

Extending the Schwartz Value Theory for Assessing Supplementary Person-Organization Fit

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CHAPTER 1

EXTENDING THE SCHWARTZ VALUE THEORY FOR ASSESSING SUPPLEMENTARY PERSON-ORGANIZATION FIT: INTRODUCTION AND OVERVIEW

Previous research on the effects of value congruence as a specific form of supplementary person-organization fit suffers from two important shortcomings. First, given the low consensus regarding which values are important for fit and which values have significant consequences for organizational outcomes, there is a need for comprehensive value measurement. This was recently stressed in a meta-analysis by Kristof-Brown, Zimmerman, and Johnson (2005), where they pleaded for the use of comprehensive value measurements that capture exhaustively the variation in personal and organizational value constructs. Second, an insufficient justification of the commensurability – describing both person and organization with the same content dimensions – of the value measurement often casts doubt on the results of previous research. Without this standard of commensurability, it is impossible to directly compare personal and organizational values, which is a fundamental property of person-organization fit theory (Edwards, Caplan, & Harrison, 1998). This doctoral dissertation introduces a new method for measuring values and value congruence in a comprehensive and commensurate way. For this purpose, the cross-culturally validated value theory of Schwartz (1992) serves as the starting point. In this first chapter, an introduction to the domain of person-organization fit and the value theory of Schwartz is given, followed by an overview of the five studies that have been executed in the framework of the present dissertation.

INTRODUCTION

“Of all of the issues in psychology that have fascinated scholars and practitioners alike, none has been more pervasive than the one concerning the fit of person and environment” (Schneider, 2001, p. 141). This statement about the interaction between personal characteristics and environmental properties – commonly described as person-environment (P-E) fit – is based on a research tradition that started in the first half of the twentieth century. Lewin (1935) described human behavior as the result of two interdependent factors: the person and the environment. He recognized the importance of both the individual and the environment as powerful determinants of human behavior. In this dissertation, we focus on a specific form of P-E fit, which has the central assumption that the congruence or fit between a person and his or her work environment is an important predictor of work outcomes. This application of P-E fit theory in organizational settings forms the basis of a topic that has received a great deal of attention during the past decades: person-organization (P-O) fit theory.

The P-E fit paradigm states that attitudes and behaviors result from the congruence between the attributes of the person and the environment (Pervin, 1989; Schneider, 1987). Person characteristics may include individuals’ biological or psychological needs, values, goals, abilities, or personality; environmental characteristics may refer to intrinsic or extrinsic rewards, physical or psychological demands, cultural values, or environmental conditions such as heat, shelter, or availability of food (Cable & Edwards, 2004). The present research is restricted to the work and organizational context. More specifically, we focus on the fit between personal work values and perceived organizational values.

This first chapter is organized around four objectives. The first objective is to clearly define P-O fit and to distinguish it from other forms of P-E fit. Special attention will be given to *supplementary P-O fit* and *value congruence*, which are the two concepts playing a key role in the present dissertation. Value congruence as a specific form of P-O fit brings us to this chapter’s second objective: giving a clear description of the value theory of Shalom Schwartz. Schwartz (1992) developed a comprehensive

model of human values, which reflects the “universal requirements of human existence to which all individuals and societies must be responsive” (Schwartz, 1992, p. 4). Today, both the contents and structure of values postulated by this theory have been validated in over 70 cultural groups around the world (Schwartz, in press). This comprehensive theory of human values has served as the starting point for studying the fit between person and organization in terms of value priorities. The third objective is to describe the main objectives of the current dissertation, and the final objective is to outline the studies that have been executed in the framework of the present dissertation.

PERSON-ORGANIZATION FIT

AN INTEGRATED DEFINITION OF PERSON-ORGANIZATION FIT

Although research about P-O fit has a long tradition, it was only in the past decade that it was clearly defined. In 1990, Rynes and Gerhart described P-O fit as elusive and as having an imprecise and inconsistent definition. Multiple conceptualizations and operationalizations, as well as a limited distinction from other forms of P-E fit, led to confusion in defining P-O fit (Judge & Ferris, 1992; Kristof, 1996). Even though most researchers broadly defined P-O fit as the compatibility between individuals and organizations, there was less agreement about the exact meaning of what compatibility really meant in this context.

According to Kristof (1996), two distinctions have been proposed that clarify these multiple conceptualizations of P-O fit. The first distinction is between *supplementary fit* and *complementary fit*, and the second distinction is between the *needs-supplies* and the *demands-abilities* perspective on fit.

Supplementary fit exists when a person and an organization each possess similar or matching characteristics. In other words, there is supplementary fit when the individual and the organization are similar. A well-known example of this type of fit is when the person and the organization share the same value priorities. Complementary fit occurs when the person or organization provides what the other

wants. For instance, when a person has experience or skills that are of particular importance for an organization, or contrary, when an organization offers the rewards that a person wishes (Muchinsky & Monahan, 1987).

The distinction between the needs-supplies perspective and the demands-abilities perspective offers a second view on the multiple conceptualizations of P-O fit. From the needs-supplies perspective, P-O fit occurs when there is a match between the person's needs, desires, or preferences and the organization's supplies (e.g., financial supplies, career opportunities). In contrast, the demands-abilities perspective refers to the match between the organizational demands and the person's abilities. In other words, fit occurs when an individual has the abilities required to meet the organizational demands (Edwards, 1996; Kristof, 1996).

The fact that these two distinctions had rarely been integrated, made Kristof (1996) conclude that a comprehensive definition was needed. Therefore, she defined P-O fit as "the compatibility between people and organizations that occurs when: (a) at least one entity provides what the other needs, or (b) they share similar fundamental characteristics, or (c) both" (Kristof, 1996, p. 4-5). Although needs-supplies fit and demands-abilities fit are not explicitly mentioned in this definition, it integrates the multiple conceptualizations of P-O fit. This can be made clear with an illustrative figure (see Figure 1.1).

In this model, the relationship between the characteristics of the person and the organization represents supplementary fit (arrow "a" in Figure 1.1). Typical characteristics of the person are values, goals, personality, and attitudes; typical characteristics of the organization are culture, climate, values, goals, and norms. Supplementary fit is said to exist when there is similarity between a person and an organization on these characteristics. In addition to the underlying characteristics, persons and organizations both have certain demands and supplies (indicated by the dotted arrows in Figure 1.1). A person has certain demands or needs (e.g., financial rewards) that have to be supplied by the organization (arrow "b" in Figure 1.1). Needs-supplies fit is achieved when the organizational supplies meet employees' demands. Similarly, organizations have certain demands for their employees (e.g., skills, experience, abilities). Demands-abilities fit (arrow "c" in Figure 1.1) is achieved

when employee supplies meet these organizational demands (for more details, see Kristof, 1996). In this figure, it is clear that both the needs-supplies and the demands abilities perspectives on fit match Muchinsky and Monahan's (1987) definition of complementary fit.

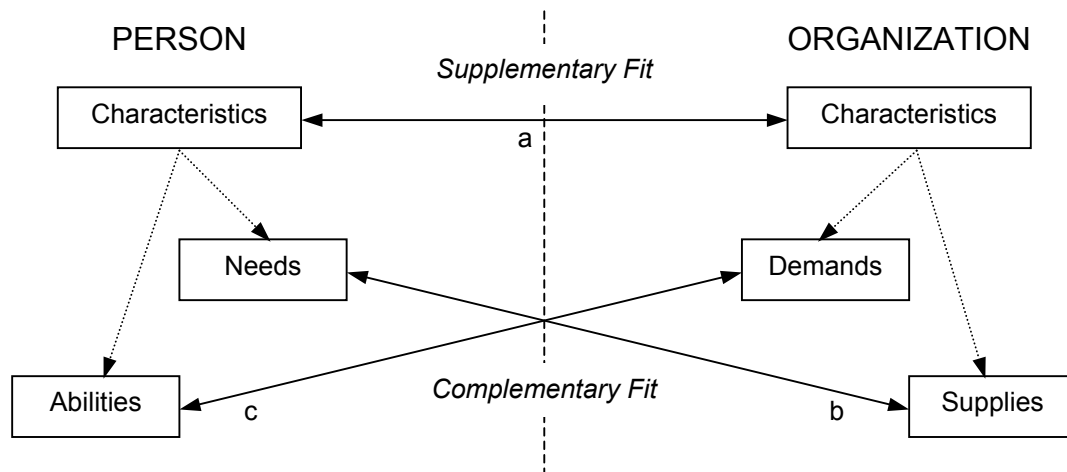


Figure 1.1. Overview of various conceptualizations of P-O fit (adapted from Kristof, 1996, p. 4).

PERSON-ORGANIZATION FIT AND OTHER FORMS OF PERSON-ENVIRONMENT FIT

According to Schneider (2001, p. 142), P-E fit is “so pervasive as to be one of, if not the, dominant conceptual forces in the field”. The constant interest of management scholars in the fit between individuals and their various environments is therefore not surprising. Although we have already defined P-O fit and its different conceptualizations, we believe it is also interesting to distinguish it from other forms of P-E congruence. A general characteristic of P-E fit research is the match between individuals and various levels of their work environment (Judge & Ferris, 1992). The broadest of these levels is the vocation or occupation (Kristof-Brown et al., 2005). *Person-vocation* (P-V) fit is determined by measuring the similarity between an individual's personality and that of a vocational environment. Research in this field includes vocational choice theories that propose matching people with careers that meet their interests (e.g., Furnham, 2001; Holland, 1985). This type of fit can be

distinguished from P-O fit because the prediction of vocational choice does not necessarily contribute to the prediction of fit with a particular organization (Kristof, 1996). A second closely related, but distinct form of P-E fit is defined as the relationship or match between a person's characteristics and those of the job or tasks that are performed at work (Edwards, 1991; Kristof-Brown et al., 2005). This well-studied type of P-E fit (e.g., Carless, 2005; Chuang & Sackett, 2005) focuses on the compatibility of individuals with specific jobs and is therefore labeled *person-job* (P-J) fit. The distinction with P-O fit lies in the fact that P-J fit should be judged relative to the tasks performed, not to the organization in which the job exists (Kristof, 1996). A third category of P-E fit focuses on the interpersonal compatibility between individuals and their work groups, and is consequently labeled *person-group* (P-G) fit (Judge & Ferris, 1992; Werbel & Gilliland, 1999). This type of fit is also called *person-team* (P-T) fit (e.g., Hollenbeck et al., 2002) because of the focus on the fit with work teams, which are widely used in the corporate world. In their book about the cultures of work organizations, Trice and Beyer (1993) give support for the distinction between P-G and P-O fit. They suggest that sub-organizational units such as groups may have different norms and values than the overall organization of which they are part of. An idea that was more recently supported by Werbel and Johnson (2001) who proposed that P-G fit is useful for employment selection. Finally, *person-person* (P-P) fit is a fourth type of P-E fit that can be distinguished from P-O fit. It exists in the dyadic relationships between individuals and others in their work environments (e.g., Ostroff, Shin, & Kinicki, 2005). For this type of fit, most research has been done about the match between subordinates and supervisors (for an overview, see Kristof-Brown et al., 2005); therefore it is sometimes labeled *person-supervisor* (P-S) fit. Here, the supervisor's personal characteristics – and not those of the organization – represent the environment.

Within the framework of this dissertation, an important remark has to be made about the distinction between P-O fit and P-G fit. Kristof (1996) stated that a work group can range from a small group of immediate coworkers to any identifiable subunit of an organization. Given that our focus is P-O fit, we asked respondents to report the values of the organization, and not the department in which they were employed. However, when an organization had different departments that were geographically

dispersed, we asked to focus on the culture of that particular geographical division. This was clearly specified to the respondents, so that no ambiguity concerning the unit of measurement arose. In this way, we complied with Hofstede's (1998) suggestion that researchers have to decide a priori what represents a culturally meaningful organizational unit. A geographic division is considered to be such a unit.

MEASURING PERSON-ORGANIZATION FIT

In the literature, a variety of methods has been used to measure P-O fit. A meaningful distinction can be made between methods assessing fit directly and methods assessing fit indirectly (Kristof, 1996; Kristof-Brown et al., 2005).

Some authors use direct measures of fit, which involves asking people explicitly whether they believe that a good fit exists (e.g., Brkich, Jeffs, & Carless, 2002; Saks, 2006). Respondents are asked how well their characteristics fit with their employing organization's characteristics, regardless of whether the respondents' characteristics are actually similar to the organization's characteristics. Therefore, this type of fit is called *perceived fit*.¹ Direct measurement of fit has been severely criticized. Because the characteristics of the person and the organization are not explicitly evaluated, the use of perceived fit as a predictor of employee attitudes may lead to a consistency bias: people who think that they fit well in their organization could consequently believe that they should also be satisfied with their job (Kristof, 1996; Kristof-Brown et al., 2005). The most important criticism, however, was formulated by Edwards (1991), who denounced direct measures primarily because they confound the constructs of the person and the environment, thereby preventing estimation of their independent effects.

Because of these shortcomings, the present dissertation only works with indirect measurement of P-O fit, as this is the case in most current P-O fit research (e.g., Abbott, White, & Charles, 2005; Finegan, 2000). Indirect measures of fit use

¹ We define perceived and subjective fit consistent with French, Rogers, and Cobb's (1974) original use of the terms. In their meta-analysis, Kristof-Brown et al. (2005) also used these original labels, but they were reversed in Hoffman and Woehr (2006) and Verquer, Beehr, and Wagner (2003).

commensurate measurement – describing both person and organization with the same content dimensions – because these measures ensure mutual relevance of the characteristics under investigation. Here, fit is measured through explicit comparisons of separately rated personal and organizational variables. When there is a focus on the match between the person and the organization as it is perceived and reported by that person him- or herself, we speak of *subjective fit*. On the other hand, when we look at the match between the person as he or she really is and the organization as it exists independently of that person's perception of it, the term *objective fit* is used (Kristof-Brown et al., 2005). A typical example of objective fit is the congruence between an individual's personal values and the aggregate of the perceived organizational values of the other organizational members. The importance of commensurate measurement was recently highlighted in Kristof-Brown et al.'s (2005) meta-analysis where only studies that measure personal and environmental characteristics on commensurate dimensions were included. As a consequence, this study focuses on indirect measurement of P-O fit. Moreover, commensurate dimensions are almost impossible to ensure when using direct measures of fit.

In order to derive the congruence between the separately assessed personal and organizational characteristics, researchers have a few options available. A popular method for assessing indirect fit is the reduction of the person and organization measures into a single index reflecting the degree of similarity between them. Two typical approaches are computing difference scores and computing profile correlations. Difference scores consist of the algebraic, absolute, or squared differences between profiles of measures (Edwards, 2002) and are widely used in psychological research that focuses on the congruence between two constructs as a predictor of outcomes (e.g., Vigoda & Cohen, 2002). However, they have been criticized repeatedly for a variety of problems. Difference scores are often less reliable than their component measures, they collapse measures of conceptually distinct constructs into a single score that is inherently ambiguous, they capture nothing more than the combined effects of their components, and they reduce inherently multivariate relationships (i.e., between two predictors – a characteristic of the person and a characteristic of the organization – and an outcome) to bivariate

relationships (i.e., between the fit and an outcome), which implies a loss of potentially highly relevant information (Edwards, 2002). Profile correlations – the correlation between the individual profile and the organizational profile – are also often used in P-O fit research (e.g., Adkins & Caldwell, 2004). However, the same concerns are raised as for difference scores (Kristof, 1996). In addition, they cannot provide information regarding the magnitude of differences between the individual and the organization (Edwards, 1993, 1994). To avoid the shortcomings of difference scores and profile correlations, Edwards (1994, 2002) suggested the use of polynomial regression analysis. In P-O fit research, it is important that the relationship between the two entities (i.e., the person and the organization) and the outcome is considered in three dimensions. In essence, polynomial regression replaces difference scores with the component measures that constitute the difference and higher-order terms such as the squares and product of these measures. The component measures have to express the components in terms of the same content dimensions. Therefore, it is necessary that personal and organizational characteristics are measured on commensurate scales (Edwards, 2002). Unlike previous approaches, this data-analytic method fully uses the data that are assessed for measuring supplementary P-O fit. Moreover, it creates new opportunities for theory development, because researchers are encouraged to conceptualize the joint effects of the components on an outcome not as a two-dimensional function, but instead as a three-dimensional surface. Because of the shortcomings of the difference score and profile similarity approach and the new opportunities of the polynomial regression approach, the polynomial regression approach will be applied throughout the present dissertation.

SUPPLEMENTARY PERSON-ORGANIZATION FIT AND VALUE CONGRUENCE

The value construct is one of the few constructs that cuts across the social sciences. Anthropologists (e.g., Brumann, 2002), economists (e.g., Grafstein, 2002), psychologists (e.g., Schwartz, 1992), sociologists (e.g., Peppas, 2004), etc. all have identified values as important research constructs. Because of its cross-cutting nature and especially because values are deemed meaningful to describe both

characteristics of individuals and organizations, the value construct forms a very good candidate for studying P-O fit.

It should come as no surprise that values are often used to study P-O fit. Numerous empirical studies have been devoted to value congruence (e.g., Erdogan, Kraimer, & Liden, 2004; Ostroff et al., 2005). Moreover, Schneider's (1987) Attraction-Selection-Attrition (A-S-A) theory, which is considered as an example of a strong theoretical foundation for the hypothesized relations between P-O fit and potential work attitudes (Arthur, Bell, Villado, & Doverspike, 2006), is based on value congruence. The A-S-A theory states that individuals are attracted to organizations that match their values (*attraction*). On the other hand, organizations tend to select candidates who are most similar to the organization (*selection*). Finally, after entry into the organization, individuals whose values are incongruent with the organization tend to leave (*attrition*). This framework posits value congruence as an important dimension of P-O fit. Also in the present dissertation, P-O fit will be studied on the basis of congruence between personal and organizational values.

A major problem with the actual use of values for studying P-O fit, is that values are studied in a piecemeal fashion. Kristof-Brown et al. (2005) recently suggested that future P-O fit research should include multiple value dimensions. Moreover, Cable and Edwards (2004) explicitly pleaded for the use of comprehensive value measurements that capture exhaustively the variation in personal and organizational value constructs when studying supplementary P-O fit. Therefore, one of the main objectives of this dissertation is to construct a comprehensive method for measuring values in a work and organizational context.

THE SCHWARTZ VALUE THEORY

For the construction of a comprehensive method for measuring values in a work and organizational context, the Schwartz value theory is used as a starting point. After a brief historical overview of value research, the Schwartz value theory will be presented as well as how this theory can be relevant for work and organizational values.

A BRIEF HISTORY OF VALUE RESEARCH

In the past century, a great deal of research was devoted to the study of values. A first systematic attempt to measure values was Allport and Vernon's (1931) Study of Values. According to Allport (1961, p. 454), a value is "a belief upon which a man acts by preference". The Study of Values yielded ipsative measures of six value types: aesthetic, economic, political, religious, social, and theoretical. Even decades after its initial development, this value measure was still widely used for counseling, pedagogical, and research purposes (Kopelman, Rovenpor, & Guan, 2003). Since Allport, many other researchers have contributed to the broad study of values. An important and much cited contribution was made by Rokeach (1973). His theoretical writing and value survey both renewed interest in this fascinating research domain. He defined a value as "an enduring belief that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end state of existence" (Rokeach, 1973, p. 5). Rokeach saw values as enduring beliefs and identified two kinds of values: instrumental and terminal values. Instrumental values are beliefs concerning desirable modes of conduct (e.g., ambitious, obedient). Terminal values are beliefs concerning desirable end states of existence (e.g., comfortable life, equality). After Rokeach (1973), several other researchers gave their own definition of values. Super (1980, p. 130) defined a value as "an objective, either a psychological state, a relationship, or material condition, that one seeks to attain". Another example is Hofstede (1980, p. 18) who defined values as "a broad tendency to prefer certain states of affairs over others". However, for a more elaborate definition, we had to wait until Schwartz and Bilsky (1987), who defined values as "(a) concepts or beliefs, (b) about desirable end states or behaviors, (c) that transcend specific situations, (d) guide selection or evaluation of behavior and events, and (e) are ordered by relative importance" (p. 551) on the basis of a broad overview of the value literature. According to this definition, values are stable motivational constructs that represent broad goals and apply across contexts and time. An important merit of this definition is that it distinguishes values from attitudes by pointing at their generalized nature, whereas attitudes are people's beliefs about specific objects or situations (Roe & Ester, 1999). It was with this conceptual definition of values that Schwartz and Bilsky (1987, 1990)

took the first steps towards a tentative theory of the universal content and structure of human values.

THE VALUE THEORY OF SHALOM SCHWARTZ

Schwartz' value theory concerns the basic values that people in all cultures recognize (Schwartz, 1992). It identifies 10 motivationally distinct value types and specifies the dynamics of conflict and congruence among these values. The primary content aspect of a value is the type of goal or motivational concern that it expresses (Schwartz & Bilsky, 1987, 1990). This motivational goal is what distinguishes one value from another. As a consequence, this value theory defines 10 broad value categories, which presumably encompass the range of motivational distinct values that are recognized across cultures. In the form of conscious goals, these values represent three universal requirements of human existence to which all individuals and societies must be responsive: needs of individuals as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups (Schwartz, 1992). According to Schwartz (in press), values are the socially desirable concepts that mentally represent these goals and they provide the vocabulary to express them in social interaction. In what follows, each of these 10 values is defined in terms of the broad goal it expresses (adopted and summarized from Schwartz, 1992, in press).

Achievement. Defining goal: personal success through demonstrating competence according to social standards. Competent performance that generates resources is necessary for individuals to survive and for groups and institutions to reach their objectives.

Benevolence. Defining goal: preservation and enhancement of the welfare of people with whom one is in frequent personal contact. Benevolence values derive from the basic requirement for smooth group functioning and from the organismic need for affiliation.

Conformity. Defining goal: restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms. Conformity

values derive from the requirement that individuals inhibit inclinations that could disrupt and undermine smooth interaction and group functioning.

Hedonism. Defining goal: pleasure and sensuous gratification for oneself. Hedonism values derive from organismic needs and the pleasure associated with satisfying them.

Power. Defining goal: social status and prestige, control or dominance over people and resources. Power values derive from a certain degree of status differentiation that is required for the functioning of social institutions and emphasize the attainment or preservation of a dominant position within the more general social system.

Security. Defining goal: safety, harmony, and stability of society, of relationships, and of self. Security values derive from basic individual and group requirements.

Self-direction. Defining goal: independent thought and action-choosing, creating, and exploring. Self-direction values derive from organismic needs for control and mastery, and interactional requirements of autonomy and independence.

Stimulation. Defining goal: excitement, novelty, and challenge in life. Stimulation values derive from the organismic need for variety and stimulation in order to maintain an optimal, positive rather than threatening, level of activation.

Tradition. Defining goal: respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self. Groups everywhere develop practices, symbols, ideas, and beliefs that represent their shared experience and fate, which eventually become sanctioned as valued group customs and traditions.

Universalism. Defining goal: understanding, appreciation, tolerance, and protection for the welfare of all people and nature. Universalism values derive from survival needs of individuals and groups.

A key aspect of Schwartz' value theory is the structural relations among the 10 values. The values are organized according to the idea that the pursuit of a value can have practical, psychological, and social consequences that are congruent with some values but conflict with others. According to Schwartz (1992, p. 14-15, in press), the

simultaneous pursuit of values from the following 12 sets of types is compatible: (a) power and achievement – both emphasize social superiority and esteem; (b) achievement and hedonism – both are concerned with self-indulgence; (c) hedonism and stimulation – both entail a desire for affectively pleasant arousal; (d) stimulation and self-direction – both involve intrinsic motivation for mastery and openness to change; (e) self-direction and universalism – both express reliance on one's own judgment and comfort with the diversity of existence; (f) universalism and benevolence – both are concerned with enhancement of others and transcendence of selfish interests; (g) benevolence and tradition – both share the devotion to one's in-group; (h) benevolence and conformity – both share normative behavior that promotes close relationships; (i) tradition and conformity – both stress self-restraint and submission; (j) tradition and security – both focus on the preservation of existing social arrangements that give certainty to life; (k) conformity and security – both emphasize protection of order and harmony in relations; and (l) security and power – both stress avoiding or overcoming the threat of uncertainties by controlling relationships and resources.

Based on the same idea of congruence and conflict, the simultaneous pursuit of values from the following three sets of types gives rise to strong psychological and/or social conflict (Schwartz, 1992, p. 15): (a) self-direction and stimulation versus conformity, security, and tradition – emphasizing own independent thought and action and favoring change interferes with submissive self-restriction, protection of stability, and preservation of traditional practices; (b) benevolence and universalism versus achievement and power – acceptance of others as equals and concern for their welfare interferes with the pursuit of one's own relative success and dominance over others; and (c) hedonism versus conformity and tradition – indulgence of one's own desires contradicts restraint of one's own impulses and acceptance of externally imposed limits.

