the fit indices described above acceptable. The strong difference between the fit indices of the three-factor and the one-factor model, as also demonstrated by the  $X^2$  test, offers additional support for this contention.

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 Table 2

 Descriptive statistics, reliabilities (in parentheses), and inter-correlations among research variables.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Individual values																					
1. Conformity	3.33	.90	(.64)																		
2. Tradition	2.74	.85	11	(.57)																	
3. Benevolence	3.32	.86	04	14	(.67)																
4. Universalism	3.50	.91	.20	13	.29	(.79)															
5. Self-direction	3.05	.89	36	21	02	11	(.59)														
6. Stimulation	2.23	1.07	45	15	29	46	.28	(.71)													
7. Hedonism	2.94	1.12	.07	04	24	19	16	01	(.73)												
8. Achievement	2.87	1.01	06	17	26	26	10	.09	12	(.73)											
9. Power	1.76	1.11	26	.12	51	68	02	.42	.11	.15	(.72)										
10. Security	3.39	.94	.26	11	.22	.20	38	51	06	26	37	(.77)									
Commitment forn	15																				
11. ORGAFFEC	5.02	.85	.18	05	.14	.26	22	13	02	02	33	.21	(.75)								
12. ORGCONT	4.22	.82	.16	.12	12	06	42	.00	.24	01	.11	.10	.26	(.71)							
13. ORGNORM	4.76	.89	.08	.07	01	.18	18	.00	.00	.04	13	04	.66	.39	(.80)						
15. OCUAFFEC	5.17	.93	.16	15	.05	.25	16	18	.03	.05	29	.25	.65	.16	.48	(.82)					
16. OCUCONT	4.23	.93	02	.02	.05	04	37	.11	.09	01	.14	.06	.18	.62	.27	.12	(.76)				
17. OCUNORM	4.89	.75	.20	.04	.08	.26	03	18	04	07	25	.06	.63	.20	.62	.46	.13	(.65)			
Performance																					
17. In-role	4.01	.42	.01	02	10	09	01	.16	06	.04	.17	11	.04	.20	01	.08	.17	.00	(.82)		
18. OCBA	3.82	.51	.04	.04	.00	.06	05	.08	13	14	.05	04	.01	.24	.04	.04	.21	04	.49	(.83)	
19. OCBO	3.94	.48	.02	.08	07	.06	05	01	19	.09	.08	08	01	.16	.09	.06	.20	02	.64	.61	(.78)

Note: ORGAFFEC = Affective organizational commitment; ORGAFFEC = Continuance organizational commitment; ORGNORM = Normative organizational commitment; OCUAFFEC = Affective occupational commitment; OCUCONT = Continuance occupational commitment; OCUNORM = Normative occupational commitment; In-role = In-role performance; OCBA = OCB-altruism; OCBO = OCB-organization. *N* = 163–66 due to missing values. Correlation  $\geq$  .16 significant at .05; correlation  $\geq$  .20 significant at .01; correlation  $\geq$  .26 significant at .001.

To test for common method variance, we performed a Harman's one-factor test (Harman, 1967; Podsakoff & Organ, 1986). All the values, commitment, and performance items were entered into a principal components factor analysis with varimax rotation. Under this technique, if a single factor emerges from the factor analysis or one "general" factor accounts for most of the variance, common method variance is deemed present. However, the results of the analysis revealed 23 factors with eigenvalues greater than one and with only one factor accounting for more than 15% (16.44%) of the variance. These results are consistent with the absence of common method variance. The findings show that the respondents were able to differentiate among the different scales applied in this study.

In the final step, we tested for multicollinearity by examining the variance inflation factor (VIF) of the regressions performed here. In no case was the VIF higher than 5, which is the accepted standard for multicollinearity. In the case of universalism, the value was 4.3 in all equations. For all other independent variables, the VIF was less than 4. Therefore, we may conclude there is very little probability that our findings have been tainted by multicollinearity.