This total pattern of relations of conflict and congruity among the 10 values is portrayed in the circular structure in Figure 1.2. To be more specific, it determines the order of the value types in this two-dimensional structure: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, conformity, tradition, and security. Conformity and tradition share the same broad motivational

goal and are therefore located in a single wedge, with conformity more towards the centre and tradition towards the periphery, signifying that tradition values conflict more strongly with the opposing values. This circular arrangement of the values represents a motivational continuum, which means that the closer any two values are in either direction around the circle, the more similar their underlying motivations; and the more distant any two values are, the more antagonistic their motivations (Schwartz, in press).

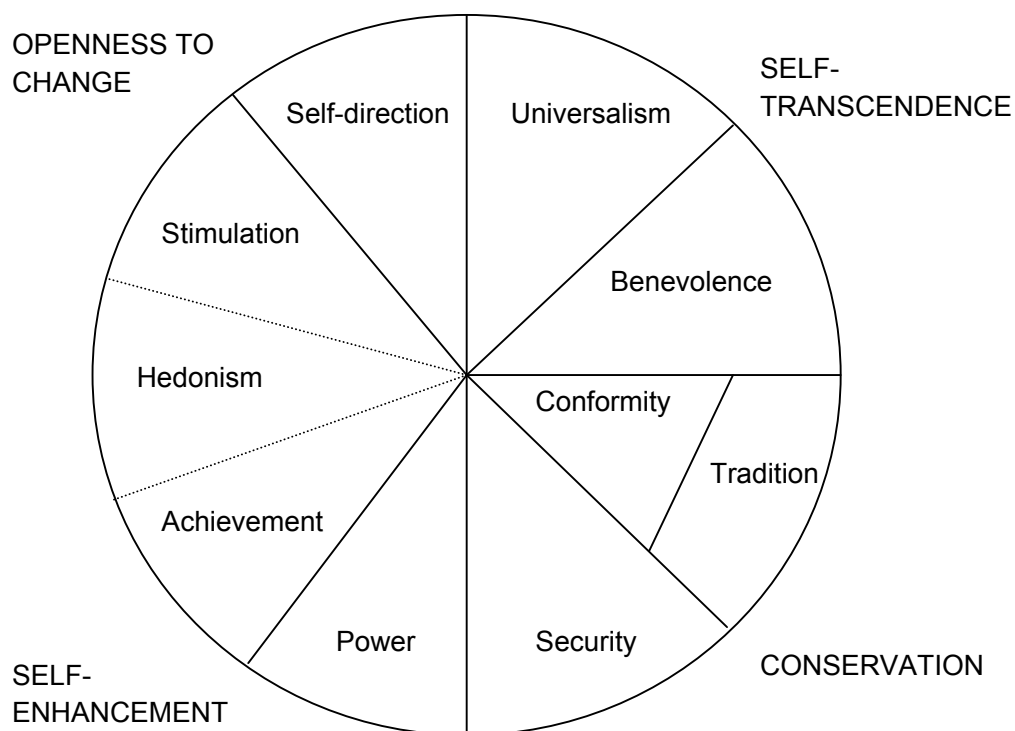


Figure 1.2. Structure of relations among the 10 motivationally distinct values (figure adopted from Sagiv & Schwartz, 2000, p. 180).

As can be seen in Figure 1.2, there is also a higher level where Schwartz (1992) discerns four value types that correspond with a dimensional interpretation of this configuration. The first dimension contrasts self-enhancement values (achievement and power) that encourage and legitimize pursuit of one's own interests, success,

and dominance over others and self-transcendence values (benevolence and universalism) that emphasize concern for the welfare and interests of others. The second dimension contrasts openness to change values (self-direction and stimulation) that welcome change and encourage pursuit of new ideas and experiences and conservation values (conformity, security, and tradition) that emphasize to maintain the status quo and to avoid threat. Hedonism shares elements of both self-enhancement and openness to change (Schwartz, 1992).

An important instrument developed to measure the 10 values proposed by the theory is known as the Schwartz Value Survey (SVS, Schwartz, 1992). The revised SVS consists of 57 value items (see Schwartz, 1994) and each item expresses an aspect of the motivational goal of one value. A short explanatory phrase in parentheses follows each item to further specify its meaning (e.g., FREEDOM [freedom of action and thought]). Respondents rate the importance of each value “as a guiding principle in my life” on a 9-point scale from *opposed to my values* (-1) through *not important* (0) to *of supreme importance* (7). An asymmetrical scale is used to reflect the desirable nature of values, because most people view values as varying from mildly to very important. The score for the importance of each value is the average rating given to the items designated a priori as markers of that value. Only value items that have demonstrated near-equivalence of meaning across cultures are included (for more information, see Schwartz, 1992, 1994, in press).

The motivational distinct content of the 10 values and the relations of conflict and compatibility among them have been validated by research in more than 70 cultural groups (including Flanders, Belgium). The SVS has been translated into 47 languages (Schwartz, in press; Schwartz & Rubel, 2005). Moreover, the SVS is often used by researchers in various domains like social psychology (e.g., Ryckman & Houston, 2003), personality psychology (e.g., Yik & Tang, 1996), and organizational psychology (e.g., Rice, 2006). Because of its comprehensiveness for human values, its extensive cross-cultural support, and its proven applicability in various psychological research domains, the Schwartz value theory has served as a basis for identifying supplementary P-O fit in this dissertation.

WORK AND ORGANIZATIONAL VALUES

A major goal of value research has been the exploration of the ways in which individuals' value priorities relate to their attitudes, behavior, and social experiences (Ros, Schwartz, & Surkiss, 1999). In the literature, a distinction is made between general life values and values concerning specific life domains (e.g., work). Numerous researchers have recognized the utility of values as a construct in understanding people's behavior with respect to work (e.g., Berings, De Fruyt, & Bouwen, 2004; Furnham, Petrides, Tsaousis, Pappas, & Garrod, 2005; Rottinghaus & Zytowski, 2006; Super & Sverko, 1995). Because work can be considered as a specific life domain, work values by implication have a more specific meaning than general values (Roe & Ester, 1999). Most researchers seem to assume that work values do somehow derive from general life values and that work values emerge from the projection of general values on the domain of work (e.g., Ros et al., 1999). Although some researchers have treated work values as a construct that is different from general life values (e.g., Elizur & Sagie, 1999; Roe & Ester, 1999), we will examine the impact of general life values directly on the domain of work (see Ros et al., 1999; Schwartz, 1999). Given the centrality of work to most people's lives (see Arvey, Harpaz, & Liao, 2004; Mannheim, Baruch, & Tal, 1997), we believe it makes sense to apply this strategy.

For the study of supplementary P-O fit, we do not only have to consider the individual's work values, but also the values of the organization. Recently, Verquer et al. (2003) pointed out the importance of studying organizational values in understanding organizational behavior. Organizational values can be defined as the guiding principles of an organization. They are elements of the organizational culture which are shared by the organization's members (Rousseau, 1990). Organizational values are measured by the perceptions of the organization's members, and therefore cannot be verified objectively by examining organizational charts or records (Kristof, 1996).

There are two different techniques for the assessment of the congruence between work and organizational values. Indirect *cross-levels* measurement considers the entire organization as unit of analysis. Therefore, the aggregations of the individual

perceptions of the organizational values are used as unit of analysis. Indirect *individual-level* measurement is a second technique for studying supplementary P-O fit, where the organizational constructs are no longer verifiable organizational characteristics, but instead the individuals' perceptions of those characteristics (Kristof, 1996).

Using the Schwartz value approach as a point of reference, the question is whether and to what extent life values have the same content and the same structure as work and organizational values. An important research question of the present dissertation is to what extent work and organizational values are organized in the same way as life values. Only when this can be demonstrated empirically, the Schwartz value theory can be used to study P-O fit.

MAIN OBJECTIVES OF THE PRESENT DISSERTATION

This doctoral dissertation introduces an extension of the Schwartz value theory for the assessment of supplementary P-O fit. In an attempt to answer the call for more comprehensive and commensurate value measurement in P-O fit research (Kristof-Brown et al., 2005), we propose a new value framework for the measurement of work and organizational values, based on the value theory of Schwartz (1992). To be more specific, the present dissertation wants to investigate the fit between an individual's work values and his or her perception² of the values of the organization, based on this newly developed value framework. The main objectives of this dissertation are:

- (a) providing a value framework that is comprehensive and commensurate for work and perceived organizational values (see Chapter 2 and 3);
- (b) developing a new value survey to measure these values (see Chapter 3);

² Although we focus on individual-level measurement, and therefore *perceived* organizational values, there are two exceptions in this dissertation. In Appendix D of Chapter 3, we take a look at the value structure of our model on organizational level, and in Chapter 4, we compare the relationship of subjective fit and objective fit (i.e., the aggregation of the perceived organizational values) with overall job satisfaction and positive work behavior.

- (c) examining two operationalizations of indirect supplementary P-O fit – subjective and objective fit – in terms of their relationships with an attitudinal and a behavioral outcome (see Chapter 4);
- (d) applying the new value framework for the assessment of supplementary P-O fit (see Chapter 5 and 6).

OUTLINE OF THE PRESENT DISSERTATION

This dissertation consists of two parts. The first part (Chapter 2 and 3) deals with the construction of a new value model – i.e., an extension of the Schwartz value model – for the comprehensive and commensurate measurement of work and perceived organizational values and their congruence. The second part (Chapter 4, 5, and 6) focuses on applications of this new model for the assessment of supplementary P-O fit. The need for additional research in this field was recently voiced by Verquer et al.'s (2003) meta-analysis. Moreover, given the numerous problems associated with difference scores and profile correlations (as discussed above), Edwards' (1994, 2002) polynomial regression procedure is used for these purposes.

Chapter 2, 3, 4, 5, and 6 are written as publishable manuscripts. Some are already under review, others will be submitted for publication in the near future. A short overview of the successive chapters is now presented.

In Chapter 2, the conceptual comprehensiveness of the Schwartz value model is tested. It has been investigated to what extent items from 42 value instruments found in the literature can be categorized into the 10 value types of Schwartz (1992). The primary focus of this first study is to examine whether the Schwartz value theory is comprehensive for life, work, and organizational values, or whether there is a need for further expansion of the number of value types already identified by Schwartz. Subsequently, the methodological study described in Chapter 3 introduces a new value model – which is actually an extended version of the original value model of Schwartz (1992) – for the assessment of values and supplementary P-O fit. It builds further on the results of Chapter 2. It investigates empirically which value types can be unambiguously identified in the life, work, and organizational value domain.

Furthermore, this study also looks at the structure of life, work, and perceived organizational values and, more important, whether these structures are commensurate for the three value domains. In addition, this chapter presents the Life, Work, and Organizational Values Survey (LWOVS). This instrument is an adapted version of the Schwartz Value Survey (Schwartz, 1992), meant to measure life, work, and organizational values in a comprehensive and commensurate way. The aim was to construct an instrument that was adequate for the assessment of value congruence and supplementary P-O fit. For this study, data are collected in 27 Belgian organizations from different employment sectors. By using a multi-unit sample like this, a broad range of organizations is represented. This is essential because the P-component has to vary across people and the O-component across organizational settings in P-O fit research (see Schneider, 2001; van Vianen, 2001). Finally, this chapter ends with four appendices to illustrate the stability of our value model.

Chapter 4, 5, and 6 are applications of this new value model. For these studies, a second and independent multi-unit sample is used consisting of respondents from 26 Belgian organizations. This time, only work and organizational values were assessed.^{3, 4} Chapter 4 is a contribution to the clarification of different techniques for measuring supplementary P-O fit. Several authors have pointed out the need for studies that examine the impact of various measurement strategies on the relationship between fit and outcomes (e.g., Cable & DeRue, 2002; Hoffman & Woehr, 2006; Verquer et al., 2003). Therefore, Chapter 4 investigates whether indirect individual-level measurement or subjective fit and indirect cross-levels measurement or objective fit are differentially related to overall job satisfaction and positive work behavior. The choice of the outcome variables in this study is based on the recent emphasis and call for more research on the correspondence between P-O fit and both attitudinal (Verquer et al., 2003) and behavioral outcomes (Hoffman &

³ Life values were not assessed for three reasons: (a) the primary focus of this dissertation is on the congruence between work and perceived organizational values, (b) omitting life values substantially shortens and simplifies the value questionnaire, and (c) there is a better congruence between work and perceived organizational values than between life and perceived organizational values (see Chapter 3).

⁴ In Chapter 3, the new value survey is labeled the Life, Work, and Organizational Values Survey (LWOVS). In Chapter 4, 5, and 6, it is labeled the Work and Organizational Values Survey (WOVS), because no life values were assessed.

Woehr, 2006). This also influenced our choice for an attitudinal outcome in Chapter 5 and a behavioral outcome in Chapter 6. Both chapters provide an empirical application of the new value model presented in Chapter 3. In Chapter 5, the relationship between supplementary P-O fit and three forms of organizational commitment (affective, normative, and continuance commitment) is investigated. Chapter 6 mirrors Chapter 5 by focusing on the relationship between supplementary P-O fit and organizational citizenship behavior. Moreover, both Chapter 5 and 6 look at the direct relationships between values (the main effects of work values and perceived organizational values) and the outcome variables. At the end of Chapter 6, we present a final appendix that shows the correlations between all outcome variables of this dissertation.

Finally, Chapter 7 provides the general conclusions, theoretical contributions, practical implications, strengths, limitations, and directions for future research.

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CHAPTER 2

IN SEARCH OF A COMPREHENSIVE VALUE MODEL FOR ASSESSING SUPPLEMENTARY PERSON-ORGANIZATION FIT¹

The purpose of this study was to test the conceptual comprehensiveness of the Schwartz value model so that it could be used for the assessment of supplementary person-organization fit. An extensive literature search was conducted in which 42 value instruments or typologies were identified that are used to measure life, work, or organizational values. Experts judged whether each of the in total 1578 items from these 42 instruments could be regarded as an indicator of one of the 10 value types identified by Schwartz (1992). We found that (a) 92.5% of the items could be classified into one of the 10 value types, (b) the remaining items suggested two possible new types (goal-orientedness and relations), and (c) there are indications that two value types can be split up in order to obtain a more univocal meaning (power into materialism, power, and prestige; and universalism into social commitment and universalism). As a result, we conclude that the Schwartz value model can be used as an overall framework for studying supplementary person-organization fit.

¹ This paper was co-authored by Johnny Fontaine.

INTRODUCTION

Using the same model for individual and organizational values is a prerequisite for studying supplementary person-organization (P-O) fit. Only if the same dimensions can be used to describe characteristics of both individuals and organizations, it is meaningful to investigate how they converge or diverge from one another. As a consequence, the purpose of the present paper is to provide such a shared and comprehensive model for individual and organizational values.

Defining P-O fit is not easy because the topic has been subject to confusion due to its multiple conceptualizations and operationalizations. According to Kristof (1996), most researchers define P-O fit as the compatibility between individuals and organizations. This compatibility, however, can be defined in a variety of ways. In this paper, we focus on supplementary P-O fit. *Supplementary fit* occurs when a person “supplements, embellishes, or possesses characteristics which are similar to other individuals” in an environment or organization (Muchinsky & Monahan, 1987, p. 269). Supplementary fit can be differentiated from *complementary fit*, which occurs when a person’s characteristics “make whole” the environment or add to it what is missing (Muchinsky & Monahan, 1987, p. 271). Person characteristics may include values, needs, goals, or personality; organizational characteristics may refer to physical or psychological demands, rewards, values, etc. (Cable & Edwards, 2004). As values have been studied as characteristics of both individuals and organizations, they constitute an excellent base for assessing supplementary P-O fit. Indeed, value congruence is the most frequently used operationalization of supplementary P-O fit (e.g., Erdogan, Kraimer, & Liden, 2004; Kalliath, Bluedorn, & Strube, 1999; Siegall & McDonald, 2004).

However, in the P-O fit literature based on value congruence, we are faced with some important problems. First, different value theories and instruments have been developed for individual (e.g., Braithwaite, 1982; Crace & Brown, 1991; Elizur & Sagie, 1999; Rokeach, 1973; Schwartz, 1992) and organizational values (e.g., Beach, 1993; Hofstede, Bond, & Luk, 1993; O’Reilly, Chatman, & Caldwell, 1991; Pasa, Kabasakal, & Bodur, 2001). Moreover, much research has focused on one

value domain, linking the importance of individual (e.g., Furnham, Petrides, Tsaousis, Pappas, & Garrod, 2005) or organizational values (e.g., Burke, 2001) to antecedents or outcomes, such as personality, workaholism, etc. It is thus not clear whether the same values are identified for the individual compared to the organization. Second, a comprehensive model for assessing individual and organizational values is seldomly used. Only a limited number of values are taken into account when investigating P-O fit (e.g., Cable & Judge, 1996; Kalliath et al., 1999; Kristof-Brown, 2000). A similar approach can give at most an incomplete picture of value-related P-O fit. Thus, for studying value-related supplementary P-O fit, a comprehensive value model is needed that can be applied for measuring both individual and organizational values.

Given its extensive cross-cultural support, we propose to use the Schwartz value model as a point of departure for such a goal (see Schwartz, 1992). Schwartz and Bilsky (1987, p. 551) define values as “concepts or beliefs, about desirable end states or behaviors, that transcend specific situations, guide selection or evaluation of behavior and events, and are ordered by relative importance”. The crucial content aspect that distinguishes values is the type of motivational goal they express. The theory identifies a comprehensive set of 10 different value types that are each defined by a central motivational goal and that can be identified across cultures (Schwartz, 1992) (see Table 2.1).

Table 2.1. Definitions of motivational types of values in terms of their goals (Sagiv & Schwartz, 2000, p. 179).

Achievement	Personal success through demonstrating competence according to social standards
Benevolence	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact
Conformity	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms
Hedonism	Pleasure and sensuous gratification for oneself
Power	Social status and prestige, control or dominance over people and resources
Security	Safety, harmony, and stability of society, of relationships, and of self
Self-direction	Independent thought and action-choosing, creating, and exploring

Stimulation	Excitement, novelty, and challenge in life
Tradition	Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self
Universalism	Understanding, appreciation, tolerance, and protection for the welfare of all people and nature

The value theory also specifies the structural relationships among these 10 value types based on an analysis of the conflicts and congruities between the motivational goals. Actions taken in pursuit of one value type have psychological, practical, and social consequences that may conflict or may be compatible with the pursuit of other value types (Sagiv & Schwartz, 2000). These structural relationships can be represented by a circular structure in which congruent value types are situated adjacent and conflicting value types oppose one another (see Figure 2.1).

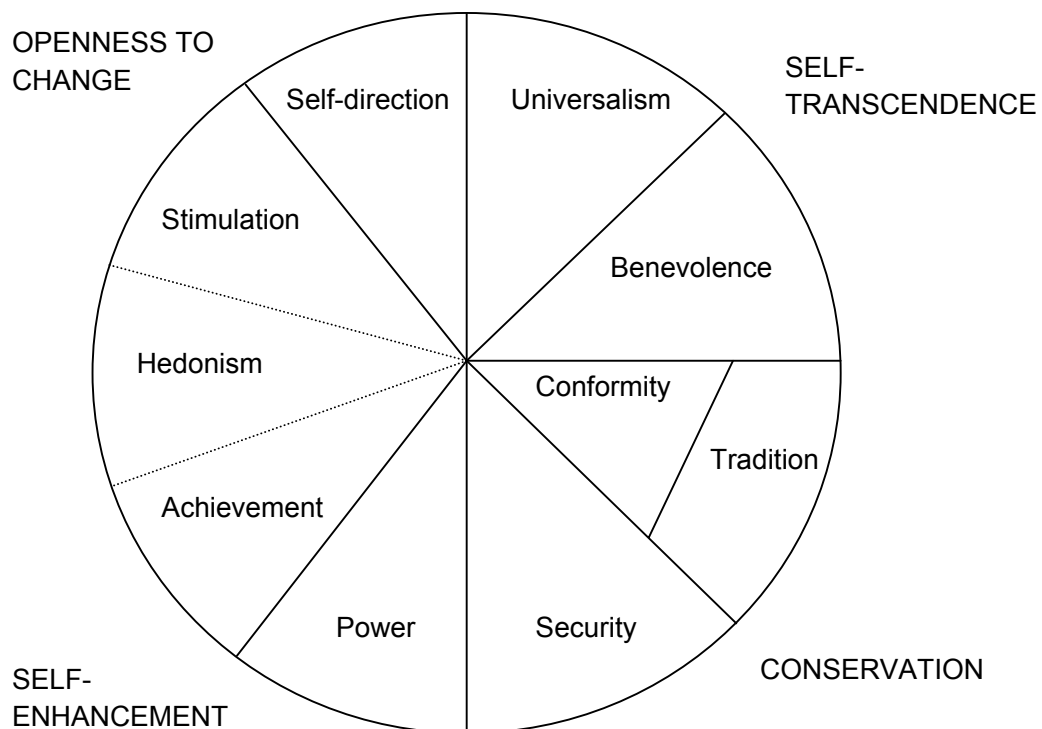


Figure 2.1. Theoretical model of relations among 10 motivational types of values (Sagiv & Schwartz, 2000, p. 180).

Two orthogonal dimensions or four higher-order value types summarize this structure: self-enhancement versus self-transcendence opposes achievement and power values to benevolence and universalism values. Openness to change versus conservation opposes self-direction and stimulation values to conformity, security, and tradition values. Hedonism values share elements of both openness to change and self-enhancement. Analyses in more than 200 samples from more than 60 nations support this circular structure and the relationships among the different value types (Schwartz, in press; Schwartz et al., 2001).

The key question of the present study is to what extent the Schwartz value model – which is a comprehensive and cross-culturally validated value model for life values – can be generalized to work and organizational values, and can be used as the so much needed comprehensive value framework that is shared across individuals and organizations. Thus, the question is whether and to what extent the multitude of value conceptualizations (i.e., in the life, work, and organizational value domains) can be integrated into the Schwartz value model. Given the multitude of value theories, it would be a daunting task to compare these theories at a conceptual level, a task moreover complicated by the lack of equivocal meaning of abstract value dimensions. However, what can be done more straightforwardly, and what is done in the present study, is to investigate whether and to what extent the operationalizations proposed by the multitude of value theories can be accounted for by the Schwartz value theory. If this were the case, the Schwartz value theory would indeed be a good candidate for an overall comprehensive theory for studying supplementary P-O fit. So, the first and main research question of this study is:

Research Question 1: Can values and value categories found in the literature be categorized into the 10 motivational types of Schwartz (1992)?

Next, we will look at potential items or value categories that cannot be categorized into these motivational types. It has been shown that Schwartz' value model is comprehensive for assessing life values (see Schwartz, in press; Schwartz et al., 2001), but it remains an open question whether this also applies for work and organizational values. In 1992, Schwartz demonstrated that there was no evidence for expanding his value structure with other motivational types than those already

distinguished. However, he left open the possibility that future theorizing could suggest additional types. Especially when extending the focus from life to work and organizational values, it is important to investigate this possibility. Therefore, we will content analyze possible items that do not fit the Schwartz value structure to search for potential additional value types that are characterized by specific motivational goals. This leads us to our second research question:

Research Question 2: Is the value theory of Schwartz (1992) comprehensive for assessing life, work, and organizational values or is there a need to expand the number of value types identified?

The last research question is whether further refinements with respect to the 10 value types are suggested by the work and organizational value literature. The 10 value types are conceptualized at a rather high level of abstraction (see Schwartz et al., 2001), which allows for the possibility that there is still quite some heterogeneity within the separate value types. It will be investigated for each value type whether or not the items from that type have a unique and equivocal meaning. If this is not the case, it will be investigated how the value type can be split up in more specific value types with a unique and univocal meaning across the work and organizational values literature. Thus, our third research question is:

Research Question 3: Is the conceptual meaning of the 10 motivational types of Schwartz (1992) univocal or is there a need to split up certain value types into two or more distinct subtypes?

The answers to these three research questions will allow us to propose a comprehensive value model that can be used as a framework for the measurement of both personal and organizational values, and in addition for measuring supplementary P-O fit.

METHOD

SAMPLE AND PROCEDURE

A computer-aided literature search was conducted using both sociological and psychological databases to identify studies on individual (life and work values) and organizational values. Keyword searches in these databases were intentionally made broad to avoid exclusion of studies. Furthermore, additional research was identified by examining the reference sections of those articles found from the database search. Two decision rules were used to decide whether a study was included or not. First, only studies that defined a value typology or instrument were taken into consideration. Second, items had to be available from the author, either in the article or on request. The final sample consisted of 42 instruments or typologies (for an overview, see Table 2.2); the total number of items was 1578.

Five experts (including the first author), all Ph.D. students in industrial and organizational psychology and well-acquainted with the Schwartz value theory, content analyzed the items.² They had to judge for each item whether it corresponded with the definition of one of the 10 value types proposed by Schwartz (1992). Across the five experts, an item could be: (a) in the category 'not categorizable' if it could not be placed into one of the 10 types of Schwartz or if it did not comply with the definition of values as transsituational goals; (b) in the category 'not assigned' if it was consistently placed into one of the 10 types of Schwartz, but without substantial agreement between judges on which type; or (c) into one of the 10 value types of Schwartz if it was assigned to that value type by at least three of the five expert judges.

ANALYSES

Pair-wise comparisons were made between the evaluations of the expert judges. Cohen's kappa was calculated to measure the degree of interrater agreement

² The authors wish to thank the expert judges Frederik Anseel, Colin Beheydt, Koen Beirens, and Evelyn Diasson for their critical analysis of the 1578 items.

(Cohen, 1968). First, this was done for assessing the interrater agreement concerning the 10 motivational types. Second, this was also done for assessing the interrater agreement at the level of the four higher-order value types.

Furthermore, all items were content analyzed to explore the meaning of the underlying motivational goals. We looked at the items that were not categorized into one of the 10 motivational types (the category 'not categorizable') in order to see if additional motivational goals could be identified above the 10 of Schwartz (1992). Moreover, on the basis of the assigned value items, we compared the 10 value types with the value dimensions proposed in the life, work, and organizational value literature in order to determine whether their meaning was unique and univocal.

RESULTS AND DISCUSSION

CATEGORIZATION INTO THE SCHWARTZ VALUE TYPES

In total, 1459 (92.5%) items were placed into the 10 motivational types of Schwartz (1992). This means that only for 119 (7.5%) items, there was no substantial agreement between the expert judges on fitting the items into one of the 10 motivational types (see Table 2.2).³

Table 2.2. Overview of value instruments and typologies encompassing 1578 items, categorized into the higher-order value types of Schwartz (1992).

	Author	Instrument/typology	Items	SE	OC	ST	CO	NA	NC
1.	Beach (1993)	Organizational Culture Survey	15	6	2	3	0	2	2
2.	Belk (1985)	Materialism Scales	27	1	1	9	2	2	12
3.	Braithwaite (1982)	Social Values Inventory	18	1	2	7	6	2	0
4.	Braithwaite (1997)	Goal, Mode and Social Values Inventory	58	8	10	18	18	2	2

³ Table 2.2 only presents the categorization of the items into the higher-order values of Schwartz (1992); the ratings of the expert judges into the 10 motivational types were converted into the four higher-order value types.

	Author	Instrument/typology	Items	SE	OC	ST	CO	NA	NC
5.	Braithwaite & Law (1985)	Mode Values Inventory	51	8	10	16	12	3	2
6.	Calori & Sarnin (1991)	Questionnaire on Work-related Values	58	11	11	16	9	7	4
7.	Chinese Culture Connection (1987)	Chinese Value Survey	40	7	3	5	14	9	2
8.	Coetsier & Claes (1990)	Values Scale	106	20	43	6	16	15	6
9.	Crace & Brown (1991)	Life Values Inventory	22	1	5	2	6	3	5
10.	Drenth & Cornelisse-Koksma (1970)	Scale of Personal Values	90	12	39	0	6	6	27
11.	Drenth & Kranendonk (1973)	Scale of Interpersonal Values	90	29	16	15	19	10	1
12.	Elizur & Sagie (1999)	Life and Work Values	42	13	7	7	7	7	1
13.	England (1967)	Personal Values Questionnaire	49	18	7	9	8	2	5
14.	Gorlow & Noll (1967)	Empirically Derived Value Constructions	75	13	11	12	19	13	7
15.	Hammill, Segal, & Segal (1995)	Personal Values Inventory	60	12	2	11	26	8	1
16.	Herche (1994)	Multi-Item Operationalisation of the List of Values	44	7	13	6	15	3	0
17.	Hofstede (1998a)	Employee Survey Questionnaire	23	6	3	3	5	5	1
18.	Hofstede (1998b)	Work Goal Importance Questionnaire	22	7	4	1	4	4	2
19.	Hofstede, Bond, & Luk (1993)	Organizational Culture Values	50	15	8	4	10	7	6
20.	Inglehart (1981)	Materialism - Post Materialism Scale	12	0	1	4	6	1	0
21.	Kahle (1983)	List Of Values	9	2	3	1	3	0	0
22.	Kim, Atkinson, & Yang (1999)	Asian Values Scale	36	4	1	3	20	7	1
23.	Manhardt (1972)	Work Values Inventory	21	6	9	1	3	2	0
24.	McDonald & Gandz (1992)	Shared Values	24	2	7	8	6	0	1

	Author	Instrument/typology	Items	SE	OC	ST	CO	NA	NC
25.	Morris (1956)	Ways To Live	13	0	5	2	1	4	1
26.	O'Reilly, Chatman, & Caldwell (1991)	Organizational Culture Profile	54	12	14	10	9	2	7
27.	Pasa, Kabasakal, & Bodur (2001)	Organisational Values	27	3	0	11	7	2	4
28.	Priest & Beach (1998)	Army Year of Values Survey	16	3	3	2	4	4	0
29.	Renner (2003)	Lexical Perspective on Human Values	125	23	12	33	39	12	6
30.	Richins & Dawson (1992)	Material Values	18	4	6	0	1	3	4
31.	Robert & Wasti (2002)	Organizational Culture Scale	13	2	3	3	0	5	0
32.	Rokeach (1973)	Rokeach Value Survey	36	4	11	7	10	3	1
33.	Ros, Schwartz, & Surkiss (1999)	Work Value Survey	10	2	3	1	2	2	0
34.	Singelis (1994)	Self-Construal Scale	24	1	7	4	9	2	1
35.	Singelis, Triandis, Bhawuk, & Gelfand (1995)	Vertical and Horizontal Individualism and Collectivism Scale	32	8	6	8	8	2	0
36.	Super (1970)	Work Values Inventory	45	10	16	4	8	7	0
37.	Tang, Kim, & O'Donald (2000)	Japanese Organizational Culture Scale	15	1	2	3	2	6	1
38.	Van Dyne, Graham, & Dienesch (1994)	Perceived Importance of Workplace Values	12	2	2	2	1	3	2
39.	van Muijen, Koopman, & De Witte (1996)	FOCUS'95-Questionnaire	29	5	2	7	9	6	0
40.	Veiga, Lubatkin, Calori, & Very (2000)	Culture Compatibility Index	23	6	5	5	1	4	2
41.	Wollack, Goodale, Wijting, & Smith (1971)	Survey of Work Values	18	11	0	0	2	5	0
42.	Zeitz, Johannesson, & Ritchie (1997)	Total Quality Management Survey	26	2	9	4	4	5	2

Note. SE = self-enhancement; OC = openness to change; ST = self-transcendence; CO = conservation; NA = not assigned: item fits into Schwartz' value model, but no agreement concerning which specific type; NC = not categorizable into Schwartz' typology.

Table 2.3 shows the amount of interrater agreement for the items that were classified into these 10 motivational types. On average across the 10 pair-wise comparisons (based on five expert judges) there was 62.22% agreement between judges (sum of the diagonal entries). Cohen’s kappa had an average value of 0.58 (range from 0.53 to 0.61). According to Landis and Koch (1977) this represents a moderate agreement. Moreover, in most cases, the highest disagreement between judges was found for adjacent value types, which is in line with the theoretically expected and empirically confirmed circular order of the value types, as most confusion can be expected there (see Sagiv & Schwartz, 2000).

Table 2.3. Average data set based on 10 pair-wise comparisons of 5 judges which shows 62.22% agreement between judges for the 10 value types of Schwartz (1992).

	PO	AC	HE	ST	SD	UN	BE	CO	TR	SE
PO	7.94									
AC	1.32	8.98								
HE	0.16	0.16	2.81							
ST	0.12	0.72	0.32	4.89						
SD	0.32	0.92	0.12	1.28	9.14					
UN	0.08	0.08	0.16	0.12	0.56	5.45				
BE	0.16	0.16	0.08	0.04	0.16	1.76	7.30			
CO	0.36	0.24	0.16	0.16	0.64	0.32	0.92	5.61		
TR	0.16	0.16	0.08	0.08	0.16	0.36	0.28	1.04	4.33	
SE	0.44	0.24	0.36	0.24	0.48	0.48	1.44	0.80	0.44	5.77

Note. PO = power; AC = achievement; HE = hedonism; ST = stimulation; SD = self-direction; UN = universalism; BE = benevolence; CO = conformity; TR = tradition; SE = security. Table entries are percentages.

Table 2.4 shows the amount of interrater agreement for the same 1459 items. However, they are now categorized into the four higher-order value types of Schwartz (1992). On average across the 10 pair-wise comparisons (based on five expert judges) there was 76.36% agreement between judges (sum of the diagonal entries). Cohen’s kappa had an average value of 0.69 (range from 0.65 to 0.74). According to Landis and Koch (1977) this represents a substantial agreement.

Table 2.4. Average data set based on 10 pair-wise comparisons of 5 judges which shows 76.36% agreement between judges for the four higher-order values of Schwartz (1992).

	SE	OC	ST	CO
SE	19.52			
OC	2.43	20.28		
ST	0.50	1.08	16.28	
CO	1.57	2.23	3.82	20.28

Note. SE = self-enhancement; OC = openness to change; ST = self-transcendence; CO = conservation. Table entries are percentages.

Thus, we conclude that we can answer our first research question affirmatively, because most items can be categorized into the 10 motivational types and four higher-order values of Schwartz (1992) with moderate to substantial agreement between expert judges. As a consequence of these results, we conclude that – from a conceptual point of view – the claimed comprehensiveness of this value theory can be confirmed to a large extent.

ADDITIONAL TYPES

In order to answer our second research question, we have looked at the 119 items that were not classified into one of the 10 value types. A number of items were ambiguous [e.g., “integrate action, enjoyment, and contemplation” (Morris, 1956)] or too specific and therefore not in line with the definition of values as transsituational goals [e.g., “I never discard old pictures or snapshots” (Belk, 1985)]. These items were not taken into account. Content analysis of the remaining items revealed two possible new value categories. The first category is a typical work or organizational value and has a focus on living and working to fulfill a purpose, not giving up, and taking initiative. We label this value type *goal-orientedness*. It is found in six of the instruments under investigation, for example: “work towards a clear goal” (Drenth & Cornelisse-Koksma, 1970); “taking initiative” (O’Reilly et al., 1991); and “having clear goals” (van Muijen, Koopman, & De Witte, 1996). The second category is focused on having good interpersonal relations with other people and valuing true friendship. As

an organizational value, this value type encompasses issues like being team-oriented, working in collaboration with others, developing friends at work, etc. Therefore we label this value type *relations*. It is found in 13 of the instruments under investigation, for example: “having a job where I can easily make friends” (Coetsier & Claes, 1990); “working in collaboration with others” (O’Reilly et al., 1991); and “coworkers in my work unit are like family” (Zeitz, Johannesson, & Ritchie, 1997).

TESTING THE UNIVOCALITY OF THE SCHWARTZ VALUE TYPES

Finally, to answer our last research question, we looked at the conceptual meaning of the items that were consistently classified into one of the motivational types of Schwartz (1992). For most of them (achievement, benevolence, conformity, hedonism, security, self-direction, stimulation, and tradition), the existing value literature does not suggest multidimensionality, pointing to the univocal meaning of these value types. However, for two value types, this was not the case.

The first value type is power. Sagiv and Schwartz (2000, p. 179) defined power as “social status and prestige, control or dominance over people and resources”. In this definition, there is already an indication of three different subtypes. However, these subtypes are not treated together in the literature. The first (social status and prestige) is found in 10 value instruments, and more importantly, in most of these, it already comprised a separate value category (e.g., Braithwaite, 1997; Manhardt, 1972; Ros, Schwartz, & Surkiss, 1999). Therefore, we label this value type *prestige* and define it as “striving for admiration and recognition”. The second subtype of power (control and dominance over resources) is found in nine value instruments. Two instruments are even exclusively devoted to this particular value type (i.e., Belk, 1985; Richins & Dawsons, 1992). As a result, we label this value type *materialism* and define it as “attaching importance to material goods, wealth, and luxury”. Finally, the third subtype of power (control and dominance over people) is now a more pure representation of the original value type (see Sagiv & Schwartz, 2000) and therefore we continue to label it *power*.

The second value type that seems to be a compilation of different subtypes is universalism. Sagiv and Schwartz (2000, p. 179) defined this value type as “understanding, appreciation, tolerance, and protection for the welfare of all people and nature”. However, this type seems to be a mix of various items (e.g., equality, wisdom, broadminded). Because we found 10 value instruments with subtypes focusing on human-heartedness and solidarity (e.g., Calori & Sarnin, 1991; Chinese Culture Connection, 1987; Ros et al., 1999), we suggest to split up this value type in two subtypes: *social commitment* and *universalism*. Social commitment is distinguished from benevolence due to its focus on the welfare of all people instead of a focus on the welfare of people with whom one is in frequent personal contact. Universalism on the other hand, contains items focusing on wisdom, broadmindedness, etc. These findings are in line with recent analyses done by Schwartz and Boehnke (2004), who found support for the existence of social concern as a subtype of universalism.

As a conclusion for our third research question, we state that for most value types of Schwartz (1992), the conceptual meaning is univocal. However, we found evidence to split up power into *prestige*, *materialism*, and *power*, and universalism into *social commitment* and *universalism*.

LIMITATIONS

Although we found 42 instruments and 1578 items in the literature, we cannot say that this sample is exhaustive. Some instruments could not be obtained because the items were not freely available (e.g., Cooke & Lafferty, 1983) or because they were too old and therefore not traceable (e.g., Scott, 1960). However, we do believe it is doubtful that these instruments would reveal more value types than those identified in our research. A second limitation of this study is the limited number of expert judges that rated the items. Furthermore, the judges were all employed in the same department. In this way, they did not only have the same cultural background, but also the same vocational background.

SUGGESTIONS FOR FUTURE RESEARCH: COMMENSURATE MEASUREMENT

This paper forms the basis of an extensive research project that is focused on assessing supplementary P-O fit and its influence on a variety of organizational outcomes. In this first step, we have proposed a conceptual model for assessing individual and organizational values in a comprehensive way. It is demonstrated that the value theory of Schwartz (1992) is an appropriate theoretical framework if a few additions are made. However, this adapted conceptual model now needs to be tested in an empirical way.

First, future research has to be done to assess the viability of the 15 motivational types of values (and especially the newly identified types) postulated in this paper. Up to now, no evidence is found for the idea that additional, universal, motivational types of values are still missing from the theory (Schwartz, in press). Therefore, an instrument is needed that assesses these 15 value types. Given that the value theory of Schwartz (1992) forms the base of this comparative inquiry, we will construct an adapted version of the Schwartz Value Scale. Items will be constructed to assess the newly suggested value types (goal-orientedness and relations) and the 'subtypes' of power and universalism. These new items will be formulated in the same way as in the original scale (i.e., each single value will be followed in parentheses by a short explanatory phrase).

In a second and final step, upcoming research could look at the value structure of the different value domains (i.e., life, work, and organization). According to Kristof (1996), the definition of supplementary P-O fit implies that the measurement of both personal and organizational values is commensurate. Values should have the same meaning and be measured on comparable scales: a basic condition for assessing supplementary P-O fit which is often only assumed, but not demonstrated.

CONCLUSION

The comprehensiveness of the value theory of Schwartz (1992) was tested in a conceptual way with the objective of obtaining an exhaustive value model for assessing supplementary P-O fit. The current research responded to the need for a more univocal way for assessing individual and organizational values (see Verquer, Beehr, & Wagner, 2003).

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CHAPTER 3

COMPREHENSIVE AND COMMENSURATE VALUE MEASUREMENT FOR ASSESSING SUPPLEMENTARY PERSON-ORGANIZATION FIT: CONSTRUCTION OF THE LIFE, WORK, AND ORGANIZATIONAL VALUES SURVEY¹

Value congruence is of particular importance in supplementary person-organization fit research. However, most studies neglect the necessity for comprehensive and commensurate value measurement, which can lead to an underestimation of the interaction between the person and the environment (Caplan, 1987; Edwards, 2002; Kristof, 1996). This paper introduces a new value model based on the cross-cultural theory of universals in the content and structure of human values (see Schwartz, 1992). A pilot version of the Life, Work, and Organizational Values Survey (LWOVS) was tested using a sample of 590 respondents from 27 Belgian organizations. First, it was shown that the Schwartz value model could serve as a base for a comprehensive assessment of work and organizational values, provided that a few alterations are made. More specifically, based on principal component analyses, we found 11 psychometrically sound value scales. Second, three underlying value dimensions were identified that can be summarized as self-enhancement versus self-transcendence, openness to change versus conservation, and hedonism versus goal-orientedness. Third, to make the questionnaire a shorter and more manageable instrument, the original 82-item pool was reduced to 50. Finally, measurement equivalence between life, work, and perceived organizational values was demonstrated and orthogonal Procrustes rotations showed the commensurability of the factor structures of life, work, and perceived organizational values. Taken together, the results of this study suggest that the LWOVS is a reliable instrument for a comprehensive and commensurate assessment of values and supplementary person-organization fit.

¹ This paper was co-authored by Johnny Fontaine.

INTRODUCTION

Ever since Mischel (1968) demonstrated that interaction effects between person and environment play a substantial role in predicting human behavior, interaction models play an important role in psychological research and theorizing (e.g., Pervin & John, 1999). One interaction model that has received particular attention in the domain of work and organizational psychology is the supplementary person-organization (P-O) fit model (e.g., Erdogan, Kraimer, & Liden, 2004; Siegall & McDonald, 2004). Supplementary P-O fit occurs when a person “supplements, embellishes, or possesses characteristics which are similar to other individuals” in an environment or organization (Muchinsky & Monahan, 1987, p. 269). This model has two defining features: (a) the person and the organization can be described by the same characteristics, and (b) the congruence between the person and the organization has a positive effect on a broad range of work-related cognitions, emotions, attitudes, and behaviors (organizational commitment, job satisfaction, turnover, etc.). In the literature, value congruence has been the most frequently used operationalization of supplementary P-O fit (e.g., Chatman, 1991; Goodman & Svyantek, 1999; Vancouver & Schmitt, 1991; Verquer, Beehr, & Wagner, 2003). Values are considered as characteristics of both individuals and organizations. On individual level, they are seen as transsituational goals that guide behavior (Schwartz, 1992). On organizational level, they are seen as defining characteristics of the organizational culture (Rousseau, 1990).

Research on the effects of value congruence between personal and organizational values suffers from two important shortcomings: (a) an insufficient justification of the commensurability of the value measurement, and (b) an incomprehensive value approach.

A defining feature of supplementary P-O fit is that the same characteristics apply to both individuals and organizations. In measurement terms, this means that supplementary P-O fit research requires commensurability of the personal and organizational value measurements. Unfortunately, this commensurability is often only assumed. Although commensurability is a meaningful hypothesis, it cannot be

considered as an a priori truth. In the P-O fit literature, it has been stressed at several occasions that commensurability between personal and organizational constructs has to be demonstrated empirically (e.g., Caplan, 1987; Edwards, 2002; Kristof, 1996; Kristof-Brown, Zimmerman, & Johnson, 2005).

According to Meglino and Ravlin (1998), there is little consensus regarding which values researchers consider to be important for fit, and which values have significant consequences for organizational behavior. Past studies have revealed differential relationships among organizational values and individual, group, and organizational outcomes (e.g., Cooke & Szumal, 1993, 2000; Zammuto, Gifford, & Goodman, 2000). Moreover, there is no definitive answer to the question how broad the set of values should be, and previous studies on the impact of value congruence mostly do not cover the whole value domain (e.g., Cable & Judge, 1996; Kalliath, Bluedorn, & Strube, 1999; Kristof-Brown, 2000). As a result, the generalizability of these findings remains an open question. Furthermore, the recent P-O fit literature (e.g., Cable & Edwards, 2004; Kristof-Brown et al., 2005) pleads for the use of comprehensive value measurements that exhaustively capture the variation in personal and organizational value constructs.

As a first step in the process of constructing a comprehensive and commensurate value instrument for measuring supplementary P-O fit, De Clercq and Fontaine (2006) have investigated to what extent the Schwartz value model (see Schwartz, 1992) could be used as a point of reference. Schwartz and Bilsky (1987, p. 551) define values as “(a) concepts or beliefs, (b) about desirable end states or behaviors, (c) that transcend specific situations, (d) guide selection or evaluation of behavior and events, and (e) are ordered by relative importance”. According to this theory, 10 value types can be identified in the value domain: achievement, benevolence, conformity, hedonism, power, security, self-direction, stimulation, tradition, and universalism. A value type consists of individual values that share the same motivational goal. For instance, the motivational goal of the achievement value type is “personal success through demonstrating competence according to social standards” (Schwartz, 1992, p. 8). The individual values belonging to this value type are *ambitious*, *influential*, *capable*, and *successful* (Schwartz, 1992, p. 6). Based on a conceptual analysis of the mutual congruencies and conflicts between the

motivational goals of each of the value types, a two-dimensional (quasi-circular) structure of the value domain is proposed by this theory. In this structure, self-enhancement values (achievement and power) are opposed to self-transcendence values (benevolence and universalism); and openness to change values (self-direction and stimulation) are opposed to conservation values (conformity, security, and tradition). Hedonism shares elements of both self-enhancement values and openness to change values (Schwartz, 1992). Both the distinction between 10 value types and the two-dimensional circular ordering of the value types has received substantial cross-cultural support (e.g., Fontaine, Poortinga, Delbeke, & Schwartz, 2006; Schwartz, 1992, in press; Schwartz et al., 2001; Schwartz & Sagiv, 1995). Because of the empirical support for this theory and because the identification of human value types in a comprehensive way across cultural groups was one of the explicit aims of the Schwartz value project, De Clercq and Fontaine (2006) took the Schwartz value theory as the starting point for constructing a new value questionnaire for investigating supplementary P-O fit. They investigated to what extent the 10 value types proposed by Schwartz could be used to organize the domain of work and organizational values conceptually. In total, they identified 1578 value items stemming from 42 value instruments from the work and organizational psychology literature that were meant to measure mainly work and/or organizational values. They asked expert judges to indicate whether or not each value item belonged to one of the 10 value types proposed by Schwartz. In this way, they showed that more than 90% of value items could be reliably categorized into his 10 motivational value types. However, based on an analysis of the work and organizational value items that were attributed to the 10 value types, they also found that some value types are treated in a more differentiated way in the work and organizational psychology literature. The power value type contained items from three distinct power motives – the motivational goal of prestige, the motivational goal of wealth, and the motivational goal of dominance – that are often measured by separate scales in work and organizational value questionnaires. In the same way, it was found that care for the well-being of all others was regularly measured by a separate scale, whereas Schwartz (1992) places this motivational goal within the universalism value type (however, more recently, Schwartz and Boehnke (2004) have considered social concern as a subtype of universalism). Moreover, intrinsically

valuing social relationships was often measured by work and organizational value questionnaires, but was only represented by one item in the Schwartz Value Survey (i.e., true friendship). Finally, it was also found that some work and organizational value surveys make a distinction between a general goal-orientedness and a more specific focus on success. This all led De Clercq and Fontaine (2006) to the conclusion that the Schwartz value model could be used as a point of reference for the construction of a comprehensive supplementary P-O fit value survey, but that there could exist more differentiable value types in a work and organizational context. Based on their comprehensive literature review, they proposed an extension of the Schwartz value theory comprising 15 motivational goals or value types (see Table 3.1).

Table 3.1. Definitions of motivational types of values in terms of their goals; based on Schwartz (1992) and De Clercq and Fontaine (2006).

Achievement	Personal success through demonstrating competence according to social standards
Benevolence	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact
Conformity	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms
Goal-orientedness	Living and working to fulfill a purpose, not giving up
Hedonism	Pleasure and sensuous gratification for oneself
Materialism	Attaching importance to material goods, wealth, and luxury
Power	Control or dominance over people
Prestige	Striving for admiration and recognition
Relations	Having good interpersonal relations with other people and valuing true friendship
Security	Safety, harmony, and stability of society, of relationships, and of self
Self-direction	Independent thought and action-choosing, creating, and exploring
Social commitment	Preservation and enhancement of the welfare of all people
Stimulation	Excitement, novelty, and challenge in life
Tradition	Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self
Universalism	Broadmindedness, appreciation, and protection of nature and beauty

Because the 15 value types form a further elaboration of the Schwartz value theory in a work and organizational context, we expect that the two dimensions of self-enhancement versus self-transcendence and openness to change versus conservation will also structure the work and organizational value domain (see Figure 3.1).