# 4. Findings

We employed hierarchical regression to test the research hypotheses regarding values, commitment and performance. We first regressed the values on the commitment forms. The 10 individual values were entered in Step 1, and the six commitment forms in Step 2. Table 3 presents the results of these analyses.

The first set of Hypotheses (1a)–(2c) expected the more traditional values (tradition, conformity, security, benevolence, and universalism), along with power, to have positive relationships with all commitment forms, and the less traditional values of hedonism, stimulation, achievement, and self-direction to have weak or negative relationships with all commitment forms. Hypothesis 1a was partially supported by the data, as shown in Table 3. As expected, affective organizational commitment was negatively related to self-direction and power. Hypothesis 1b was also partly supported. Self-direction was strongly and negatively related to continuance organizational commitment, as expected by the hypothesis. However, the positive relationship of hedonism with this commitment form was not expected. Hypothesis 1c was partially supported, with the data showing a positive relationship between universalism and normative organizational commitment. Hypothesis 2a was also partially supported, as demonstrated by the positive relationship between security and affective occupational commitment. The data also provide partial support for Hypothesis 2b. Both the negative relationship of self-direction and the positive relationship of benevolence with continuance occupational commitment were expected. However, the data also show unexpected positive relationships between stimulation and this commitment form. Hypothesis 2c was not supported by the data because none of the values were significantly related to normative occupational commitment.

Hypothesis 3 was partially supported by the data. This hypothesis expected that values would explain more variation in organizational commitment than in occupational commitment. Table 3 shows that this is indeed the case, with more variance explained for organizational than occupational commitment in all three cases—specifically, .23 versus .20, .26 versus .24, and .19 versus .16 for affective, continuance, and normative commitment respectively. However, the magnitude of the differences is not very high.

Hypothesis 4 was supported in general by the data. This hypothesis expected that more traditional values, plus power, would be more strongly related to the outcomes measured than less traditional values. As Table 4 shows, the negative relationship of hedonism and achievement with altruistic OCB (Step #2) are in accordance with this hypothesis. The negative relationship of hedonism with organizational OCB (Step #2) is also in accordance with the rationale of this hypothesis. No

#### Table 3

Hierarchical regression results (standardized coefficients) of individual values on organizational and occupational commitment and in-role performance.

Organizational commitment	Affective organizational commitment	Continuance organizational commitment	Normative organizational commitment	Affective occupational commitment	Continuance occupational commitment	Normative occupational commitment
Individual values						
1. Conformity	.17	.08	.12	.02	11	.16
2. Tradition	.07	.14	.19	10	02	.17
3. Benevolence	.01	03	00	18	.29*	.01
4. Universalism	.16	.05	.34*	.26	.16	.25
5. Self-direction	$20^{*}$	$48^{***}$	20	08	56***	.11
6. Stimulation	.21	.19	.21	.04	.27*	08
7. Hedonism	03	.24*	03	.03	.03	06
8. Achievement	.06	05	.06	.15	07	03
9. Power	29**	.09	09	20	.24*	09
10. Security	.14	.07	22	.30*	.03	11
$R^2$	.23	.26	.19	.20	.24	.16
F	4.53***	5.32	3.50***	3.73***	4.88***	2.98**

N = 163-66 due to missing values.

<sup>∗</sup> *P* ≤ .05.

\*\*  $P \le .01.$ 

\*\*\*  $P \leq .001.$ 

#### Table 4

Hierarchical regression results (standardized coefficients) of individual values and organizational and occupational commitments on in-role performance and OCB.