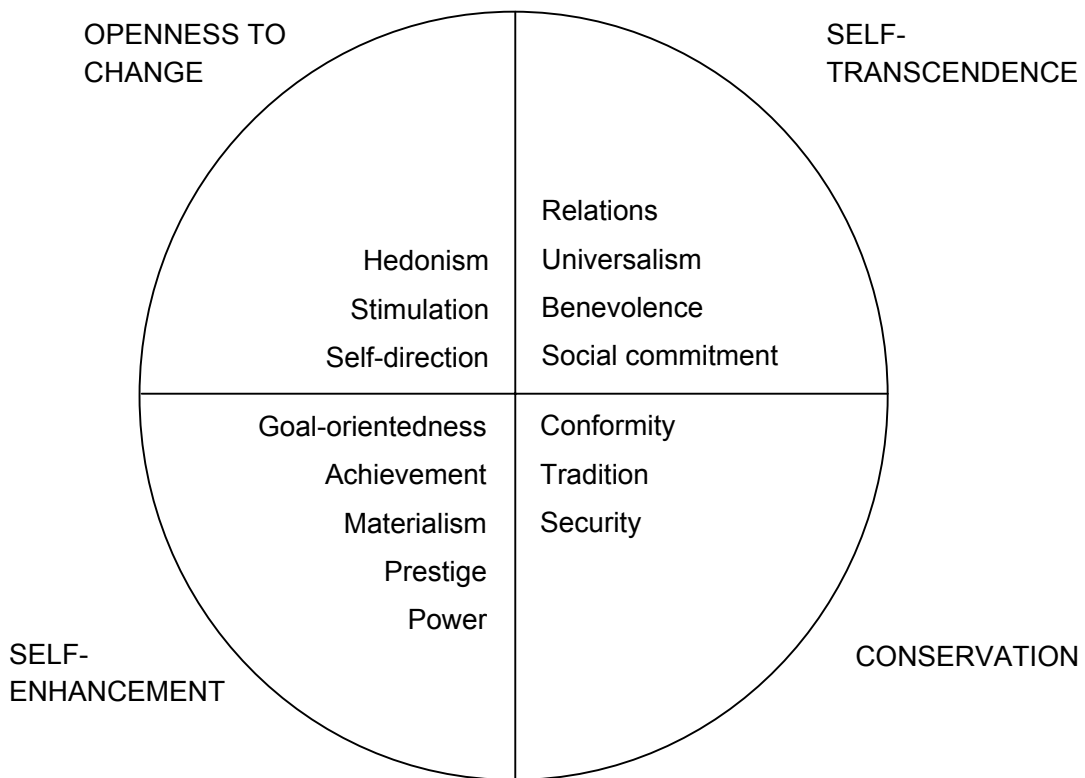


Figure 3.1. Graphical representation of the extended value model of Schwartz (based on De Clercq & Fontaine, 2006).

A pilot version of the new value survey was constructed comprising 82 items that were selected and generated to represent each of the 15 motivational goals. 48 items were taken from the Schwartz Value Survey (some with minor adjustments) and 34 new items were added. New items were formulated in the same way as the original items from the Schwartz Value Survey: each single value is followed in parentheses by a short explanatory phrase. Table 3.2 gives an overview of the 82 value items belonging to one of 15 motivational goals. The source of each item is also reported in Table 3.2.

Table 3.2. Eighty-two single values postulated within 15 motivational goals.

Motivational goals	Value items	Source	
Achievement	It_06	GROUP PERFORMANCE (to be part of a successful group or organization)	New item
	It_12	SUCCESSFUL (achieving goals)	SVS item 55
	It_30	DEVELOPING ABILITIES (continuously improving skills and knowledge)	New item
	It_47	CAPABLE (competent, being good at what you do)	SVS item 43 adjusted
	It_56	PROFESSIONAL (skilled, to be an expert)	New item
	It_72	AMBITIOUS (hard-working, getting ahead)	SVS item 34 adjusted
Benevolence	It_02	RESPONSIBLE (reliable)	SVS item 52
	It_07	FORGIVING (willing to pardon others)	SVS item 54
	It_38	LOYAL (faithful to my friends, group)	SVS item 33
	It_53	HONEST (genuine, sincere)	SVS item 45
	It_67	HELPFUL (working for the welfare of others)	SVS item 49
Conformity	It_01	CONFORMISM (to comply with rules and regulations)	New item
	It_14	OBEDIENT (doing what you have been instructed)	SVS item 47 adjusted
	It_41	SELF-DISCIPLINE (self-restraint, resistance to temptation)	SVS item 20
	It_61	CONVENTIONAL (accepting prevailing standards and habits in society)	New item
	It_70	HONORING OF ELDERS (showing respect for people with experience in work and life)	SVS item 40 adjusted
	It_71	POLITENESS (courtesy, good manners)	SVS item 11
Goal-orientedness	It_16	IMPASSIONED (to be affected by a purpose)	New item
	It_27	GOAL-ORIENTED (living with a purpose)	New item

	It_31	PERSEVERANCE (to carry on, not giving up)	New item
	It_54	TAKING INITIATIVE (to come into action to reach one's aim)	New item
	It_66	TO BE ENTERPRISING (working to fulfill a purpose)	New item
	It_68	PASSIONATE (to pursue one's aim)	New item
Hedonism	It_34	JOY IN LIFE (enjoying life)	Renner, 2003
	It_35	ENJOYING LIFE (enjoying food, sex, leisure, etc.)	SVS item 50
	It_50	SELF-INDULGENT (doing pleasant things)	SVS item 57
	It_58	CHEERFULNESS (laughing a lot)	New item
	It_82	PLEASURE (enjoyment, gratification of desires)	SVS item 4
Materialism	It_04	TO ENRICH ONESELF (gathering more and more property)	Richins & Dawson, 1992
	It_24	MATERIALISM (attaching great importance to material goods)	New item
	It_48	WEALTH (material possessions, money)	SVS item 12
	It_52	LUXURY (to own expensive homes, cars, or clothes)	Richins & Dawson, 1992
	It_60	AFFLUENCE (to own everything you want)	Renner, 2003
Power	It_03	INFLUENTIAL (having an impact on people and events)	SVS item 39
	It_11	POWER (to have absolute power)	New item
	It_23	TYRANNY (exercising capricious power)	New item
	It_26	SOCIAL POWER (control over others, dominance)	SVS item 3
	It_59	TO HAVE AUTHORITY OVER OTHERS (others depend completely on you)	New item
	It_64	LEADERSHIP (telling other people what to do)	Coetsier & Claes, 1990
	It_81	AUTHORITY (the right to lead or command)	SVS item 27
Prestige	It_18	SOCIAL RECOGNITION (to get respect from others)	SVS item 23 adjusted

	It_19	BEING ADMIRER (other people who look up to me)	New item
	It_40	STANDING (to be seen as a special person)	Coetsier & Claes, 1990
	It_45	PRESERVING MY PUBLIC IMAGE (see that others have a positive image of me)	SVS item 46 adjusted
	It_65	TO MEET WITH APPRECIATION (to be highly esteemed)	New item
Relations	It_10	SOCIAL RELATIONS (doing things with people I like)	Coetsier & Claes, 1990
	It_13	TRUE FRIENDSHIP (having good friends)	SVS item 28 adjusted
	It_37	AFFECTION (to have warm relationships with other people)	Kahle, 1983
	It_43	SENSE OF BELONGING (feeling that others care about me)	SVS item 7
	It_44	GOOD INTERPERSONAL RELATIONS (to have good relations with friends, colleagues, etc.)	New item
	It_49	TO BE PART OF A GROUP (to be included in a group, organization, etc.)	New item
Security	It_36	SECURITY OF MY ORGANIZATION (protection of my organization from threats)	New item
	It_39	SOCIAL ORDER (respect for authority in society)	SVS item 8 adjusted
	It_42	NEATNESS (clean, tidy)	SVS item 56 adjusted
	It_51	PERSONAL SECURITY (not being threatened by danger)	New item
	It_63	NATIONAL SECURITY (protection of my nation from enemies)	SVS item 13
	It_77	SECURITY FOR FAMILIE, RELATIVES, FRIENDS (safety for loved ones)	SVS item 22 adjusted
	It_80	RECIPROCATION OF FAVORS (avoidance of indebtedness)	SVS item 15
Self-direction	It_05	INDEPENDENT (self-reliant, self-sufficient)	SVS item 31
	It_17	FREEDOM (freedom of action and thought)	SVS item 5
	It_32	CURIOUS (interested in everything, exploring)	SVS item 53
	It_75	CHOOSING OWN GOALS (selecting own purposes)	SVS item 41

	It_76	CREATIVITY (uniqueness, imagination)	SVS item 16
Social commitment	It_09	A WORLD AT PEACE (a world free of war and conflict)	SVS item 17 adjusted
	It_28	SOCIAL COMMITMENT (to devote oneself to social welfare)	New item
	It_46	EQUALITY (equal opportunity for all)	SVS item 1
	It_73	SOCIAL JUSTICE (care for the weak)	SVS item 30 adjusted
	It_79	SOLIDARITY (to dedicate oneself to a better world)	New item
Stimulation	It_21	INTELLECTUAL STIMULATION (loving complexity and having fun in solving problems)	Super, 1970
	It_25	AN EXCITING LIFE (stimulating experiences)	SVS item 9
	It_33	A VARIED LIFE (filled with challenge, novelty, and change)	SVS item 25
	It_62	TO BE PHYSICALLY ACTIVE (to get sufficient exercise, to have a good physical condition)	Coetsier & Claes, 1990
	It_74	DARING (seeking adventure, risk)	SVS item 37
Tradition	It_15	ACCEPTING THE WAY THINGS ARE (submitting to the circumstances)	SVS item 44 adjusted
	It_20	MODERATE (avoiding extremes of feeling and action)	SVS item 32
	It_69	HUMBLE (modest, self-effacing)	SVS item 36
	It_78	PRESERVATION OF TRADITION (to uphold good, old habits)	SVS item 18 adjusted
Universalism	It_08	WISDOM (a mature understanding of life)	SVS item 26
	It_22	A WORLD OF BEAUTY (beauty of nature and the arts)	SVS item 29
	It_29	PROTECTING THE ENVIRONMENT (preserving nature)	SVS item 38
	It_55	BROADMINDED (tolerant of different ideas and beliefs)	SVS item 35 adjusted
	It_57	UNITY WITH NATURE (fitting into nature)	SVS item 24

Note. SVS = Schwartz Value Survey, items adopted from Schwartz (1992, p. 60-62).

OBJECTIVES OF THE PRESENT STUDY

The present study has four goals: (a) investigating whether 15 distinct value types can be identified in the life, work, and organizational value domains; (b) investigating whether the value types are organized by the two underlying dimensions of self-enhancement versus self-transcendence and openness to change versus conservation; (c) reducing the new instrument to a shorter, more manageable number of value items; and (d) investigating whether the value types and the underlying dimensions are commensurate for the life, work, and organizational value domains.

METHOD

QUESTIONNAIRE

A pilot version of the new value survey was constructed based on the findings of De Clercq and Fontaine (2006). This new survey was labeled the Life, Work, and Organizational Values Survey (LWOVS). Respondents rated the importance of 82 value items (see Table 3.2) on a 9-point scale from opposed to my or my organization's principles (-1) through not important (0) to of supreme importance (7). This asymmetrical scale was adopted from Schwartz (1992). The asymmetry reflects the discriminations people naturally make when thinking about value importance, reflecting the desirable nature of values (see Schwartz & Bardi, 2001). Each item was rated for its importance in the respondents' life (personal life values), work (personal work values), and for the organization they work for (perceived organizational values).

PARTICIPANTS

The participants of this study were a random sample of 765 employees in 27 Belgian organizations: 17 from the public services, four organizations from the private sector, and six schools. Participants who did not rate the importance of four or more value

items were excluded from the sample. Furthermore, those who did not differentiate sufficiently between values (i.e., who gave the same rating to more than 41 items of the 82 for the life, work, and organizational value domains) were also removed from the sample. A similar procedure was applied by Schwartz (1992), because those who concentrated their responses on that degree were assumed to have failed on making a serious effort to differentiate among their values. The use of this selection procedure led to a total sample of 590 respondents (44% females and 56% males). The ages of the respondents ranged from 19 to 64 years ($M = 38.88$; $SD = 10.12$). Data collection took place from May through October 2004.

RESULTS

PART 1: MEASUREMENT EQUIVALENCE/INVARIANCE (ME/I) OF THE VALUE ITEMS

ME/I was assessed across the three value domains (life, work, and organization). The equality of variance-covariance matrices was tested via a confirmatory factor analytic method. If a well-fitting model of this form supports ME/I, no further tests of specific aspects of ME/I are necessary (Vandenberg & Lance, 2000). For evaluation of the model fit, the present investigation utilized the χ^2 goodness-of-fit statistic and the following fit indices: (a) the Goodness-of-Fit Index (GFI; Jöreskog & Sörbom, 1996); (b) the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990); (c) the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973); and (d) the Comparative Fit Index (CFI; Bentler, 1990).

A confirmatory factor analytic application of LISREL 8 (Jöreskog & Sörbom, 1996) was used for analyzing ME/I. However, because LISREL 8 could not perform a ME/I analysis on 82 items, 10 random samples of 42 items were used. The average results of the 10 ME/I tests showed that the fit indices produced an acceptable fit (with the exception of the χ^2 goodness-of-fit statistic which is overly sensitive; see Byrne, 1998), $\chi^2(1806) = 3674.47$ ($p < 0.01$), $GFI = 0.91$, $RMSEA = 0.039$, $TLI = 0.97$, and $CFI = 0.98$. These fit indices are in line with the minimum fit recommendations of Vandenberg and Lance (2000). Consequently, measurement equivalence between life, work, and organizational values can be assumed.

PART 2: VALUE TYPES AND VALUE STRUCTURE

Schwartz (1992) describes the value domain as a motivational continuum in which the value items gradually shift in meaning. Depending on its position in the value domain, an individual value item can refer to one or more motivational goals. Schwartz used the configurational verification approach to support his theory that 10 motivational value types can be distinguished within his motivational continuum. First, a two-dimensional geometrical representation of the value domain is computed by means of multidimensional scaling. Then it is investigated whether the value items belonging to a specific value type form a separate bounded region within this two-dimensional space. This approach, however, has been criticized for the freedom it gives to the researcher when drawing the boundaries in the two-dimensional space. In recent research, Schwartz and Boehnke (2004) have tested the theory more rigorously with confirmatory factor analysis (CFA). This analysis confirmed the internal structure, but only based on large samples stemming from different cultural groups. Moreover, they only tested the configural invariance of their value model, which is a less stringent test of ME/I than the test of the equality of variance-covariance matrices applied here (see Vandenberg & Lance, 2000).

The conclusion from previous value research within the Schwartz approach is that the overall structure is very robust, although in individual samples deviations are likely to be observed at item level (e.g., Fontaine et al., 2006). For identifying homogeneous and differentiable value types, we did not want to rely on the configurational verification approach because of its leniency. However, we did not dispose of a very large sample that could generate robust structures with CFA, especially given the large number of items in the instrument. Therefore, we have chosen an intermediate approach – more rigorous than the configurational verification approach, but less rigorous than CFA.

We used principal component analysis (PCA) to identify homogeneous and differentiable value types. To withhold a value type, three simple criteria were used: (a) an item had to load at least 0.60 on its own factor when a PCA was executed on the items of that value type; (b) a value item had to load highest on its own factor and at least 0.50 when a PCA was performed with items from two value types at the

same time; and (c) each value scale had to consist of at least three value items that satisfied the two previous conditions. To check the robustness of the value scales obtained on the basis of these three criteria, we randomly split the sample in two halves. We first present the results of the analyses on the first split-half. In order to avoid the item selection process being too liable on random sampling fluctuations and because equivalence of variance-covariance matrices across the three domains (life, work, and organization) was demonstrated, all analyses have been performed on an average correlation matrix between the 82 items across the life, work, and organizational value domains. This average correlation matrix was computed separately for the first and the second split-half.² The identification of homogeneous and differentiable value scales was executed in five steps. We used the 15 a priori identified value types (see Table 3.1) as a point of departure.

Step 1: Identifying high loading items.

We started with executing a PCA per a priori identified value scale. In this way, we performed 15 PCAs in total. Following items loading less than 0.60 on their own factor were excluded from further analyses: It_06 (group performance), It_08 (wisdom), It_15 (accepting the way things are), It_18 (social recognition), It_21 (intellectual stimulation), It_36 (security of my organization), It_39 (social order), It_49 (to be part of a group), It_62 (to be physically active), It_70 (honoring of elders), It_71 (politeness), and It_80 (reciprocation of favors). To avoid the elimination of valuable items in this first step, we checked whether any of these 12 items could be assigned to one of the other 14 value types. Only It_39 (social order) clearly related to one other value type (i.e., conformity). All the other items either related to none of the 14 other scales or related to more than one of the 14 other scales, which implied that they were not suited for constructing homogeneous and differentiable value scales. Because of its special theoretical interest when studying P-O fit, we decided to keep It_36 (security of my organization), which loaded less than 0.60 on the security factor. Thus, of the 82 items, 10 items were removed in this first step.

² For the computation of the average correlation matrix across life, work, and organizational values, Fisher-z transformations were applied first.

Step 2: Pairwise principal component analyses per quadrant.

In the second step, we applied a PCA on each pair of value types, separately for each of the four higher-order value types of Schwartz (1992): self-enhancement, self-transcendence, openness to change, and conservation.

For the self-enhancement quadrant, we found that goal-orientedness and achievement items could not be separated by means of a PCA; they formed a single factor. The other three a priori value scales of the self-enhancement quadrant (materialism, power, and prestige) did differentiate from one another and from the goal-orientedness/achievement value type.

For the self-transcendence quadrant, we found in a joint PCA that the relations and benevolence value types could not be distinguished from one another, so they were merged into one relations/benevolence value scale. The three remaining value scales did differentiate well in the pairwise PCAs. However, not all items fitted the a priori predicted position: It_67 (helpful) clearly loaded higher on the social commitment factor than on the relations/benevolence factor and It_09 (a world at peace) loaded higher on the universalism factor than on the social commitment factor. Because these items related conceptually to these factors, we decided to move these two items to these other value scales. Three value items were removed in this phase: It_53 (honest) because it did not differentiate between social commitment and relations/benevolence, It_55 (broadminded) because it did not differentiate between social commitment and universalism, and It_02 (responsible) because it did not load 0.60 on the new relations/benevolence factor.

For the openness to change quadrant, stimulation and self-direction could not be separated in a joint PCA; they formed a single factor. Hedonism could be separated from the stimulation/self-direction factor, although It_05 (independent) and It_17 (freedom) of the stimulation/self-direction scale loaded higher on the hedonism factor. Because the meaning of these items could be clearly conceptually differentiated from hedonism, we decided to remove these two items.

For the conservation quadrant, we found that the tradition value scale could not be retained. The items of tradition did not form a separate factor of three items with at

least a loading of 0.50 in the pairwise PCAs.³ Moreover, It_36 (security of my organization) shifted from the security to the conformity factor.

Based on the second step, one value type (tradition) was deleted, and six value types were merged together, namely stimulation and self-direction, relations and benevolence, and goal-orientedness and achievement. Thus, after the second step, 11 value scales were retained. Moreover, from the 72 remaining value items, eight were removed in this step.

Step 3: Pairwise principal component analyses across quadrants.

In the third step, we applied pairwise PCAs between the value types from the different quadrants. In this step, only one item had to be removed: It_32 (curious) did not differentiate between stimulation/self-direction and achievement/goal-orientedness. All other items loaded highest and at least 0.50 on the predicted factor in the pairwise PCAs. So, from the remaining 64 items, one was additionally excluded. This means that in the first split-half 63 items satisfied the criteria that they should load at least 0.60 on their own factor in a separate PCA, and at least 0.50 on their own factor when a PCA was performed with another value scale.

Step 4: The internal structure of the life, work, and organizational value domains.

In this step, we investigated whether the 11 differentiable value types were organized according to the two dimensions of self-enhancement versus self-transcendence and openness to change versus conservation. A PCA with varimax rotation was performed on the average correlation matrix (averaged across life, work, and organizational values) of the mean-centered value types. The correspondence with the a priori theoretically expected two-dimensional value structure of Schwartz (1992) was investigated with orthogonal Procrustes rotation (Schönemann, 1966).

³ Also in preliminary analyses based on item-test and item-rest correlations, the tradition value type did not turn out to be a homogeneous and differentiable value type. It was therefore excluded from further analyses.

Orthogonal Procrustes rotation rotates factors to minimize the sums of squares of deviations from the target matrix, and is of particular use for assessing the invariance of variables that do not show a simple structure but rather a circumplex order (e.g., McCrae & Costa, 1989; McCrae, Zonderman, Bond, Costa, & Paunonen, 1996).

To our surprise, the scree test (Cattell, 1966) revealed not a two-, but a three-componential structure. After orthogonal Procrustes rotation, materialism, power, and prestige opposed relations/benevolence, social commitment, and universalism; and stimulation/self-direction opposed conformity and security as expected. However, hedonism and goal-orientedness/achievement formed a third bipolar factor. Factor loadings of the PCA on the average correlation matrix of the 11 life, work, and organizational value scales can be seen in the first part of Table 3.3.

Step 5: Higher-order value types.

Based on the previous structural analyses, it was suggested that the 11 value scales could be merged into six higher-order value types each corresponding to a pole in the componential structure. A PCA with three components on the average correlation matrix between these six mean-centered higher-order value types indeed confirmed the opposition between self-enhancement and self-transcendence, between openness to change and conservation, and between hedonism and goal-orientedness. Factor loadings of the PCA on the average correlation matrix of the six higher-order value types can be found in the second part of Table 3.3.

Table 3.3. Factor loadings of the PCAs on the average correlation matrices of the 11 value scales and the six higher-order value scales. PCAs are executed on the 63-item version and the reduced 50-item version for the first split-half ($n = 295$) and the reduced 50-item version for the second split-half ($n = 295$).

	63 items first split-half			50 items first split-half			50 items second split-half		
	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3
Materialism	0.691	-0.119	0.420	0.676	-0.177	0.421	0.739	-0.015	0.355
Power	0.736	-0.048	-0.228	0.690	0.012	-0.260	0.679	-0.052	-0.313
Prestige	0.623	0.212	-0.076	0.657	0.186	-0.092	0.718	0.031	0.033
Relations/benevolence	-0.563	0.083	0.382	-0.561	0.077	0.352	-0.543	0.103	0.377
Social commitment	-0.664	-0.070	-0.222	-0.653	-0.086	-0.150	-0.610	-0.237	-0.205
Universalism	-0.587	-0.096	0.198	-0.500	-0.014	0.145	-0.477	-0.013	0.162
Stimulation/self-direction	0.038	0.781	0.070	0.024	0.789	0.097	-0.129	0.802	0.025
Conformity	0.082	-0.776	-0.337	0.123	-0.761	-0.341	0.046	-0.737	-0.343
Security	-0.172	-0.631	0.388	-0.142	-0.632	0.402	-0.286	-0.653	0.341
Hedonism	-0.354	0.327	0.647	-0.375	0.273	0.646	-0.298	0.299	0.725
Goal-orientedness/achievement	-0.111	0.308	-0.741	-0.097	0.237	-0.783	-0.040	0.273	-0.763
Self-enhancement	0.973	-0.006	0.093	0.963	-0.011	0.068	0.973	-0.049	0.046
Self-transcendence	-0.818	-0.080	0.325	-0.805	-0.039	0.312	-0.827	-0.096	0.254
Openness to change	0.047	0.853	0.009	0.045	0.852	0.032	-0.093	0.847	0.029
Conservation	-0.027	-0.863	-0.072	0.017	-0.883	-0.047	-0.140	-0.854	-0.077
Hedonism	-0.414	0.342	0.595	-0.408	0.284	0.620	-0.279	0.339	0.717
Goal-orientedness	-0.182	0.261	-0.914	-0.164	0.205	-0.928	-0.072	0.233	-0.914

PART 3: REDUCING THE INSTRUMENT

Because the aim was to arrive at a reduced instrument, we selected for each of the 11 scales the best items (highest loading on their own factor and low loading on the other factor in pairwise PCAs). As much as possible, we selected the items for the reduced instrument in such a way that each of the six poles was at least represented by nine items and maximally by 12 items. Given that there were only five openness to change, five hedonism, and eight conservation items that met the requirements of the pairwise PCAs, these poles could not be represented by at least nine items. The selected items were (for item labels, see Table 3.2): conformity (It_01, It_14, It_36, It_39, It_61); goal-orientedness/achievement (It_12, It_27, It_31, It_47, It_54, It_56, It_66, It_68, It_72); hedonism (It_34, It_35, It_50, It_58, It_82); materialism (It_24, It_48, It_52, It_60); power (It_26, It_59, It_64, It_81); prestige (It_19, It_40, It_45, It_65); relations/benevolence (It_10, It_13, It_37, It_38); security (It_51, It_63, It_77); social commitment (It_46, It_67, It_73, It_79); stimulation/self-direction (It_25, It_33, It_74, It_75, It_76); and universalism (It_22, It_29, It_57). Factor loadings of the PCA on the average correlation matrix of the 11 reduced value scales can be seen in the first part of Table 3.3. The second part of Table 3.3 shows the factor loadings of the PCA on the average correlation matrix of the six reduced higher-order value scales.

As all three items of universalism have a focus on the protection and preservation of nature, we will label this value type nature instead of universalism. This is in line with Schwartz and Boehnke (2004) who already suggested the existence of nature as a subtype within universalism values. In addition, goal-orientedness/achievement will further on be labeled as goal-orientedness, relations/benevolence will be labeled as relations, and stimulation/self-direction will be labeled as stimulation.

PART 4: EMPIRICAL REPLICATION OF THE REDUCED INSTRUMENT

Based on the second split-half, we checked whether the 11 value scales comprising 50 items fitted the criteria of homogeneity (a loading of at least 0.60 when a PCA was executed on one scale only) and differentiability (highest loading on own factor of at least 0.50 in the pairwise PCAs) that were applied in the first split-half. In total, 11

PCAs on the items of each of the 11 value scales requesting a one-factorial solution, and 55 pairwise PCAs with varimax rotation requesting a two-factorial solution were executed. For all 50 items, the criteria were met. There was one small exception: It_34 (joy in life) loaded somewhat higher on the relations (0.69) factor than on the hedonism (0.60) factor. In the perspective of all these PCAs, this is a very small deviation that can be very well explained by random sampling fluctuations. Therefore, we conclude that our item selection approach has led to 11 homogeneous and differentiable value scales which are replicable across two random split-halves.

Cronbach alpha internal reliability coefficients (based on the total sample) for life, work, and organizational value scales are presented in Table 3.4. All scales met the threshold of 0.60 proposed by Robinson, Shaver, and Wrightsman (1991), and all scales but security met the more rigorous standard of 0.70 proposed by Nunnally (1978).

Moreover, we checked whether the same three-dimensional structure organized the value domain of the second split-half. As in the first split-half, a PCA with three components was executed on the average correlation matrix of the 11 mean-centered value types (see Table 3.3). After orthogonal Procrustes rotation of these components to the solution of the first split-half, very high congruence measures were observed (above 0.900; see Table 3.5, third part). The same results were found when the analyses were replicated for the higher-order value scales (congruence measures again higher than 0.900; see Table 3.6, third part). Congruence coefficients of 0.900 or higher have traditionally been considered evidence of factor replication (Barrett, 1986). Here, Tucker's phi (Tucker, 1951) was used to determine the degree of fit.

Based on these results, it can be concluded that the value types and the structural relationships among the value types of the reduced instrument were independently replicated in the second random split-half of the total sample.

Table 3.4. Cronbach alpha internal reliability coefficients for life, work, and organizational values based on the total sample (N = 590).

Value scale	# items	Reliability coefficients		
		Life	Work	Org
Conformity	5	0.74	0.73	0.70
Goal-orientedness	9	0.88	0.90	0.90
Hedonism	5	0.84	0.80	0.87
Materialism	4	0.85	0.78	0.83
Nature	3	0.79	0.74	0.76
Power	4	0.79	0.82	0.85
Prestige	4	0.76	0.74	0.72
Relations	4	0.82	0.78	0.82
Security	3	0.63	0.69	0.69
Social commitment	4	0.81	0.78	0.81
Stimulation	5	0.82	0.77	0.78
Self-enhancement	12	0.86	0.85	0.88
Self-transcendence	11	0.84	0.83	0.88
Openness to change	5	0.82	0.77	0.78
Conservation	8	0.78	0.78	0.74
Hedonism	5	0.84	0.80	0.87
Goal-orientedness	9	0.88	0.90	0.90

PART 5: COMMENSURABILITY OF THE LIFE, WORK, AND ORGANIZATIONAL VALUE DOMAINS

Finally, we assessed whether the three-factorial structure that emerged on the averaged correlation matrices indeed represented the internal structure of the life, work, and organizational value domain adequately as was suggested by the first overall test of commensurability (ME/I). The commensurability of the factor structure of the 11 value types and the six higher-order value types for the life, work, and organizational value domains was assessed with orthogonal Procrustes rotations (Schönemann, 1966).

The first part of Table 3.5 gives an overview of the congruence coefficients between the value structures of the 11 life, work, and organizational value scales in the first split-half. The third dimension of life values is not congruent with the third dimension of work and perceived organizational values. This was confirmed in the second part of Table 3.5 (based on the second split-half). Moreover, the congruence for the second dimension of work and perceived organizational values was below 0.900 in the first split-half. However, this anomaly was very small (0.885) and disappeared in the second split-half. Table 3.6 gives an overview of the congruence between the value structures of the six higher-order value scales. All congruence coefficients met Barrett's (1986) threshold of 0.900 for factor replication.⁴

Table 3.5. Congruence coefficients of the orthogonal Procrustes rotations on the value structures of the 11 value scales.

Rotation	Dimensions		
	1	2	3
Split-half 1			
Life – Work	0.983	0.951	0.777
Life – Org	0.974	0.961	0.639
Work – Org	0.978	0.885	0.959
Split-half 2			
Life – Work	0.991	0.942	0.753
Life – Org	0.977	0.972	0.593
Work – Org	0.986	0.920	0.963
Control: congruence between split-halves			
Life SH1 – Life SH2	0.976	0.954	0.995
Work SH1 – Work SH2	0.989	0.960	0.979
Org SH1 – Org SH2	0.988	0.993	0.951

Note. Dimension 1 = self-enhancement versus self-transcendence; Dimension 2 = openness to change versus conservation; Dimension 3 = hedonism versus goal-orientedness. Congruence coefficients are Tucker's phi (Tucker, 1951).

⁴ It was possible for LISREL 8 to perform a ME/I analysis on the 50 final items. All fit indices (again with the exception of the χ^2 goodness-of-fit statistic) were in line with the minimum fit recommendations of Vandenberg and Lance (2000), $\chi^2(2550) = 3994.34$ ($p < 0.01$), GFI = 0.91, RMSEA = 0.032, TLI = 0.98, and CFI = 0.99.

Table 3.6. Congruence coefficients of the orthogonal Procrustes rotations on the value structures of the six higher-order value scales.

Rotation	Dimensions		
	1	2	3
Split-half 1			
Life – Work	0.993	0.984	0.992
Life – Org	0.973	0.982	0.946
Work – Org	0.978	0.986	0.976
Split-half 2			
Life – Work	0.993	0.998	0.946
Life – Org	0.974	0.992	0.908
Work – Org	0.986	0.989	0.982
Control: congruence between split-halves			
Life SH1 – Life SH2	0.985	0.998	0.989
Work SH1 – Work SH2	0.990	0.989	0.995
Org SH1 – Org SH2	0.979	0.998	0.997

Note. Dimension 1 = self-enhancement versus self-transcendence; Dimension 2 = openness to change versus conservation; Dimension 3 = hedonism versus goal-orientedness. Congruence coefficients are Tucker's phi (Tucker, 1951).

To conclude, two tables show factor loadings of the PCAs on the 11 life, work, and organizational value scales for both split-halves (Table 3.7) and on the six higher-order life, work, and organizational value scales, again for both split-halves (Table 3.8).

Table 3.7. Factor loadings of the PCAs of the 11 life, work, and organizational value scales for both split-halves.

Split-half 1									
Value scale	Life values			Work values			Organizational values		
	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3
Materialism	0.711	-0.225	0.283	0.554	-0.164	0.510	0.712	-0.093	0.492
Power	0.644	-0.007	-0.442	0.636	0.167	-0.306	0.777	-0.140	-0.160
Prestige	0.550	0.226	-0.167	0.689	0.179	-0.087	0.707	0.095	-0.171
Nature	-0.584	-0.093	-0.319	-0.441	0.151	0.203	-0.450	-0.048	0.357
Relations	-0.533	0.029	0.424	-0.435	-0.127	0.238	-0.640	0.241	0.324
Social commitment	-0.703	-0.033	-0.377	-0.609	-0.021	-0.132	-0.614	-0.282	-0.002
Stimulation	0.087	0.768	0.040	0.029	0.803	0.028	-0.063	0.821	0.137
Conformity	0.063	-0.802	-0.148	0.047	-0.805	-0.305	0.218	-0.626	-0.470
Security	-0.066	-0.681	0.326	-0.198	-0.564	0.386	-0.232	-0.558	0.452
Hedonism	-0.192	0.243	0.793	-0.263	0.133	0.646	-0.577	0.316	0.545
Goal-orientedness	-0.137	0.380	-0.288	-0.070	0.186	-0.787	-0.060	0.162	-0.882

Split-half 2

Value scale	Life values			Work values			Organizational values		
	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3
Materialism	0.769	0.037	0.290	0.684	0.027	0.408	0.771	-0.051	0.326
Power	0.605	0.010	-0.475	0.631	0.061	-0.244	0.755	-0.155	-0.287
Prestige	0.706	-0.049	-0.149	0.754	0.001	-0.001	0.728	0.096	0.136
Nature	-0.552	-0.081	-0.375	-0.436	0.224	0.217	-0.436	-0.084	0.448
Relations	-0.409	0.169	0.436	-0.511	-0.136	0.387	-0.639	0.200	0.365
Social commitment	-0.637	-0.201	-0.409	-0.568	-0.238	-0.209	-0.648	-0.203	-0.111
Stimulation	-0.098	0.803	0.063	-0.074	0.814	-0.047	-0.219	0.787	0.027
Conformity	0.016	-0.780	-0.121	0.016	-0.757	-0.367	0.122	-0.675	-0.472
Security	-0.225	-0.709	0.386	-0.330	-0.623	0.320	-0.316	-0.615	0.294
Hedonism	-0.176	0.165	0.788	-0.238	0.249	0.728	-0.468	0.386	0.609
Goal-orientedness	-0.189	0.366	-0.239	-0.004	0.249	-0.791	0.059	0.182	-0.845

Table 3.8. Factor loadings of the PCAs of the six higher-order life, work, and organizational value scales for both split-halves.

Higher-order value scale	Life values			Work values			Organizational values		
	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3
Split-half 1									
Self-enhancement	0.933	-0.051	0.068	0.952	0.062	0.083	0.979	-0.069	0.024
Self-transcendence	-0.839	-0.125	0.117	-0.793	-0.058	0.257	-0.792	-0.007	0.435
Openness to change	0.100	0.833	0.006	0.052	0.834	-0.029	-0.034	0.866	0.073
Conservation	0.026	-0.867	0.004	-0.067	-0.886	-0.004	0.029	-0.865	-0.114
Hedonism	-0.249	0.339	0.710	-0.287	0.186	0.685	-0.562	0.302	0.598
Goal-orientedness	-0.200	0.336	-0.819	-0.113	0.211	-0.898	-0.150	0.116	-0.967
Split-half 2									
Self-enhancement	0.954	-0.050	0.011	0.969	-0.002	0.092	0.991	-0.076	0.004
Self-transcendence	-0.847	-0.107	0.009	-0.797	-0.145	0.286	-0.803	-0.018	0.408
Openness to change	-0.054	0.863	0.082	-0.047	0.843	-0.071	-0.189	0.837	0.037
Conservation	-0.110	-0.872	0.070	-0.190	-0.831	-0.121	-0.131	-0.865	-0.182
Hedonism	-0.171	0.296	0.777	-0.230	0.320	0.754	-0.432	0.372	0.667
Goal-orientedness	-0.174	0.284	-0.812	-0.037	0.270	-0.888	-0.028	0.154	-0.954

DISCUSSION

The first research goal of the present study was to investigate whether some of the 10 value types identified by Schwartz (1992) could be further split up or supplemented, as suggested by an extensive screening of life, work, and organizational value surveys by De Clercq and Fontaine (2006). This was indeed the case for the power value type that could be split up in materialism, power, and prestige, and the universalism value type that could be split up in nature and social commitment. The benevolence value type could not be distinguished from relations and some items had high cross-loadings on social commitment. This does seem to indicate that the issue in the self-transcendence values is not the distinction between in-group and out-group, as suggested by Schwartz (1992), but that two other issues are at stake: (a) intrinsically valuing social relationships versus committing oneself to the welfare of others, and (b) focus on fellow humans versus focus on the environment. The proposed distinction between achievement and goal-orientedness was not confirmed either.

Unexpectedly, we could not confirm the existence of a separate tradition value type. The items of that value type did not emerge as clearly separate in the pairwise PCAs. This lack of a tradition factor is highly surprising because tradition can be very important in many organizations. Customs and traditions are considered as basic elements of organizational culture (e.g., Schein, 2004). Therefore, a possible explanation could be that tradition is so important in organizations that people cannot consciously reflect upon it anymore. Another possible explanation stems from the items being used to measure this value type. All four items were adopted from Schwartz (1992), so they have a main focus on the importance of tradition as a life value. Maybe these items are not suited to measure tradition in a work and organizational context? Future research is warranted here to shed more light on this matter.

Another unexpected finding was that the distinction between self-direction values and stimulation values could not be confirmed. As such, this is a small deviation from the original Schwartz model in which self-direction and stimulation are considered to be adjacent value types with compatible motivational goals.

The second research question was whether the value types were organized by the two underlying dimensions of self-enhancement versus self-transcendence and openness to change versus conservation. As expected, these two dimensions were the most important dimensions in the value domain. However, in the present research a third factor emerged: hedonism versus goal-orientedness. This was especially the case in the work and the organizational value domain. A possible explanation for the discovery of this dimension is the differentiability of our value scales. As homogeneity and differentiability were two key premises for scale construction, overlap between goal-orientedness, hedonism, self-direction, and stimulation was reduced to a minimum. This maximal differentiability between value scales could have led to the appearance of a third value dimension. Traditionally, hedonism has been located between achievement and stimulation because it was hypothesized to share elements of both self-enhancement and openness to change (Schwartz, 1992). Until now, the theory did not specify whether hedonism is related more to the former or to the latter higher-order value type (Schwartz, in press). We believe that our third dimension could be a possible explanation for the uncertain position of hedonism in the life value domain of Schwartz (1992).

On a conceptual level, we think there are two potential explanations for this third factor. First, opposing hedonism and goal-orientedness can be explained as opposing gratification and delay of gratification. Mischel (1981, p. 244) suggested that delay of gratification occurs when “people attempt to delay immediate smaller gratification for the sake of more distant but deferred goals”. More recently, Bembenuddy (1999) found that a task-goal orientation was positively and significantly related to delay of gratification. This supports the idea that goal-orientedness (living and working to fulfill a purpose) goes together with delay of gratification, and on the contrary, hedonism (pleasure and sensuous gratification for oneself) can be seen as aiming at immediate gratification. In line with this, a second explanation for the third dimension can be found with Hofstede (2001). In his work, he describes five dimensions of national culture differences: power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity, and long-term versus short-term orientation. A key societal norm of his long-term versus short-term orientation is “deferred gratification of needs versus immediate gratification of needs”

(p. 367). Therefore, a long-term orientation can be seen as delay of gratification, thus in line with goal-orientedness, versus a short-term orientation which is directed towards immediate gratification, and as a consequence in line with hedonism.

The third aim of the present research was to construct a shorter, more manageable instrument. We could reduce the 82-item pilot version to a 50-item value questionnaire with 11 psychometrically sound value scales. Moreover, the use of a split-half procedure guarantees that the properties of the reduced instrument are replicable.

The fourth and last research question was whether the value types and the underlying dimensions are commensurate between the life, work, and organizational value domains. A first overall test at value item level indicated that the hypothesis of equal variance-covariance matrices for the three value domains had not to be rejected. This finding justified to proceed the analyses on the average correlation matrices between the value items, which prevented the investigation of the value types and the selection of the value items being too liable to random sampling fluctuations (average correlation matrices are quite robust).

More detailed analyses of the equivalence of the structural relationships among the 11 value types confirmed this finding for work and perceived organizational values. The three work and organizational value factors were highly congruent. For the life value domain, however, one important deviation was observed for the third factor. While the goal-orientedness value type has a highly negative loading on the third factor in work and organizational value domains, its loading is much less negative in the life value domain. This finding was replicated in the second split-half. This could mean that the opposition between hedonism and goal-orientedness is elicited by the work and organizational context. Employees are paid by organizations and organizations pay employees to meet certain predefined goals. In this context, pursuing self-gratification (hedonism) is probably much more detrimental for achieving goals, than in daily life where goals are much more self-selected.

Although the deviation on the third dimension with respect to life values is relevant for value research, it is only marginally relevant for the construction of a comprehensive

and commensurate value instrument in order to investigate P-O fit. The comprehensiveness of the 50-item value instrument is guaranteed by the extensive mapping of the domain of work and organizational values by De Clercq and Fontaine (2006). All but one (tradition) a priori identified value types are represented in the 50-item value instrument. The commensurability between work and organizational values is guaranteed by the high congruence measures between the three work and organizational value factors. In general, the conclusion can be made that the LWOVS is a comprehensive and commensurate survey for assessing life, work, and organizational values. In spite of relative moderate sized samples and split-halves, the value structures are replicable and robust. Therefore, this instrument could be of particular importance for assessing value congruence and supplementary P-O fit.

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APPENDIX A

CONFIRMATORY FACTOR ANALYSIS OF THE VALUE MODELS

INTRODUCTION

In this section, we examine whether confirmatory factor analysis (CFA) corroborates the three-dimensional structure of life, work, and perceived organizational values proposed in Chapter 3. Given that it is widely recommended that at least three observed variables should be used as indicators of the underlying constructs (Anderson & Gerbing, 1984; Bentler & Chou, 1987; Wothke, 1993), we decided to divide certain value types into two parcels. This was done for each value type that was the sole representative of one of the poles of the three bipolar value dimensions (self-enhancement versus self-transcendence; openness to change versus conservation; and hedonism versus goal-orientedness). As a consequence, the following models were tested:

- The lower-order value model. In this model, 11 value types are ordered in three bipolar dimensions. Stimulation is the only representative of openness to change, and therefore it is divided into two parcels. The same was done for hedonism and goal-orientedness (see Figure 3.2).
- The higher-order value model. Here, six higher-order value types are ordered in three bipolar dimensions. The six higher-order value types constitute the poles of the three bipolar dimensions and are therefore divided into two parcels (see Figure 3.3).

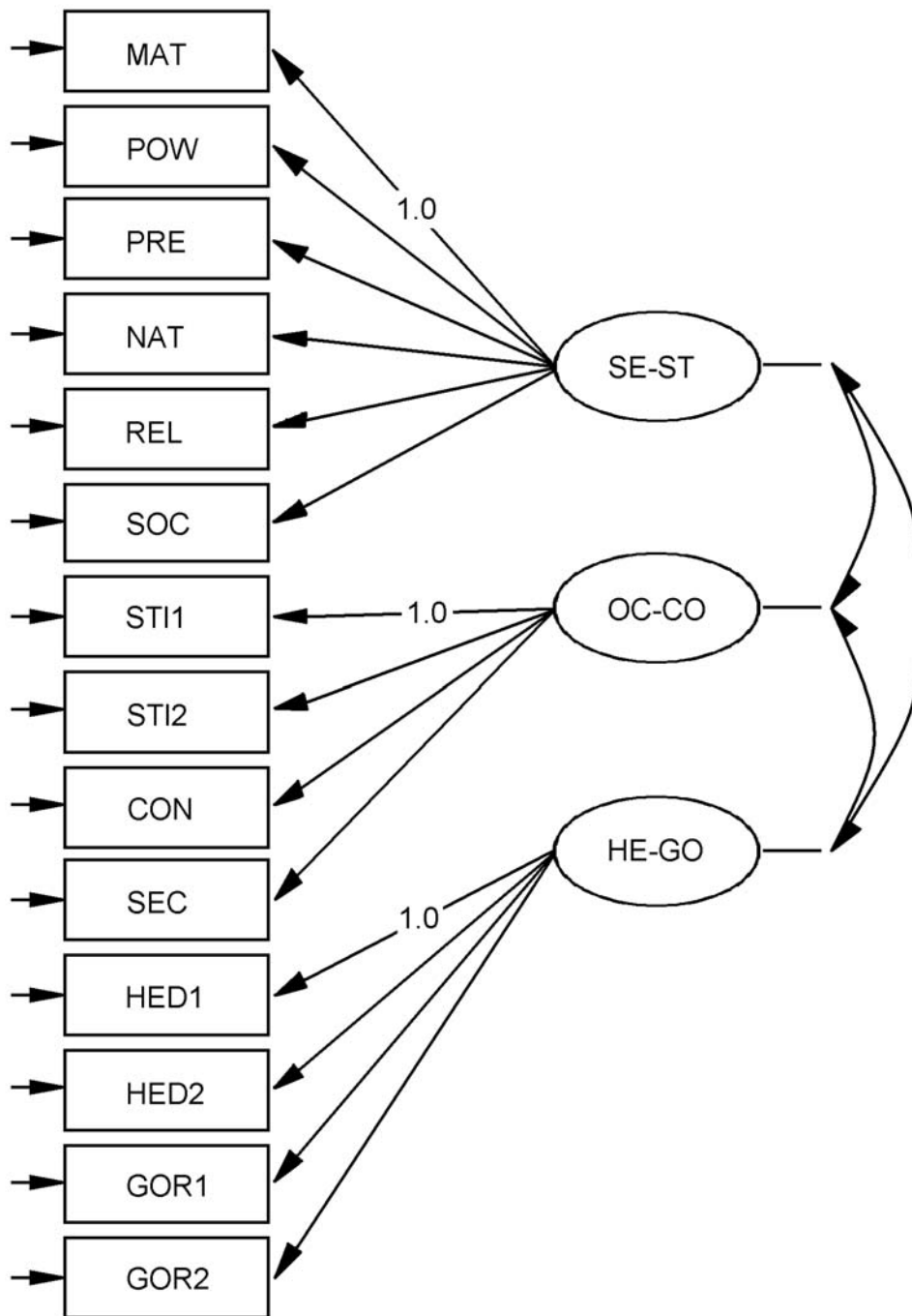


Figure 3.2. The lower-order value model (MAT = materialism; POW = power; PRE = prestige; NAT = nature; REL = relations; SOC = social commitment; STI = stimulation; CON = conformity; SEC = security; HED = hedonism; GOR = goal-orientedness; SE-ST = self-enhancement versus self-transcendence; OC-CO = openness to change versus conservation; HE-GO = hedonism versus goal-orientedness).

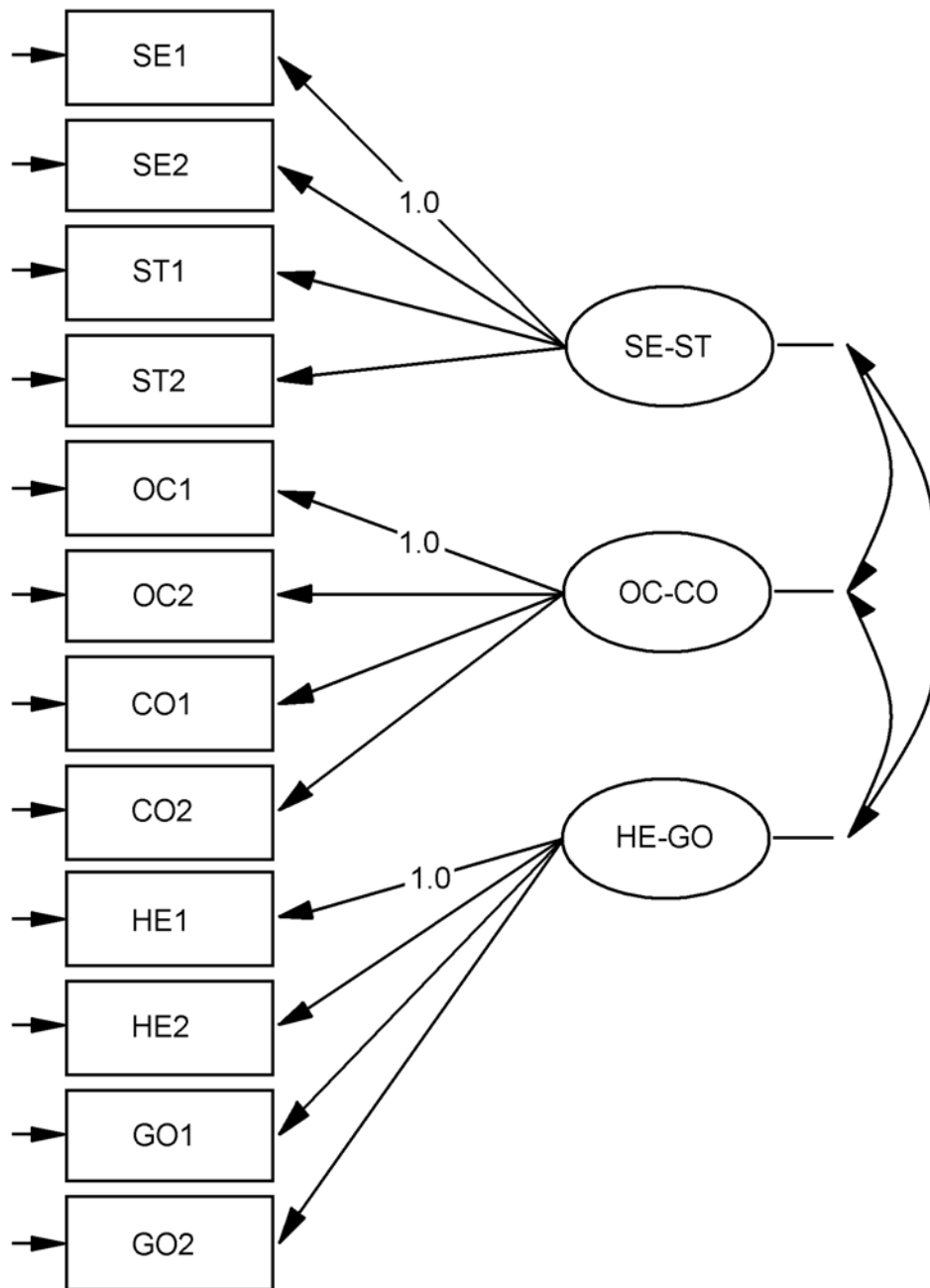


Figure 3.3. The higher-order value model (SE = self-enhancement; ST = self-transcendence; OC = openness to change; CO = conservation; HE = hedonism; GO = goal-orientedness; SE-ST = self-enhancement versus self-transcendence; OC-CO = openness to change versus conservation; HE-GO = hedonism versus goal-orientedness).