Performance	Altruistic O	CB	Organizatio	nal OCB	In-role performance		
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	
Independent variables							
Individual values							
1. Conformity	.23	.25	.04	.07	.06	.06	
2. Tradition	.01	.02	.06	.07	06	03	
3. Benevolence	.01	.02	09	13	02	00	
4. Universalism	.16	.15	.25	.20	.07	.06	
5. Self-direction	13	.06	10	.12	07	.08	
6. Stimulation	.19	.11	04	16	.14	.10	
7. Hedonism	20	29*	$28^{*}$	33**	13	21	
8. Achievement	$26^{*}$	$26^{*}$	.08	.08	03	03	
9. Power	.12	.07	.14	.11	.17	.18	
10. Security	13	22	-18	24	09	24	
Commitment forms							
11. Affective organizational commitment.		04		.06		.12	
12. Continuance organizational commitment		.30**		.13		.26*	
13. Normative organizational commitment		06		.03		$26^{*}$	
14. Affective occupational commitment		.15		.10		.18	
14. Continuance occupational commitment		.08		.20*		.06	
15. Normative occupational commitment		14		16		01	
$R^2$	.09	.18	.09	.17	.05	.14	
F	1.47	$2.05^{*}$	1.41	$1.82^{*}$	.80	1.52	
$\Delta R^2$		.09		.08		.09	
F for $\Delta R^2$		$2.85^{*}$		$2.36^{*}$		2.65	

N = 346 - 58 due to missing values.

significant relationship was found between any of the values and in-role performance. It should be noted that the regression equations in Step 1, including only the values, were not significant.

Hypothesis 5 expected that the commitment forms would be related to the outcomes and that organizational commitment would have a stronger relationship with the outcomes than occupational commitment. This hypothesis was partially supported by the data. As expected, continuance organizational commitment was related to altruistic OCB, explaining a significant amount of variance (.09) for this outcome. Hypothesis 5 was partly supported for organizational OCB. Commitment significantly explained the variance in organizational OCB, but the form of commitment in question was continuance occupational commitment, and not one of the organizational forms. As for in-role performance, continuance organizational commitment was positively and normative organizational commitment was negatively related to this outcome, but the explained variance they added was not significant. Hypothesis 6 was supported in general by the data. Commitment forms explained the variance in both altruistic and organizational OCB above and beyond that already explained by cultural values (see Table 4). Their contribution, however, was not significant in the case of in-role performance.

#### 5. Discussion

This study considers the interplay between values, commitment, and performance, where commitment is considered in terms of two foci – the organization and the occupation and performance outcomes include both in-role and extra-role behaviors. This study is one of a growing number to explore this interplay in terms of the conceptual framework advanced here. However, it is one of the very few to look at these concepts outside of the typical Western setting—specifically, in China.

The findings support one obvious general conclusion, not necessarily a surprising one—namely, that Chinese employees do differ in interesting ways from employees in Western cultures. This is demonstrated in particular by the strong effect of continuance commitment as both a dependent and independent variable. Rarely has this form of commitment been found to be strongly related to values as a dependent variable and to outcomes as an independent variable. The strong negative relationship between self-direction and all commitment forms is also interesting and quite unusual. Indeed, many of the current findings were not anticipated by the hypotheses advanced in this research. This can be attributed to the somewhat exploratory nature of this study, which sought to test theories honed in one context in a very different, rarely examined setting. The findings of this study do suggest some interesting and important insights that can provide ideas and directions for future research, which will be elaborated below.

As suggested above, one of the more notable findings in this study is the emergence of continuance commitment as an important dependent and independent variable. First, the values examined here explain more variance in continuance commitment, both organizational and occupational, than in either of the other two commitment forms. Second, we should

<sup>&</sup>lt;sup>\*</sup> *P* ≤ .05.

<sup>\*\*</sup>  $P \leq .01$ .

 $<sup>^{***}</sup>P \leq .001.$ 

note the positive effect of continuance organizational commitment on altruistic OCB and in-role performance (though in the latter case this effect was not significant). An immediate question is, what is the meaning of this finding? This question arises because continuance commitment was not found to be important (compared with affective and normative commitment) in most studies conducted in Western cultures (e.g., Cohen, 2003; Meyer et al., 2002). One explanation may lie in differing cultural attitudes and beliefs relating to the costs of leaving one's organization and the availability of employment alternatives (Meyer & Allen, 1984). While the idea of continuance commitment is not straightforward in Western culture, judging from the conceptual and methodological problems in studies that have applied this concept (Cohen, 2003), it seems to be an important concept for the Chinese. The findings here point to an interesting future research agenda. Is affective commitment a more relevant concept for Western cultures and continuance commitment more relevant in Chinese culture and society?