METHOD

We used LISREL 8 (Jöreskog & Sörbom, 1996) to conduct CFAs with maximum likelihood estimation on both the 11 value scales and the six higher-order value scales.¹ To assess how these models represented the data, five fit indices were calculated. Absolute fit indices such as the χ^2 goodness-of-fit statistic, the Goodness-of-Fit Index (GFI; Jöreskog & Sörbom, 1996), and the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990) as well as relative fit indices such as the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973) and the Comparative Fit Index (CFI; Bentler, 1990) were used. Both models were analyzed for life, work, and perceived organizational values separately. As a consequence, six CFA models were tested.

RESULTS

The results of the CFAs showed that both models produced a poor fit (see Table 3.9).

Table 3.9. Overall goodness-of-fit indices for both CFA models (N = 590).

	χ^2	<i>df</i>	GFI	RMSEA	TLI	CFI
Lower-order value model						
Life values	936.49*	74	0.80	0.147	0.44	0.54
Work values	978.88*	74	0.79	0.150	0.29	0.42
Perceived org. values	1136.38*	74	0.77	0.163	0.51	0.60
Higher-order value model						
Life values	655.13*	51	0.83	0.148	0.51	0.62
Work values	825.38*	51	0.80	0.168	0.31	0.47
Perceived org. values	938.89*	51	0.78	0.180	0.53	0.64

Note. * $p < 0.01$.

¹ This was done with the same data used in Chapter 3.

All χ^2 values were highly significant, meaning that none of the models provided a good fit with our data. Similarly, all GFI, TLI, and CFI values were less than 0.90, indicating a poor fit (Marsh, 1995; Marsh, Balla, & Hau, 1996; Medsker, Williams, & Holahan, 1994). Finally, all RMSEA values were above 0.10, which is also an indication of a poor fit (Browne & Cudeck, 1992).

DISCUSSION

The CFAs showed that our value models did not produce an acceptable fit to the data. At first sight, this seems to be problematic. However, we believe that there is an important reason to doubt the appropriateness of this approach. Although confirmatory maximum likelihood factor analysis is widely regarded by statisticians as the optimal way to evaluate a hypothesized factor structure, Breckler (1990) and McCrae, Zonderman, Bond, Costa, and Paunonen (1996) have pointed out the dangers of an uncritical adoption and simplistic application of CFA techniques. Analyses of personality data from structures that are known to be reliable showed poor fit when evaluated by CFA techniques (e.g., Borkenau & Ostendorf, 1990; Holden & Fekken, 1994). McCrae et al. (1996) encountered the same difficulties when they evaluated the replicability of factors in the Revised NEO Personality Inventory. In their study, CFA goodness-of-fit indices were not high either. However, they did not discard their personality structure, but instead called into question some assumptions underlying the application of CFA when used to examine personality structures. Because our value models (and Schwartz' (1992) original model) are circumplex models as well, they could experience the same difficulties as the ones observed when assessing circumplex personality structures.

Other possible explanations are the presence of error covariances and secondary loadings. Error covariances are not uncommon in social science research and can often lead to substantial misfit in a model (Byrne, 1998). Furthermore, models that are submitted to CFA are usually specified so that each observed variable loads on only one factor (Borkenau & Ostendorf, 1990). This is in line with Church and Burke (1994), who claimed that CFA techniques are best suited for the analysis of simple

structure models. However, because our value model is a circumplex model, secondary loadings can be expected. Therefore, as in personality research, we believe that our factor structure is only approximately a simple structure, which can also have led to the misfit of the CFA models presented here.

CONCLUSION

To conclude, following McCrae et al. (1996), we are convinced that CFA is not the optimal method to test the fit of our value models, whereas orthogonal Procrustes rotation (Schönemann, 1966) is more legitimate to test the invariance of the factor structures of life, work, and perceived organizational values. The stability and robustness of our value models has already been shown with a split-half procedure which applied principal component analysis in Chapter 3 of this dissertation. For a further confirmation of this stability, we refer to Appendix B and C, where two independent samples are used.

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APPENDIX B

CONFIRMATION OF THE THREE-DIMENSIONAL VALUE STRUCTURE WITH A SAMPLE OF KEY RESPONDENTS (*N* = 205)

INTRODUCTION

A first confirmation of the value structure proposed in Chapter 3 stems from a sample of key respondents. Key respondents are individuals from the managerial staff from each of the 27 organizations that took part in this study. In this appendix, two research questions are answered: (a) is the value structure of the key respondents' data similar to that of the respondents' data (see Chapter 3), and (b) are the ratings of the key respondents and the respondents for the three value factors and the value types (both the lower-order and the higher-order value types) in correspondence? To be more specific, the second research question verifies if key respondents and respondents rate their organization in a similar way for the different value factors and value types.

METHOD

SAMPLE

In total, 205 key respondents filled in the LWOVS. However, they only rated the importance of the 82 value items for their organization (i.e., their perception of the organizational values). 22% of these key respondents were female, and 78% were male. Their ages ranged from 26 to 63 years ($M = 45.96$; $SD = 8.16$). Data collection took place from May through October 2004. Compared to the sample of respondents in Chapter 3, they have a longer tenure in the organization ($M = 18.04$ years versus $M = 12.94$ years, $t(778) = 5.68$, $p < 0.001$).

ANALYSES

For the first research question, measurement equivalence/invariance (ME/I) between the data of the key respondents and the data of the respondents was assessed via a test of the equality of variance-covariance matrices (see Vandenberg & Lance, 2000). Following this, we assessed the congruence of the perceived organizational value structure of the key respondents and the perceived organizational value structure of the respondents with orthogonal Procrustes rotation (see Schönemann, 1966). To answer the second research question, Pearson correlation coefficients were calculated. For this purpose, aggregated scores of each organization's perceived organizational values were used. Before doing this, the degree of agreement or interrater reliability was assessed with intraclass correlations (ICCs). To be more specific, the two-way mixed effects model with measures of consistency was calculated for each organization. To have a general indication of the interrater reliability, we used average measures of the ICCs (see McGraw & Wong, 1996; Shrout & Fleiss, 1979).

RESULTS

TEST OF ME/I

To assess ME/I, we used a confirmatory factor analytic application of LISREL 8 (Jöreskog & Sörbom, 1996). For evaluation of the model fit, we utilized the χ^2 goodness-of-fit statistic and the following fit indices: (a) the Goodness-of-Fit Index (GFI; Jöreskog & Sörbom, 1996); (b) the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990); (c) the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973); and (d) the Comparative Fit Index (CFI; Bentler, 1990). All fit indices (with the exception of the χ^2 goodness-of-fit statistic which is overly sensitive; see Byrne, 1998) were in line with the minimum fit recommendations of Vandenberg and Lance (2000), $\chi^2(1275) = 1519.07$ ($p < 0.01$), GFI = 0.97, RMSEA = 0.023, TLI = 0.93, and CFI = 0.97. These results support measurement invariance between the data of the key respondents and the data of the respondents.

TESTS OF CONGRUENCE

Principal component analyses (PCAs) with varimax rotation were performed on the 11 lower-order and six higher-order mean-centered perceived organizational value types. The scree test (Cattell, 1966) revealed a three-dimensional structure for both the lower-order and higher-order values. After rotation to the a priori theoretically expected two-dimensional value structure of Schwartz (1992), self-enhancement (materialism, power, and prestige) opposed self-transcendence (nature, relations, and social commitment); openness to change (stimulation) opposed conservation (conformity and security); and hedonism opposed goal-orientedness. Factor loadings of these PCAs can be found in Table 3.10 and 3.11.

Table 3.10. Factor loadings of the PCAs of the 11 lower-order perceived organizational value types based on the key respondents data.

Value types	Perceived organizational values		
	Dim 1	Dim 2	Dim 3
Materialism	0.776	0.016	0.349
Power	0.765	-0.213	-0.196
Prestige	0.707	0.002	-0.134
Nature	-0.416	-0.217	0.337
Relations	-0.685	0.271	0.050
Social commitment	-0.731	-0.232	-0.088
Stimulation	-0.015	0.787	0.148
Conformity	0.051	-0.798	-0.292
Security	-0.049	-0.640	0.444
Hedonism	-0.378	0.337	0.718
Goal-orientedness	-0.098	0.342	-0.787

The congruence of the perceived organizational value structure of the key respondents and the perceived organizational value structure of the respondents was tested with orthogonal Procrustes rotations. The extent of fit was assessed with Tucker's phi (Tucker, 1951). All congruence coefficients were higher than 0.900,

which is considered as factor replication (see Barrett, 1986). For the lower-order values, the congruence coefficients for the three dimensions were 0.987, 0.975, and 0.952 respectively. For the higher-order values, the congruence coefficients were 0.987, 0.994, and 0.963 respectively.

Table 3.11. Factor loadings of the PCAs of the six higher-order perceived organizational value types based on the key respondents data.

Value types	Perceived organizational values		
	Dim 1	Dim 2	Dim 3
Self-enhancement	0.959	-0.096	0.005
Self-transcendence	-0.889	-0.078	0.204
Openness to change	0.024	0.862	0.129
Conservation	0.043	-0.885	0.060
Hedonism	-0.360	0.344	0.724
Goal-orientedness	-0.161	0.275	-0.906

TESTS OF CORRESPONDENCE BETWEEN KEY RESPONDENTS' AND RESPONDENTS' RATINGS

Before performing the tests of correspondence, the ICCs were calculated. Agreement between raters was very high for the factor scores, the lower-order value types, and the higher-order value types. For the factor scores, the average ICCs were 0.877 (all $p < 0.05$) for the key respondents and 0.894 (all $p < 0.05$) for the respondents. For the lower-order value types, the average ICCs were 0.899 (all $p < 0.05$) for the key respondents and 0.916 (all $p < 0.001$) for the respondents. Finally, for the higher-order value types, the average ICCs were 0.923 (all $p < 0.05$) for the key respondents and 0.930 (all $p < 0.01$) for the respondents. As a result, aggregating value scores was permitted for each organization.

First, the correspondence for the factor scores was calculated. All Pearson correlation coefficients were positive and significant. For the lower-order value model, correlations were $r = 0.60$ ($p < 0.01$) for the first factor, $r = 0.71$ ($p < 0.001$) for the

second factor, and $r = 0.65$ ($p < 0.01$) for the third factor. For the higher-order value model, correlations were $r = 0.64$ ($p < 0.01$) for the first factor, $r = 0.72$ ($p < 0.001$) for the second factor, and $r = 0.62$ ($p < 0.01$) for the third factor.

Second, the correspondence between the lower-order value types was calculated. Here, we also found 11 positive and significant Pearson correlation coefficients. These were $r = 0.60$ ($p < 0.01$) for conformity, $r = 0.71$ ($p < 0.001$) for goal-orientedness, $r = 0.56$ ($p < 0.01$) for hedonism, $r = 0.71$ ($p < 0.001$) for materialism, $r = 0.67$ ($p < 0.001$) for nature, $r = 0.49$ ($p < 0.05$) for power, $r = 0.47$ ($p < 0.05$) for prestige, $r = 0.60$ ($p < 0.01$) for relations, $r = 0.66$ ($p < 0.001$) for security, $r = 0.91$ ($p < 0.001$) for social commitment, and $r = 0.61$ ($p < 0.01$) for stimulation.

Finally, the correspondence between the higher-order value types was calculated. Again, all Pearson correlation coefficients were positive and significant. They were $r = 0.63$ ($p < 0.001$) for self-enhancement, $r = 0.84$ ($p < 0.001$) for self-transcendence, $r = 0.61$ ($p < 0.01$) for openness to change, $r = 0.76$ ($p < 0.001$) for conservation, $r = 0.56$ ($p < 0.01$) for hedonism, and $r = 0.71$ ($p < 0.001$) for goal-orientedness.

CONCLUSIONS

The perceived organizational value model based on the key respondents data confirms our value structure. Both analysis of measurement invariance and orthogonal Procrustes rotations show high congruence with the value model presented in Chapter 3. It seems that our value structure is stable, robust, and replicable across samples. Therefore, our first research question is answered positively: the value structure of the key respondents' data is similar to that of the respondents' data. Subsequently, all Pearson correlation coefficients between the ratings of the key respondents and the ratings of the respondents are positive and significant, indicating that key respondents and respondents rate the values of their organization in a similar way. Our second research question is therefore also answered positively.

In Appendix C, another independent sample ($N = 591$) is used as a second confirmation of the stability and robustness of this value model.

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APPENDIX C

CONFIRMATION OF THE THREE-DIMENSIONAL VALUE STRUCTURE WITH A NEW SAMPLE OF RESPONDENTS (*N* = 591)

INTRODUCTION

For a second confirmation of the value structure proposed in Chapter 3, we introduce a new sample.¹ The central research question of this appendix is whether the value structure found with our 2004 sample (see Chapter 3) is congruent with the value structure obtained from this new and independent sample of respondents. In this way, we want to investigate whether the value structure proposed in Chapter 3 is stable and replicable across samples.

METHOD

SAMPLE

This time, data collection took place mid-2005 in 26 Belgian organizations: 17 from the public services, four organizations from the private sector, and five schools. In total, there were 591 respondents (42% females and 58% males), ages ranged from 20 to 62 years ($M = 40.17$; $SD = 10.36$).

ANALYSES

First, we assessed measurement equivalence/invariance (ME/I) between our 2005 sample and our 2004 sample via confirmatory factor analysis (equality of variance-covariance matrices) (see Vandenberg & Lance, 2000). This was done for both work and perceived organizational values. Following this, we analyzed the work and

¹ This new sample is the same as the one used in Chapters 4, 5, and 6 of this dissertation.

perceived organizational value structure of the 11 lower-order and the six higher-order value types. Each time, we assessed the congruence of these value structures with the ones found based on the sample of 2004. This was done with orthogonal Procrustes rotations (see Schönemann, 1966).²

RESULTS

ME/I BETWEEN 2005 AND 2004

To assess ME/I between 2005 and 2004, we used a confirmatory factor analytic application of LISREL 8 (Jöreskog & Sörbom, 1996). For evaluation of the model fit, we utilized the χ^2 goodness-of-fit statistic and the following fit indices: (a) the Goodness-of-Fit Index (GFI; Jöreskog & Sörbom, 1996); (b) the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990); (c) the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973); and (d) the Comparative Fit Index (CFI; Bentler, 1990). The results for both work and perceived organizational values are shown in Table 3.12. All fit indices produced an acceptable fit and were in line with the minimum fit recommendations of Vandenberg and Lance (2000) (with the exception of the χ^2 goodness-of-fit statistic which is overly sensitive; see Byrne, 1998). These results support measurement invariance between the 2005 data and the 2004 data for both work and perceived organizational values.

Table 3.12. Goodness-of-fit statistics for tests of ME/I between 2005 and 2004.

	χ^2	<i>df</i>	GFI	RMSEA	TLI	CFI
Work values	2235.03*	1275	0.93	0.037	0.91	0.95
Perceived org. values	2417.74*	1275	0.92	0.040	0.91	0.95

Note. * $p < 0.01$.

² These analyses could not be done for life values because life values were not measured in 2005.

LOWER-ORDER VALUE MODEL

Principal component analyses (PCAs) with varimax rotation were performed on the 11 mean-centered work and perceived organizational value types from the 2005 data. The scree test (Cattell, 1966) revealed a three-dimensional structure for both work and perceived organizational values. After rotation to the a priori theoretically expected two-dimensional value structure of Schwartz (1992), materialism, power, and prestige opposed nature, relations, and social commitment; stimulation opposed conformity and security; and hedonism opposed goal-orientedness. Factor loadings of these PCAs can be seen in Table 3.13. One small deviation is observed for the perceived organizational value structure: nature has a higher loading on the third dimension than on the first dimension. To assess the congruence of these value models with the value models based on the 2004 data, we applied orthogonal Procrustes rotations. Tucker's phi (Tucker, 1951) was used to determine the extent of fit. For work values, Tucker's phi was 0.978 for the first dimension, 0.967 for the second dimension, and 0.983 for the third dimension. All congruence coefficients were higher than 0.900, which is considered as factor replication (see Barrett, 1986). For perceived organizational values, the results were similar: Tucker's phi was 0.994 for the first dimension, 0.963 for the second dimension, and 0.980 for the third dimension.

HIGHER-ORDER VALUE MODEL

In this model, the 11 value types were merged into six higher-order value types each corresponding to a pole in the componential structure. PCAs with three components performed on these six mean-centered higher-order value types confirmed the opposition between self-enhancement and self-transcendence, between openness to change and conservation, and between hedonism and goal-orientedness for the 2005 data, for both work and perceived organizational values (factor loadings are presented in Table 3.14). The congruence with the models based on the 2004 data was again assessed with orthogonal Procrustes rotations. For work values, the Tucker's phi was 0.988 for the first dimension, 0.981 for the second dimension, and 0.990 for the third dimension; and for perceived organizational values, the Tucker's

phi was 0.998 for the first dimension, 0.998 for the second dimension, and 0.995 for the third dimension. All congruence coefficients were again higher than 0.900, which is considered as factor replication (see Barrett, 1986).

Table 3.13. Factor loadings of the PCAs of the 11 work and perceived organizational value types based on the 2005 data.

Value types	Work values			Perceived org. values		
	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3
Materialism	0.652	-0.011	0.455	0.720	0.253	0.344
Power	0.554	0.016	-0.315	0.730	-0.309	-0.036
Prestige	0.638	0.225	-0.107	0.655	0.091	-0.110
Nature	-0.525	0.134	0.139	-0.412	0.044	0.489
Relations	-0.549	0.085	0.446	-0.650	0.255	0.339
Social commitment	-0.727	-0.027	-0.319	-0.692	-0.264	-0.165
Stimulation	-0.055	0.797	0.043	-0.158	0.733	0.230
Conformity	0.012	-0.803	-0.291	0.023	-0.737	-0.417
Security	-0.106	-0.725	0.322	-0.180	-0.645	0.434
Hedonism	-0.160	0.143	0.790	-0.465	0.366	0.515
Goal-orientedness	0.073	0.131	-0.764	0.000	0.153	-0.875

Table 3.14. Factor loadings of the PCAs of the six higher-order work and perceived organizational value types based on the 2005 data.

Value types	Work values			Perceived org. values		
	Dim 1	Dim 2	Dim 3	Dim 1	Dim 2	Dim 3
Self-enhancement	0.938	0.073	0.054	0.988	-0.008	0.058
Self-transcendence	-0.866	0.056	0.196	-0.797	0.005	0.390
Openness to change	-0.045	0.866	0.028	-0.126	0.810	0.185
Conservation	-0.061	-0.910	-0.018	-0.113	-0.891	-0.082
Hedonism	-0.138	0.168	0.799	-0.434	0.374	0.582
Goal-orientedness	0.004	0.122	-0.904	-0.102	0.107	-0.974

CONCLUSION

Both the lower-order and the higher-order value models obtained from the 2005 data confirm the value structures presented in Chapter 3. Comparison of the variance-covariance matrices as well as orthogonal Procrustes rotations between the value structures of 2005 and 2004 give evidence of high congruence. Based on these results and in line with the results of Appendix B, we conclude that our value structure is stable, robust, and replicable across samples.

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APPENDIX D

CONFIRMATION OF THE THREE-DIMENSIONAL VALUE STRUCTURE ON ORGANIZATIONAL LEVEL

INTRODUCTION

Throughout this dissertation, we use perceived organizational values to determine the supplementary fit between person and organization. This means that all analyses are on individual level. In this final appendix of Chapter 3, we take a closer look at the value structure on *organizational level*. In Appendix B and C, we already confirmed our value structure with two independent samples. This time, we will try to confirm our value structure on a higher level of analysis: the organizational level. After all, potential future multi-level studies need commensurate value structures on individual and organizational level.

METHOD

SAMPLE

To assess the value structure on organizational level, we used our 2005 sample of 26 organizations comprising 591 respondents because this sample is independent of the one used in Chapter 3.

ANALYSES

If individuals in each of these organizations agree with each other about the perception of the organizational values, these perceptions can be aggregated to the organizational level and can be used to describe the organization (Fischer, 2006). Therefore, the degree of agreement or interrater reliability was assessed with intraclass correlations (ICCs). The two-way mixed effects model with measures of

consistency was calculated for all 26 organizations. Because we were not interested in the reliability of a single rater, we used average measures of the ICCs (see McGraw & Wong, 1996; Shrout & Fleiss, 1979). This was done for both the 11 lower-order and six higher-order values. Next, by means of principal component analyses (PCAs), we analyzed the structure of the aggregated lower-order and aggregated higher-order organizational values (i.e., the value structure on organizational level). Finally, the congruence between the value structures (lower-order and higher-order) on organizational level and the organizational value structures on individual level was assessed with orthogonal Procrustes rotations (see Schönemann, 1966).

RESULTS

Agreement between raters was very high with a mean ICC of 0.928 (range between 0.841 and 0.980) for the lower-order values and 0.952 (range between 0.884 and 0.987) for the higher-order values. All ICCs were statistically significant ($p < 0.001$). As a consequence, aggregating the individual perceptions of the organizational values within each organization was permitted.

PCAs with varimax rotation were performed on the 11 aggregated lower-order organizational value types and on the six aggregated higher-order organizational value types. The scree test (Cattell, 1966) revealed a three-dimensional structure for both the lower-order and the higher-order value model. Factor loadings of these PCAs (after targeted rotation to the a priori theoretically expected two-dimensional value structure of Schwartz (1992)) can be found in Table 3.15. As can be seen, all value types principally loaded on their intended factor.

Finally, the congruence of these two models on organizational level with the models based on the 2004 data (perceived organizational values on individual level, both the lower-order value model and the higher-order value model; see Chapter 3) was assessed with orthogonal Procrustes rotations (see Schönemann, 1966). Tucker's phi (Tucker, 1951) was used to determine the degree of fit. For the lower-order value model, Tucker's phi was 0.933 for the first dimension, 0.910 for the second dimension, and 0.838 for the third dimension. Although the congruence coefficient of

the third dimension is not sufficient to conclude factor replication (threshold is 0.900), Barrett (1986, p. 337) has mentioned 0.800 as a lower bound for factor similarity. For the higher-order value model, all congruence coefficients gave evidence of factor replication: Tucker's phi was 0.971 for the first dimension, 0.962 for the second dimension, and 0.918 for the third dimension.

Table 3.15. Factor loadings of the PCAs of the aggregated lower-order and aggregated higher-order organizational value types.

	Aggregated organizational values		
	Dim 1	Dim 2	Dim 3
Lower-order value types			
Materialism	0.846	0.416	0.026
Power	0.733	-0.417	0.022
Prestige	0.742	0.188	-0.216
Nature	-0.616	0.145	0.137
Relations	-0.621	0.187	0.577
Social commitment	-0.846	-0.363	-0.215
Stimulation	0.001	0.860	0.310
Conformity	-0.287	-0.909	-0.035
Security	0.069	-0.726	0.384
Hedonism	-0.401	0.445	0.699
Goal-orientedness	0.266	0.485	-0.762
Higher-order value types			
Self-enhancement	0.963	0.080	-0.170
Self-transcendence	-0.936	-0.099	0.251
Openness to change	0.037	0.908	0.213
Conservation	-0.142	-0.915	0.188
Hedonism	-0.262	0.493	0.785
Goal-orientedness	0.159	0.468	-0.845

CONCLUSION

Inspection of the value structure on *organizational level* reveals high congruence with the value structure on individual level. Thereby, we have demonstrated that our value model is stable and replicable across levels of analysis.

GENERAL CONCLUSION

Although we could not confirm our value model in Appendix A with confirmatory factor analysis, the other three appendices did indicate its stability and replicability. More specifically, in addition to Appendix B and C where we have shown that our value model is stable, robust, and replicable across samples, we have now demonstrated that this is also the case across levels of analysis. We believe that these additional analyses presented in the appendices are an adequate and persuasive confirmation of the value model proposed in Chapter 3.

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CHAPTER 4

SUBJECTIVE VERSUS OBJECTIVE SUPPLEMENTARY PERSON- ORGANIZATION FIT: RELATIONSHIPS WITH AN ATTITUDINAL AND A BEHAVIORAL OUTCOME¹

In person-organization fit research, two different approaches of assessing indirect supplementary fit are frequently used. In this study, we examine whether these two approaches, subjective and objective supplementary fit, yield differential relationships with attitudes (job satisfaction) and behavior (positive work behavior). The results of this study indicate that subjective fit is stronger related to the attitudinal outcome than objective fit. However, this is not the case for the behavioral outcome, where no significant differences were found between subjective and objective fit. These findings suggest that the use of objective measures in person-organization fit research may provide an underestimation of the effect of fit on attitudinal outcomes.

¹ This paper was co-authored by Johnny Fontaine and Frederik Anseel.

INTRODUCTION

The last decades, person-organization (P-O) fit is a topic that has received a substantial amount of scholarly attention (for recent meta-analyses, see Hoffman & Woehr, 2006; Kristof-Brown, Zimmerman, & Johnson, 2005; Verquer, Beehr, & Wagner, 2003). According to Kristof (1996), the essential facet of P-O fit is the compatibility between people and the organization in which they work. This compatibility may be conceptualized in various ways. In this study, we will take a closer look at *supplementary P-O fit*. Muchinsky and Monahan (1987) were the first to define this type of fit, which occurs when a person “supplements, embellishes, or possesses characteristics which are similar to other individuals” in an environment or organization (p. 269). In other words, supplementary fit occurs when individual and organizational characteristics are similar.

When assessing supplementary P-O fit, most researchers focus on value congruence (Piasentin & Chapman, 2006; Verquer et al., 2003). This is not surprising, given that values can be studied for both individuals (life and work values) and organizations (organizational values). An important decision that has to be made when examining supplementary P-O fit, concerns the strategy that will be used for assessing the extent of fit. People can be asked whether they believe that a good fit exists, or they can judge the importance of their own values and the organization’s values independently. The former is a direct measure of fit, the latter an indirect measure of fit (Kristof, 1996). Although both measures of fit have been used frequently, there seem to be several criticisms against the use of direct measures. The most important criticism was formulated by Edwards (1991), who stated that direct measures of fit confound the constructs of the person and the environment, preventing an estimation of their independent effects. The respondents only indicate whether they have the perception that a good fit with their organization exists (as a consequence, Kristof-Brown and colleagues (2005) have labeled this *perceived fit*). Other criticisms relate to the neglect of commensurate dimensions (i.e., the use of the same value dimensions for both the person and the organization) and a consistency bias (e.g., people satisfied with their job believe they also fit well in their

organization) (Kristof, 1996). In sum, a number of researchers have recommended against the use of direct measures and for the use of indirect measures of P-O fit.

The present study addresses the question how two different techniques for assessing indirect fit based on individual and organizational values relate to different outcome variables. The first technique is *indirect individual-level measurement*. In this perspective, the respondents are asked to report their own value priorities and their perceptions of the value priorities of their organization. Next, the fit between the individuals' values and their perceptions of the organizational values is assessed and related to different outcomes. Thus, similar to perceived fit, the fit between person and environment is assessed by the same source (i.e., the individual). In contrast, the second technique uses the aggregated employee perceptions of the organizational values without taking the individual's subjective perception of the organizational values into account. In this perspective, called *indirect cross-levels measurement*, the fit between the person and the environment is not assessed by the same source. In what follows, the former will be labeled *subjective fit* and the latter *objective fit* (see Kristof-Brown et al., 2005).²

The aim of the current study is to contribute to the clarification of two different techniques for measuring supplementary P-O fit. If these two techniques or conceptualizations of fit are distinct as suggested by Kristof-Brown et al. (2005), one should expect to see different relationships with work outcomes. However, according to Cable and DeRue (2002) almost no research examined the differential outcomes of various techniques of fit assessment. In addition, Hoffman and Woehr (2006) were unable to locate studies which included multiple methods of measuring P-O fit in a single sample. Therefore, this study aims to examine whether two different measures of indirect fit differentially affect individual outcome variables. With this objective, this study aims to respond to recent calls in the P-O fit domain for more studies that examine the predictive validity of subjective and objective fit (Verquer et al., 2003) and for "additional research... to examine the impact of fit measurement strategy on the relationship between fit and outcomes" (Hoffman & Woehr, 2006, p. 397). This

² Recent meta-analyses by Verquer et al. (2003) and Hoffman and Woehr (2006) interchanged the meaning of perceived and subjective fit. However, for this study, we adopted the denotations of Kristof-Brown and colleagues (2005), which is consistent with French, Rogers, and Cobb's (1974) original use of the terms.

was also stressed by Kristof-Brown et al. (2005) who claimed that the comparison between individual-level and cross-levels measurement is merited.

For subjective fit, the targeted question is whether the person fits with the organization that he or she perceives to exist (see Kristof, 1996). As both self-perception theory (Bem, 1967) and cognitive dissonance theory (Festinger, 1957) suggest that individuals are driven to maintain internally consistent perceptions, it can be expected that subjective fit will have a stronger relationship with most individual outcome variables compared to objective fit. Appraising a work environment as providing a poor fit but still reporting a high level of satisfaction with that environment, would probably produce cognitive dissonance for an individual (Kristof-Brown et al., 2005). In support of this hypothesis, several scholars have argued that objective fit could be a less proximal determinant of attitudes and behavior than subjective fit (e.g., Cable & DeRue, 2002; Kristof-Brown et al., 2005). Given that the objective reality or the shared perceptions of organizational values still must be filtered through individuals' perceptions, they expected that objective fit should have the weakest relationships with most outcomes. Therefore, our first hypothesis states:

Hypothesis 1: Subjective fit is stronger related to individual outcome variables than objective fit.

In addition, we believe that there could be a difference between subjective and objective fit when comparing attitudinal and behavioral outcomes. From the perspective of similarity-attraction research (Byrne, 1969), objective fit should affect the relationships between individuals and organizations regardless of whether it is perceived explicitly (e.g., through improved communication). As a consequence, no differences between the two techniques to measure fit would be expected. However, when examining subjective characteristics such as values, subjective fit and objective fit may become unaligned, meaning that subjective fit could be more predictive of outcomes than objective fit (Cable & Judge, 1997; Pulakos & Wexley, 1983). In addition, Kristof (1996) suggested that objective fit between people and organizations may result in improved process and performance outcomes even if the perception of fit does not exist. More specifically, she stated "perceived fit should have more of an impact on individual attitudinal outcomes, whereas actual fit should be more

influential on process and performance outcomes” (Kristof, 1996, p. 34). Because of the similarities between perceived fit and subjective fit (see Kristof, 1996), we expect that the decrease in influence when comparing objective and subjective fit will be less pronounced for performance or behavioral criteria compared to attitudinal criteria. As a result, our second hypothesis is:

Hypothesis 2: The decrease in explained variance of the outcome variables will be less pronounced for behavioral outcomes than for attitudinal outcomes, when comparing objective fit with subjective fit.

METHOD

SAMPLE AND PROCEDURE

Data were collected in 2005 in 26 Belgian organizations. Anonymous questionnaires were sent to 40 employees in each organization. Participation in the study was voluntary and respondents were ensured of confidentiality and anonymity. Participants were asked to place their surveys in an envelope provided by the researchers. Response rates ranged between 10% and 93%. In total, 591 respondents (42% females and 58% males) filled in the questionnaire, yielding a total response rate of 57%. The ages of the respondents ranged from 20 to 62 years ($M = 40.2$; $SD = 10.4$).

QUESTIONNAIRES

Values were measured with the Work and Organizational Values Survey (WOVS) (De Clercq & Fontaine, 2006), a newly developed comprehensive value scale based on the value theory of Schwartz (1992). Each of the 50 single values was followed in parentheses by a short explanatory phrase (e.g., CONFORMISM [to comply with rules and regulations]). The importance of each value was rated on a 9-point scale from *opposed to my or my organization's principles* (-1) through *not important* (0) to *of supreme importance* (7). This asymmetrical scale reflects the desirable nature of

values (Schwartz, 1992). Each item was rated for its importance in the respondents' work (personal work values) and for the organization they work for (perceived organizational values).

The WOVIS measures six value types that can be used as predictors in the polynomial regression analyses. These value types are the poles of three orthogonal dimensions: self-enhancement (enhancement of own personal interests, even at the expense of others) versus self-transcendence (transcending selfish concerns and promotion of the welfare of others and nature), openness to change (following own intellectual and emotional interests in unpredictable and uncertain directions) versus conservation (preservation of the status quo and valuing certainty in relationships with close others, institutions, and traditions), and hedonism (pleasure and sensuous gratification for oneself) versus goal-orientedness (living and working to fulfill a purpose and not giving up). Coefficient alphas ranged from 0.77 (openness to change) to 0.89 (goal-orientedness) with an average of 0.84 for personal work values, and from 0.79 (openness to change) to 0.90 (goal-orientedness) with an average of 0.86 for perceived organizational values.

Commensurability of the work and organizational value dimensions – which is a prerequisite for assessing supplementary P-O fit (Edwards, 1991; Kristof, 1996; Kristof-Brown et al., 2005) – was assessed by means of a confirmatory factor analytic (CFA) method suggested by Vandenberg and Lance (2000) and with orthogonal Procrustes rotations (Schönemann, 1966). The CFA model tested the equality of variance-covariance matrices to have an indication of measurement equivalence. All fit indices were acceptable (with the exception of the χ^2 goodness-of-fit statistic which is overly sensitive; see Byrne, 1998). Fit indices were: $\chi^2(1275) = 2140.53$ ($p < 0.01$); the Goodness-of-Fit Index (GFI; Jöreskog & Sörbom, 1996) = 0.93; the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990) = 0.035; the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973) = 0.93; and the Comparative Fit Index (CFI; Bentler, 1990) = 0.96. These fit indices were in line with the minimum fit requirements for measurement equivalence as suggested by Vandenberg and Lance (2000). In addition, orthogonal Procrustes rotations were applied to test the congruence of the three bipolar value dimensions. The Tucker's phi (Tucker, 1951) was 0.968 for the first dimension (self-enhancement versus self-transcendence), 0.983 for the second

dimension (openness to change versus conservation), and 0.961 for the third dimension (hedonism versus goal-orientedness). According to Barrett (1986), a congruence coefficient of 0.900 or higher is traditionally considered evidence of factor replication. As a result, commensurability of the three value dimensions is guaranteed.

Two individual outcome variables were related to the congruence between personal work values and organizational values. To test our hypotheses, an attitudinal and a behavioral outcome had to be selected. We chose overall job satisfaction (attitudinal outcome) and positive work behavior (behavioral outcome) because no direct comparisons between subjective and objective fit were made for these outcome variables. Overall job satisfaction was measured with the Global Job Satisfaction scale (Warr, Cook, & Wall, 1979). This scale has often been used in empirical research and has proven an excellent reliability (e.g., Hardy, Woods, & Wall, 2003; Niklas & Dormann, 2005). Respondents had to indicate how satisfied they were with several aspects of their job (e.g., the amount of variety in their job). Responses were obtained on a 7-point Likert-type scale from *extremely dissatisfied* (1) to *extremely satisfied* (7). The coefficient alpha of this scale was 0.85. Positive work behavior was assessed with the On-The-Job Behaviors scale developed by Lehman and Simpson (1992). Positive work behavior represents behavior that is typical for the overachieving, highly productive worker. Commonly, most employees report engagement in this behavior (see Lehman & Simpson, 1992). The On-The-Job Behaviors scale can also be used to measure other job behaviors like antagonistic work behavior and withdrawal behavior (e.g., Jackson, Colquitt, Wesson, & Zapata-Phelan, 2006). Respondents had to report how often they performed certain behaviors in the past twelve months (e.g., volunteered to work overtime). Responses were obtained on a 7-point Likert-type scale from *never* (1) to *very often* (7). The coefficient alpha of this scale was 0.70.

ANALYSES

To overcome methodological problems commonly associated with measures of profile similarity (e.g., profile correlations, difference scores), we used polynomial regression analysis (Edwards, 1994, 2002) to determine the relationships between values, value congruence, and outcomes. Using this technique precludes that the independent contribution of personal and organizational variables on work outcomes is ignored. Addressing the issue whether attitudes and behavior are determined by person characteristics, organizational characteristics, or their congruence, is troublesome without separate measures of personal and organizational variables (see Finegan, 2000).

Before applying the supplementary P-O fit model, P and O terms were entered simultaneously to test for linear main effects (Model 1). Following this, the supplementary P-O fit model was applied (Model 2). In this model, the component measures (P and O) and the higher-order terms – the squares of both component measures (P^2 and O^2) and their product (PO) – were also entered in the regression equation. Furthermore, overall job satisfaction and positive work behavior were used as the dependent variable (Z) (see Equation 1).

$$Z = b_0 + b_1P + b_2O + b_3P^2 + b_4PO + b_5O^2 + e \quad (\text{Equation 1})$$

Value scores were scale centered prior to the polynomial regression analyses, which is necessary for reducing multicollinearity and facilitating interpretation (Edwards, 1994). In order to test our two hypotheses, the relationships with the two outcome variables were tested with subjective and objective measures of fit. This was done for the six value types separately, yielding six regression analyses. To control the risk of Type I error associated with these analyses, we used the sequential Bonferroni procedure (Seaman, Levin, & Serlin, 1991).

Given that we have shown the comprehensiveness of this value model for work and organizational values in previous research (see De Clercq & Fontaine, 2006), we are also interested in the results for the full set of values, entered together as predictors in the regression analyses. By using a comprehensive set of values, we can have an indication of the importance of values in general. Therefore, for each outcome

variable, a multiple regression analysis was conducted with all value types together as predictors to evaluate the overall contribution of all value types (i.e., the full value model). Predictors were entered the same way as in the previous analyses.

To assess the significance of potential differences between subjective and objective fit in explained variance of the outcome variables, four additional hierarchical regression analyses were conducted on the full value model. In these analyses, the additional explained variance of subjective assessments of organizational values was investigated after controlling for personal work values and objective measures of organizational values (i.e., the aggregated scores). More specifically, for the linear model (Model 1), we examined whether $O_{(s)}$ or each individual's perception of the organizational values explained additional variance above P (personal work values) and $O_{(o)}$ (objective or aggregated organizational values). The same was done for the supplementary P-O fit model (Model 2), where the quadratic and congruence terms were also taken into account.³

Prior to these analyses, it was investigated whether there was sufficient agreement between the individual perceptions of the organizational values. This was necessary to determine if the aggregation of individual perceptions of organizational values was legitimized for assessing objective P-O fit (James, 1982; James, Joyce, & Slocum, 1988; Kristof, 1996). Intraclass correlations (ICCs) were calculated to assess the degree of interrater agreement or reliability. Following the guidelines of McGraw and Wong (1996), the two-way mixed effects model with measures of consistency was calculated for each organization. The number of raters for each organization ranged from four to 37 with an average of 23. We used average measures of the ICCs because we were not interested in the reliability of a single rater, but instead in an overall interrater reliability for all k raters per organization (see McGraw & Wong, 1996; Shrout & Fleiss, 1979).

³ Regression equations for the linear and supplementary P-O fit model are respectively:

$$Z = b_0 + b_1P + b_2O_{(o)} + b_3O_{(s)} + e \quad (\text{Equation 2})$$

$$Z = b_0 + b_1P + b_2O_{(o)} + b_3P^2 + b_4PO_{(o)} + b_5O_{(o)}^2 + b_6O_{(s)} + b_7PO_{(s)} + b_8O_{(s)}^2 + e \quad (\text{Equation 3})$$

RESULTS

Agreement between raters was very high with a mean ICC of 0.952 (range was between 0.884 and 0.987); all ICCs were statistically significant ($p < 0.001$). As a consequence, for all 26 organizations, aggregated scores were calculated for organizational values. However, for each respondent, this aggregated score was corrected for his or her own subjective perception of the organizational values. Table 4.1 presents descriptive statistics and correlations for all study variables.

OVERALL JOB SATISFACTION

We refer to Table 4.2 for the results of the polynomial regression analyses of overall job satisfaction on work and perceived organizational values. For Model 1, R^2 was lower for all six value types when comparing objective fit with subjective fit. Also for the full value model, the explained variance was much lower when comparing objective fit with subjective fit (0.091 versus 0.203). The same was found for Model 2: R^2 was lower for all six value types and for the full value model (0.154 versus 0.259) when comparing objective fit with subjective fit.

The additional R^2 of subjective assessments of organizational values over personal work values and objective assessments of organizational values was 0.134 ($p < 0.01$) for the linear model (see Equation 2) and 0.159 ($p < 0.01$) for the supplementary P-O fit model (see Equation 3). Taken together, these results confirm Hypothesis 1 for overall job satisfaction.

Table 4.1. Descriptive statistics and correlation coefficients.

Constructs	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
Personal work values																					
1. Self-enhancement	-1.29	0.73																			
2. Self-transcendence	0.38	0.72	-0.65																		
3. Openness to change	-0.19	0.84	-0.05	-0.01																	
4. Conservation	0.18	0.88	-0.22	-0.12	-0.59																
5. Hedonism	0.29	1.01	-0.21	0.08	0.09	-0.16															
6. Goal-orientedness	1.03	0.75	-0.12	-0.28	-0.01	-0.14	-0.48														
Perceived org. values																					
7. Self-enhancement	-0.29	0.93	0.31	-0.08	0.05	-0.22	0.01	-0.12													
8. Self-transcendence	-0.38	0.76	-0.24	0.26	0.01	0.07	-0.02	-0.06	-0.71												
9. Openness to change	-0.81	0.80	0.12	-0.11	0.32	-0.16	0.09	-0.12	-0.19	0.13											
10. Conservation	0.79	0.80	-0.24	0.06	-0.24	0.46	-0.11	-0.00	-0.16	-0.10	-0.52										
11. Hedonism	-1.09	1.00	-0.02	-0.08	0.12	-0.07	0.35	-0.14	-0.42	0.38	0.34	-0.32									
12. Goal-orientedness	1.18	0.80	-0.03	-0.12	-0.12	-0.01	-0.17	0.39	-0.18	-0.31	-0.16	-0.02	-0.39								
Aggregated org. values																					
13. Self-enhancement	-0.29	0.35	0.24	-0.19	0.07	-0.20	0.04	0.06	0.25	-0.34	0.06	-0.22	0.01	0.15							
14. Self-transcendence	-0.37	0.35	-0.27	0.27	-0.04	0.09	-0.03	-0.01	-0.27	0.39	-0.07	0.16	0.02	-0.16	-0.88						
15. Openness to change	-0.80	0.30	0.14	-0.09	0.19	-0.24	-0.02	0.07	0.06	-0.08	0.27	-0.34	0.13	0.07	0.07	-0.13					
16. Conservation	0.79	0.45	-0.19	0.05	-0.18	0.40	-0.02	-0.10	-0.15	0.13	-0.24	0.51	-0.11	-0.17	-0.40	0.24	-0.69				
17. Hedonism	-1.10	0.24	0.01	0.07	0.12	-0.20	0.00	0.03	0.02	0.05	0.21	-0.25	0.06	-0.01	-0.16	0.24	0.65	-0.53			
18. Goal-orientedness	1.19	0.29	0.21	-0.17	0.01	-0.11	0.02	0.02	0.16	-0.22	0.08	-0.26	-0.02	0.23	0.32	-0.51	0.14	-0.46	-0.25		
Outcome variables																					
19. Overall job sat.	4.65	0.64	-0.01	-0.12	-0.14	0.20	-0.13	0.13	-0.33	0.18	0.10	-0.02	0.09	0.22	0.00	-0.07	0.06	0.04	0.01	0.03	
20. Positive work beh.	3.48	0.86	0.01	-0.04	0.14	-0.20	-0.10	0.24	0.01	0.02	0.10	-0.16	0.06	-0.00	-0.03	-0.00	0.11	-0.08	-0.00	0.11	0.03

Note. *N* = 591. Correlations greater than or equal to |0.08| were statistically significant ($p < 0.05$).

Table 4.2. Results of linear and quadratic regressions of overall job satisfaction on work values and organizational values.

	Model 1			Model 2						
	P	O	R ²	P	O	P ²	PO	O ²	ΔR ²	R ²
Subjective fit (perceived org. values)										
Self-enhancement	0.096**	-0.251**	0.119**	0.080*	-0.232**	0.029	-0.013	-0.033	0.007	0.126**
Self-transcendence	-0.149**	0.184**	0.058**	-0.146**	0.180**	-0.026	0.057	0.032	0.006	0.064**
Openness to change	-0.139**	0.126**	0.041**	-0.118**	0.107	-0.036	0.091*	-0.031	0.009	0.050**
Conservation	0.195**	-0.118**	0.060**	0.192**	-0.097**	0.023	0.109*	-0.110**	0.023*	0.083**
Hedonism	-0.110**	0.095**	0.034**	-0.089**	0.075*	-0.018	0.063*	0.003	0.010	0.044**
Goal-orientedness	0.054	0.157**	0.052**	0.098*	0.125**	-0.051	0.104*	-0.134**	0.042**	0.094**
Full value model			0.203**						0.056**	0.259**
Objective fit (aggregated org. values)										
Self-enhancement	-0.009	0.012	0.000	0.001	0.029	0.040	-0.150	-0.297	0.013	0.013
Self-transcendence	-0.094*	-0.072	0.015*	-0.098*	-0.082	-0.024	0.049	-0.316	0.006	0.021
Openness to change	-0.115**	0.173	0.025**	-0.119**	0.135	-0.031	0.025	0.415	0.009	0.034**
Conservation	0.161**	-0.075	0.042**	0.163**	-0.076	0.030	0.049	-0.065	0.006	0.048**
Hedonism	-0.081**	0.025	0.017*	-0.081**	0.015	-0.008	-0.084	0.723*	0.011	0.028*
Goal-orientedness	0.108**	0.049	0.016*	0.120**	0.055	-0.047	0.105	-0.186	0.007	0.023
Full value model			0.091**						0.063**	0.154**

Note. $N = 591$. For all columns, except those labeled ΔR^2 and R^2 , table entries are unstandardized regression coefficients for equations with all predictors entered simultaneously. For Model 1, the column labeled R^2 indicates the variance explained by two predictors (P, O); for Model 2, the column R^2 indicates the variance explained by five predictors (P, O, P², PO, O²). The column labeled ΔR^2 contains incremental variance explained by the quadratic terms (P², O²) and the congruence term (PO) over Model 1.

* $p < 0.05$; ** $p < 0.01$.

POSITIVE WORK BEHAVIOR

When we look at Table 4.3, we see similar explained variances of the full value model for subjective fit and objective fit for Model 1 (explained variance is 0.107 and 0.115 respectively). For the six value types separately, we only see one (hedonism) substantial lower R^2 when we compare objective fit with subjective fit. For Model 2, the total explained variance for the full value model was also very similar for subjective fit and objective fit (0.129 and 0.142 respectively), and there were almost no differences in explained variance for five of the six value types. Similar to Model 1, there was only one (hedonism) substantial lower R^2 when we compare objective fit with subjective fit. This leads us to the conclusion that Hypothesis 1 cannot be confirmed for positive work behavior.

The additional R^2 of subjective assessments of organizational values over personal work values and objective assessments of organizational values was not significant for both the linear model (see Equation 2) and the supplementary P-O fit model (see Equation 3). These additional explained variances were 0.017 and 0.029 respectively. These results also lead to the rejection of Hypothesis 1 for positive work behavior.

ATTITUDINAL VERSUS BEHAVIORAL OUTCOME

When we compared the differences in explained variance of subjective and objective fit, we saw remarkable differences between the attitudinal and the behavioral outcome. For overall job satisfaction, R^2 was 0.112 lower for Model 1 and 0.105 lower for Model 2 when comparing objective fit with subjective fit. For positive work behavior, we saw a totally different picture: instead of lower explained variances when comparing objective fit with subjective fit, they were a little higher (0.008 for Model 1 and 0.013 for Model 2). These results confirm Hypothesis 2.

Table 4.3. Results of linear and quadratic regressions of positive work behavior on work values and organizational values.

	Model 1			Model 2						
	P	O	R ²	P	O	P ²	PO	O ²	ΔR ²	R ²
Subjective fit (perceived org. values)										
Self-enhancement	0.010	0.006	0.000	0.016	0.021	0.089	-0.002	-0.022	0.007	0.007
Self-transcendence	-0.064	0.035	0.003	-0.055	0.035	0.080	-0.063	-0.074	0.010	0.013
Openness to change	0.120**	0.071	0.023**	0.119**	0.075	0.022	0.011	0.001	0.001	0.024*
Conservation	-0.157**	-0.086	0.044**	-0.153**	-0.083	-0.001	-0.075	0.018	0.005	0.049**
Hedonism	-0.117**	0.088*	0.019*	-0.129**	0.101*	0.016	-0.043	-0.025	0.006	0.025*
Goal-orientedness	0.332**	-0.123**	0.069**	0.331**	-0.110*	0.014	-0.062	0.011	0.002	0.071**
Full value model			0.107**						0.022	0.129**
Objective fit (aggregated org. values)										
Self-enhancement	0.014	-0.065	0.001	0.032	-0.090	0.057	0.249	0.171	0.012	0.013
Self-transcendence	-0.054	0.015	0.002	-0.042	0.032	0.026	0.131	0.264	0.006	0.008
Openness to change	0.126**	0.256*	0.027**	0.122**	0.259*	0.020	-0.054	0.107	0.001	0.028*
Conservation	-0.185**	-0.033	0.039**	-0.188**	-0.043	-0.041	0.004	0.157	0.004	0.043**
Hedonism	-0.083*	-0.010	0.009	-0.084*	-0.012	-0.015	0.132	0.352	0.004	0.013
Goal-orientedness	0.276**	0.301*	0.068**	0.290**	0.389**	-0.009	-0.136	-0.638*	0.010	0.078**
Full value model			0.115**						0.027	0.142**

Note. $N = 591$. For all columns, except those labeled ΔR^2 and R^2 , table entries are unstandardized regression coefficients for equations with all predictors entered simultaneously. For Model 1, the column labeled R^2 indicates the variance explained by two predictors (P, O); for Model 2, the column R^2 indicates the variance explained by five predictors (P, O, P², PO, O²). The column labeled ΔR^2 contains incremental variance explained by the quadratic terms (P², O²) and the congruence term (PO) over Model 1.