One possible reason for the importance of continuance commitment in China is that for Chinese employees, employment itself may be very important. Continuance commitment is based on the notion that the fear of losing or having to change one's job increases levels of commitment. This seems to be an important consideration for the employees examined here. However, research findings from Western societies have showed that for the average Western employee, it is not enough to simply have a job; the terms of employment are equally or even more important. For Western employees, in other words, exchange relationships with their employer and or occupation are critical. Western employees offer commitment in return for job satisfaction. Affective commitment is the key representation of such an exchange relationship, and this form of commitment has been found to be a main determinant of many work outcomes, OCB included, in most Western cultures (Cohen, 2003; Cohen & Keren, 2008). Continuance commitment, in contrast, has been found to have only a weak or even sometimes a negative relationship with many work outcomes in Western cultures (Cohen & Keren, 2008). It may be that different mechanisms drive employees from the two cultures—productive exchange for Western employees versus fear of being unemployed in China. Naturally, more research is needed before a firm conclusion can be made regarding this contention.

Another result worth noting is the strong effect of self-direction on organizational and occupational continuance commitment and on affective organizational commitment. Self-direction is a value that represents independent thought and action, creativity, independence, and goal-setting. Is commitment in Chinese culture a concept more prevalent among more passive and dependent employees? The very strong effect of self-direction on the continuance commitment forms does support this contention. Naturally, much more research is needed before solid conclusions can be made regarding this relationship.

The findings regarding Hypothesis 4 are quite interesting. We anticipated that in the supposedly more traditional Chinese culture, higher levels of "Western" values like hedonism would have an inverse effect on the outcomes. However, based on previous findings and theory (Cohen, 2007b), we also predicted that values such as tradition, conformity, benevolence, and security would have a stronger positive effect on the behavior of Chinese employees in the workplace. This was not borne out by the data. Rather, those variables had a very weak effect on the outcomes examined here. A possible explanation for our findings is that Chinese society is changing, with the old ways slowly being abandoned, but not yet replaced by values that characterize Western cultures such as achievement, stimulation, self-direction and hedonism. This may explain the inverse effect of hedonism on the Chinese sample in our study as well as the absence of any effect of tradition and conformity. As for the specific organization, as described above in Section 2.3, the organization is experiencing some major changes but at the time of the data collection there were no attempts at downsizing or workforce reduction. Therefore, values such as security were not affected by any situational circumstances.

Other findings are also worth noting. The negative effect of achievement on altruistic OCB is very interesting and suggests that Chinese culture looks at these concepts differently than do Western observers. It appears that in China, people who help others in their organization without expecting any rewards place low value on achievement. This raises a question about the meaning of altruism for Chinese employees. Is altruistic behavior really an effort to help employees at work, or does this simply represent a form of friendly interaction, regardless of any implication for organizational or individual effectiveness? Our finding suggests a stimulating research agenda in the Chinese context.

Finally, a limitation of this research should be noted. In a huge country like China, one can draw only very tentative conclusions based on a single organization (Jackson & Bak, 1998). China comprises 9.6 million square kilometers with huge differences between north and south, between coastal and inland regions, between rural and urban areas, and between Beijing and the rest of China. What pertains in one area may not be the case in another. Therefore, much more research is needed if we are to develop a solid understanding of the relationship between individual values, commitment and behavioral outcomes in this setting. Despite these limitations, this study highlights important findings and suggests some important directions for future research. More such studies can only increase our understanding of behavior and attitudes in the workplace.

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