* $p < 0.05$; ** $p < 0.01$.

DISCUSSION

This study contributes to the call for more comparative research between different operationalizations of P-O fit (e.g., Kristof-Brown et al., 2005). The aim of this study was to take a closer look at differences between subjective and objective P-O fit for different individual outcome variables that are of particular relevance in an organizational setting. Based on the suggestions made by Kristof (1996), an attitudinal and a behavioral outcome were selected. Our results seem to support the hypothesis that differences between subjective and objective fit are more pronounced for attitudinal outcomes compared to behavioral outcomes. More specifically, the explained variance of objective fit was much lower than the explained variance of subjective fit for overall job satisfaction (for both the linear and the supplementary P-O fit model). However, this was not the case for positive work behavior, because the total explained variance was a little higher for objective fit compared to subjective fit (also for both the linear and the supplementary P-O fit model).

Two findings of the current study deserve further attention. First, for subjective fit, the explained variance is much higher for the attitudinal outcome than for the behavioral outcome. However, this difference disappears when we look at objective fit. The use of aggregated scores for organizational values seems to affect the attitudinal outcome only, which translates into a lower R^2 for objective fit compared to subjective fit. The absence of this difference for the behavioral outcome, could have its origins in the fact that organizational values do not seem to be strongly related to positive work behavior in general. For overall job satisfaction, we see significant relations with organizational values for subjective fit. This is not the case for positive work behavior, where in four out of six cases there is no significant relationship with organizational values. For the behavioral outcome, the strongest relations can be found with individual work values. It seems that behavior is particularly related to individual characteristics, and to a much lesser extent to organizational characteristics. As a result, aggregation of organizational values does not seem to play an important role.

Second, for the full value model, Model 2 has only an additional significant impact over Model 1 for overall job satisfaction, for both subjective and objective fit. Quadratic and congruence terms do not seem to be relevant for positive work

behavior. This is an additional indication that behavior is not substantially related to organizational characteristics.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

A first limitation of this study could be that common method variance is inflating the correlations between work values, organizational values, and the outcomes. We believe, however, that for several reasons this might not be the case. First, following Schwartz (1992), the mean of the value ratings each individual gives to all the work and all the organizational values is partialled out. In this way, acquiescence or the tendency to agree with statements regardless of content (see Winkler, Kanouse, & Ware, 1982) cannot raise the correlations among value ratings and outcomes. Furthermore, in line with Kristof-Brown et al. (2005), we are convinced that having the same persons rate work values, organizational values, and outcome variables, does not compromise the integrity of the reported relationships, but instead reflects the reality of how people's attitudes and behavior are influenced by fit as they experience it. The second limitation of this study is that the data were cross-sectional. As a consequence, we were unable to make causal inferences regarding the relationship between P-O fit and the outcomes. Therefore, we suggest longitudinal studies to determine the exact nature of the causality between P-O fit and outcome variables.

Future research with other behavioral and attitudinal outcomes is desirable to determine whether the present results can be confirmed. The lack of significant relationships between congruence terms (Model 2) and the behavioral outcome needs further elaboration. Future research is also needed to confirm the absence of significant relationships between organizational values and behavioral outcomes (e.g., with contextual performance, task performance, etc.). Furthermore, it would be interesting to explore differences between subjective and objective fit for other variables like burnout, emotions, etc.

GENERAL CONCLUSION

In summary, the results confirm the importance of work and organizational values for relevant individual outcome variables. However, our findings suggest that aggregating the scores of the organizational values to determine objective supplementary P-O fit gives an underestimation of the true importance of organizational values, in particular for attitudinal outcomes. This is in line with the historical argument in interactional psychology that people can only be influenced by fit with the environment as they perceive it (e.g., Caplan, 1987; Kristof-Brown et al., 2005). In addition, Kristof-Brown et al. (2005) recently stated that the stronger relationships between subjective fit and outcomes might reflect reality rather than artificial bias. Thus, in order not to minimize organizational influences on relevant individual outcomes, researchers might want to consider the use of subjective measures of fit instead of objective measures of fit obtained with aggregated scores.

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CHAPTER 5

PERSON-ORGANIZATION FIT AND ORGANIZATIONAL COMMITMENT: A COMMENSURATE AND COMPREHENSIVE APPROACH¹

In this present research, the relationship between supplementary person-organization fit and affective, normative, and continuance organizational commitment was studied by means of a commensurate and comprehensive work and organizational values survey in a sample of 591 employees from 26 Belgian organizations. All respondents made judgments about their own personal work values and the way these same values were characteristic of their organization. The results of the polynomial regression analyses indicated that all three forms of commitment were predicted by the employees' personal work values and their perception of the values of their organization. Moreover, we found significant congruence effects, particularly for affective commitment. This study's findings suggest that, although linear effects explain most of the variance in commitment, congruence effects can also play a crucial role. In addition, this paper highlights the importance of using commensurate value dimensions and shows that different value types have differential relationships with various forms of organizational commitment.

¹ This paper was co-authored by Johnny Fontaine.

INTRODUCTION

Person-organization (P-O) fit concerns the antecedents and consequences of the compatibility between people and the organization in which they work (Kristof, 1996). It is assumed that attitudes and behaviors result from the congruence between attributes of the person and the organization. Person characteristics may include values, needs, goals, and personality; organizational characteristics may refer to physical or psychological demands, rewards, values, etc. (Cable & Edwards, 2004). According to Muchinsky and Monahan (1987) there are two long-standing traditions of research. The first tradition is based on the notion of *complementary fit*, which occurs when a person's characteristics "make whole" the environment or add to it what is missing and vice versa (Muchinsky & Monahan, 1987, p. 271). For instance, when a worker has skills the organization requires, it is in the interest of the organization to retain this worker; or an organization can offer rewards that the worker wants, so that he or she is willing to stay with the organization. The second tradition is drawn from the concept of *supplementary fit*, which occurs when a person "supplements, embellishes, or possesses characteristics which are similar to other individuals" in an environment or organization (Muchinsky & Monahan, 1987, p. 269). The most frequently used operationalization of this perspective on fit is represented by research examining value congruence between employees and organizations (e.g., Erdogan, Kraimer, & Liden, 2004; Kalliath, Bluedorn, & Strube, 1999; Siegall & McDonald, 2004). The importance of a good fit between the individual and the organization was emphasized by Kristof (1996, p. 1) who stated that "achieving high levels of P-O fit through hiring and socialization can be the key to retaining a workforce with the flexibility and organizational commitment necessary to meet the competitive challenges organizations are confronted with nowadays (e.g., downsizing, quality initiatives, changes in job structures, etc.)".

In the present paper, we focus on supplementary fit. We address the impact of the congruence between personal work values and organizational values on organizational commitment. To be more specific, we are interested in the subjective fit or match between person and organization as it is perceived and reported by the

person him- or herself (see French, Rogers, & Cobb, 1974; Kristof-Brown, Zimmerman, & Johnson, 2005). Therefore, in this study, organizational values are in fact individual perceptions of the organizational values or *perceived* organizational values.

The current study aims at giving a substantial contribution to the assessment of P-O fit in different ways. First, we base our findings on a value model that is commensurate and comprehensive for both personal work values and perceived organizational values. Second, we use the three-component model of organizational commitment of Meyer and Allen (1991, 1997) to have a broad view on the impact of values and value congruence on three different forms of organizational commitment (i.e., affective, normative, and continuance commitment). Third, data are analyzed with polynomial regression analysis (Edwards, 1994, 2002) to overcome methodological problems related to difference scores and other traditional congruence measures (e.g., profile correlations), which are commonly used in value congruence research. Finally, because data collection occurred in three different sectors, comprising 26 different organizations, we believe that the robustness and generalizability of our results is enhanced. By doing so, not only the variability across people, but also the variability across organizational settings is established (see van Vianen, 2001).

WORK AND PERCEIVED ORGANIZATIONAL VALUES

Values have been studied in a variety of research domains (e.g., life values, work values, organizational values, cultural values, etc.). As the value construct can thus be applied for the individual and the organization, it constitutes an excellent point of departure for assessing supplementary P-O fit. However, previous studies on the effects of the congruence between personal and organizational values suffer from two important shortcomings: (a) an insufficient justification of the commensurability of the value measurement and (b) an incomprehensive value approach.

Commensurability of work and organizational values. The definition of supplementary P-O fit implies that the measurement of both personal and organizational values is

commensurate. The values should have the same meaning and should be measured on comparable scales (Kristof, 1996). Unfortunately, this basic condition for studying supplementary P-O fit is often only assumed, but not demonstrated. A similar assumption is highly questionable. Moreover, we know from cross-cultural research that the meaning of a construct can shift from one level of measurement to another level of measurement (e.g., Schwartz, 1994). Therefore, a clear demonstration of the value model's commensurability is indispensable.

Comprehensive value model. Numerous studies on the impact of value congruence often focused on one single or sometimes a few value types without covering the whole value domain (e.g., Cable & Judge, 1996; Kalliath et al., 1999). The generalizability of these findings for other value types remains an open question. To give a complete picture of the impact of value congruence on organizational commitment, a comprehensive measurement of the value domain is a prerequisite.

For the present study, we used a new value survey based on the value theory of Schwartz (1992), which forms a cross-culturally validated comprehensive approach to life values (Schwartz, in press; Schwartz et al., 2001). Values are defined as "concepts or beliefs, about desirable end states or behaviors, that transcend specific situations, guide selection or evaluation of behavior and events, and are ordered by relative importance" (Schwartz & Bilsky, 1987, p. 551). Values are cognitive representations of people's important goals or motivations, phrased in socially acceptable language useful for coordinating action (Schwartz, Sagiv, & Boehnke, 2000). The primary content aspect distinguished among values is the motivational goal they express.

The Work and Organizational Values Survey measures 11 value types (for an overview, see Table 5.1) that are a comprehensive outline of work and organizational values. More important, factor analyses on these value types revealed a commensurate bipolar three-factorial structure for both work and organizational values (De Clercq & Fontaine, 2006). The first two bipolar factors can be interpreted according to Schwartz' value theory. On the first factor, materialism, power, and prestige are opposed to nature, relations, and social commitment; on the second factor, stimulation is opposed to conformity and security. Next to these two bipolar

dimensions already identified by Schwartz (1992), a third bipolar factor emerged, opposing hedonism and goal-orientedness. In this study, the poles of these three orthogonal dimensions represent higher-order value types for which commensurability was demonstrated in previous research (De Clercq & Fontaine, 2006). More specifically, these higher-order value types can be summarized as: self-enhancement (enhancement of own personal interests, even at the expense of others) versus self-transcendence (transcending selfish concerns and promotion of the welfare of others, close and distant, and nature), openness to change (following own intellectual and emotional interests in unpredictable and uncertain directions) versus conservation (preservation of the status quo and valuing certainty in relationships with close others, institutions, and traditions), and hedonism (pleasure and sensuous gratification for oneself) versus goal-orientedness (living and working to fulfill a purpose, not giving up). This three-dimensional bipolar factor structure forms a structural aspect of values that was described in detail by Schwartz (1992). Actions in pursuit of any value are expected to have psychological, practical, and social consequences that may conflict with their opposite value type.

Table 5.1. Definitions of 11 motivational types of values in terms of their goals.

Conformity	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms
Goal-orientedness	Living and working to fulfill a purpose, not giving up
Hedonism	Pleasure and sensuous gratifications for oneself
Materialism	Attaching importance to material goods, wealth, and luxury
Nature	Appreciation, preservation, and protection of nature
Power	Control or dominance over people
Prestige	Striving for admiration and recognition
Relations	Having good interpersonal relations with other people and valuing true friendship
Security	Safety, harmony, and stability of society, of relationships, and of self
Social commitment	Preservation and enhancement of the welfare of all people
Stimulation	Excitement, novelty, and challenge in life

ORGANIZATIONAL COMMITMENT

In general, commitment can be defined as “a force that binds an individual to a course of action that is of relevance to one or more targets” (Meyer & Herscovitch, 2001, p. 301). However, organizational commitment has been described and measured in many ways. Our study focuses on the three-component model of Meyer and Allen (1991, 1997) because this model has been subjected to extensive empirical scrutiny and has received a lot of support (see Meyer, Stanley, Herscovitch, & Topolnytsky, 2002, for a review). According to this model, there are three distinguishable themes that characterize three different forms of commitment: affective, normative, and continuance commitment. Affective commitment refers to the emotional attachment a person feels for the organization, normative commitment refers to the feelings of obligation a person has to remain with an organization, and finally, continuance commitment refers to commitment associated with the perceived costs of leaving the organization (Meyer & Allen, 1997). With all three types of commitment, the employee is bound to the organization, but for different reasons. Meyer et al. (2002) show that, although all three forms relate negatively to turnover, they produce different effects. Affective commitment is associated with higher productivity (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989), more positive work attitudes (Allen & Meyer, 1996), and a greater likelihood of engaging in organizational citizenship behavior (Meyer & Allen, 1991). Meyer and Allen (1997) describe similar findings for normative commitment, but for continuance commitment they report very few positive relations with performance indicators.

HYPOTHESIS DEVELOPMENT²

Locke (1976, p. 1327) was one of the first to state that “individuals are generally attracted to and feel most comfortable with people who are like them or see things the way they do”. Recently, Kalliath et al. (1999) specified empirical findings and theoretical reasons to support the hypothesis that values are positively related to organizational commitment. More generally, it is expected that different types of

² All hypotheses are based on previous research. However, some parts of specific hypotheses are based on the bipolarity of our value model. These are placed between parentheses.

commitment are associated with both personal and organizational values (e.g., Finegan, 1994; Oliver, 1990).

Affective commitment. Previous research has revealed significant relations of values and value congruence with affective commitment. Finegan (2000) found that organizations with a focus on humanity (e.g., cooperation, consideration – which are typical features of self-transcendence values) and vision (e.g., openness, creativity – which are typical features of openness to change values) showed higher levels of affective commitment. For conventional values (e.g., obedience, cautiousness – which are typical features of conservation values), the opposite was found. Finegan's study did not reveal any significant relationships between personal values and affective commitment. Similar results were reported by Kalliath et al. (1999). However, Abbott, White, and Charles (2005) showed that persons who attached importance to conservatism values (e.g., obedience, orderliness – which are typical features of conservation values) reported higher levels of affective commitment. As a result, we expect that both personal work values and perceived organizational values will be significantly related to affective commitment. More explicitly:

Hypothesis 1a: For personal work values, conservation will be positively related to affective commitment (and as a consequence of the bipolarity of our value model, openness to change will be negatively related to affective commitment).

Hypothesis 1b: For perceived organizational values, self-transcendence and openness to change will be positively related to affective commitment and conservation will be negatively related to affective commitment (and as a consequence of the bipolarity of our value model, we expect that self-enhancement will also be negatively related to affective commitment).

Normative commitment. The correlation between affective and normative commitment is often quite strong (Meyer et al., 2002), which has led some authors to question the utility of normative commitment as a separate scale (Ko, Price, & Mueller, 1997). Moreover, most studies (e.g., Abbott et al., 2005; Finegan, 2000) report similar relationships between work and organizational values and normative

and affective commitment. Therefore, we will test the same hypotheses as those for affective commitment:

Hypothesis 2a: For personal work values, conservation will be positively related to normative commitment (and as a consequence of the bipolarity of our value model, openness to change will be negatively related to normative commitment).

Hypothesis 2b: For perceived organizational values, self-transcendence and openness to change will be positively related to normative commitment and conservation will be negatively related to normative commitment (and as a consequence of the bipolarity of our value model, we expect that self-enhancement will also be negatively related to normative commitment).

Continuance commitment. This type of commitment is based on the fact that the costs of leaving the organization are too high or that the employee has few other options on the labor market (Meyer & Allen, 1997). As a consequence, we believe that people who value conservation will show higher levels of continuance commitment, because staying with the organization gives them a feeling of security, which is a typical conservation value. Concerning organizational values, Finegan (2000) found a significant relationship with continuance commitment. She found that the more individuals perceived that the organization valued adherence to conventional values, the more likely these individuals were to score high on continuance commitment. Moreover, Abbott et al. (2005) reported that the more the organization was perceived as being open, the lower the continuance commitment of the employees. Based on this, we hypothesize:

Hypothesis 3a: For personal work values, conservation will be positively related to continuance commitment (and as a consequence of the bipolarity of our value model, openness to change will be negatively related to continuance commitment).

Hypothesis 3b: For perceived organizational values, conservation will be positively related to continuance commitment and openness to change will be negatively related to continuance commitment.

Based on the findings of previous research, we were able to formulate hypotheses about the relationships between certain value types and three forms of organizational commitment. However, no specific hypotheses were made about the relation between hedonism and commitment and the relation between goal-orientedness and commitment. Because these two value types constitute our third bipolar value dimension, we will examine their relationship with all three forms of organizational commitment in an explorative manner.

Value congruence. Above these main effects of personal work values and perceived organizational values, we also expect congruence effects. Despite the fact that previous research has shown mixed results concerning the existence of congruence effects (e.g., Chatman, 1991; Kalliath et al., 1999; Meglino, Ravlin, & Adkins, 1989; O'Reilly, Chatman, & Caldwell, 1991), we believe that value congruence will be significantly related to certain forms of organizational commitment. More specifically, given that Finegan (2000) found significant small positive relations between value congruence and affective commitment, we believe that this finding will be replicated in our study. In addition to this, we also expect significant positive relationships between value congruence and normative commitment, even though this was not found in Finegan's study. This supposition stems from the high correlation usually found between both types of commitment (Meyer et al., 2002) and from the specific attention on commensurate and comprehensive value measurement in this study. Opposite to this, we believe there will be no significant relationships between value congruence and continuance commitment, because employees showing high levels of continuance commitment only stay with the organization because they have no other choice and not because they experience a good match or fit with their organization. As a result, we hypothesize:

Hypothesis 4a: There will be significant positive relationships between value congruence and affective commitment.

Hypothesis 4b: There will be significant positive relationships between value congruence and normative commitment.

Hypothesis 4c: There will be no significant relationships between value congruence and continuance commitment.

Comprehensive value model. We are also interested in the explanatory effect of the full set of values. In previous research, we have shown that our value model is comprehensive for both work and organizational values (see De Clercq & Fontaine, 2006). Therefore, entering all the value types together as predictors in the regression analyses, can give us an indication of the importance of values as potential antecedents of affective, normative, and continuance organizational commitment in general. For this purpose, we do not formulate particular hypotheses, but instead handle this in an explorative manner.

METHOD

SAMPLE AND PROCEDURE

This study was conducted in the Dutch speaking part of Belgium. Data were collected in 26 Belgian organizations: 17 from the public services, four organizations from the private sector, and five schools. Data collection took place from April through November 2005. Anonymous questionnaires were sent to 40 employees in each organization. Of 1040 potential respondents, 591 usable surveys were returned, representing an average response rate of 57%. The response rate varied across locations from a minimum of 10% to a maximum of 93%. Demographic backgrounds of the respondents are summarized in Table 5.2.

MEASURES

Work and organizational values. Respondents completed the 50-item Work and Organizational Values Survey (WOVS) (De Clercq & Fontaine, 2006). Each of the single values was followed in parentheses by a short explanatory phrase (e.g., CONFORMISM [to comply with rules and regulations]). Respondents rated the importance of each value on a 9-point scale from *opposed to my or my organization's*

principles (-1) through *not important* (0) to *of supreme importance* (7). This asymmetrical scale was adopted from Schwartz (1992) and reflects the desirable nature of values. Each item was rated for its importance in the respondents' work (personal work values) and for the organization they work for (perceived organizational values). For personal work values, the alpha coefficients ranged from 0.77 (openness to change) to 0.89 (goal-orientedness) with an average of 0.84; for perceived organizational values, the alpha coefficients ranged from 0.79 (openness to change) to 0.90 (goal-orientedness) with an average of 0.86.

Table 5.2. Demographic backgrounds of the respondents.

	Public services	Private sector	Schools	Total
	<i>n</i> = 391	<i>n</i> = 95	<i>n</i> = 105	<i>N</i> = 591
	66%	16%	18%	100%
Gender				
% male	59	62	50	58
% female	41	38	50	42
Age				
<i>M</i>	40.7	35.8	42.1	40.2
<i>SD</i>	10.5	8.7	10.2	10.4
Educational level				
% secondary	60	25	15	46
% higher	24	61	49	35
% university	16	14	36	19

Commensurability between personal work values and perceived organizational values was tested with a confirmatory factor analytic (CFA) method (equality of variance-covariance matrices) (see Vandenberg & Lance, 2000) and with orthogonal Procrustes rotations (see McCrae, Zonderman, Bond, Costa, & Paunonen, 1996; Schönemann, 1966). The CFA model produced acceptable fit indices (with the exception of the χ^2 goodness-of-fit statistic which is overly sensitive, see Byrne, 1998): $\chi^2(1275) = 2140.53$ ($p < 0.01$), the Goodness-of-Fit Index (GFI; Jöreskog & Sörbom, 1996) = 0.93; the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990) = 0.035; the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973) = 0.93;

and the Comparative Fit Index (CFI; Bentler, 1990) = 0.96. This is in line with the minimum fit recommendations of Vandenberg and Lance (2000). In addition, orthogonal Procrustes rotations between the three bipolar work and perceived organizational value dimensions gave congruence coefficients higher than 0.900, which is considered evidence of factor replication (Barrett, 1986). Tucker's Phi (Tucker, 1951) was 0.968 for the first dimension (self-enhancement versus self-transcendence), 0.983 for the second dimension (openness to change versus conservation), and 0.961 for the third dimension (hedonism versus goal-orientedness). Both analyses confirm the commensurability of the three bipolar work and organizational value dimensions measured with the WOVs.

Organizational commitment. We measured organizational commitment using the revised 6-item versions of the Affective, Normative, and Continuance Commitment Scales (Meyer & Allen, 1997). Respondents rated the items on a 7-point Likert-type scale from *strongly disagree* (1) to *strongly agree* (7). The coefficient alpha values were 0.80 for affective commitment, 0.77 for normative commitment, and 0.61 for continuance commitment. Other authors already reported low alphas for continuance commitment in studies performed outside North America (e.g., Ko et al., 1997). As a consequence, we used the lack of alternative subscale of continuance commitment (see Meyer & Allen, 1997; Meyer et al., 2002). This subscale of three items reflects a perceived lack of alternative employment opportunities and has a coefficient alpha value of 0.75. In this way, all the organizational commitment scales met the threshold of 0.70 proposed by Nunnally (1978).

ANALYSES

Surfaces relating P-O fit to organizational commitment were tested using polynomial regression analysis (Edwards, 1994, 2002; Edwards & Parry, 1993). Most research on the congruence between two constructs as a predictor of outcomes uses difference scores (e.g., Vigoda & Cohen, 2002). However, the problem with difference scores, along with numerous methodological problems (for an overview, see Edwards, 2002), is that the independent contribution of personal variables and organizational variables is ignored. Because a difference score is calculated from its

component measures, it captures nothing more than the combined effects of its components. The observed relationship “may represent anything from the effect of a single component to the effects of all components combined” (Edwards, 1994, p. 70). Without separate measures of personal variables and organizational variables, it is difficult to address the entire question of whether behavior is determined by personal characteristics, organizational characteristics, or their congruence (Finegan, 2000). The relationship between fit and some outcome variable should rather be thought of in terms of three dimensions. The x-axis represents the person, the y-axis the organization, and the z-axis the outcome. In this three-dimensional representation it is possible to represent independently the contribution of the person, the organization, and their congruence. This information would be lost by the two dimensions imposed by traditional congruence measures or direct measures of fit (Edwards, 1991).

For analyzing the data, we used the polynomial regression procedure and for interpretation of the surfaces implied by the three-dimensional representation, we applied the response surface methodology developed by Edwards (1994, 2002). It comprises a collection of procedures for estimating and interpreting three-dimensional surfaces relating two variables to an outcome. The following regression equations were used to determine the relative contribution of the two components of interest in this study (personal work values and perceived organizational values) and their congruence:

$$OC = b_0 + b_1P + b_2O + e \quad (\text{Equation 1})$$

$$OC = b_0 + b_1P + b_2O + b_3P^2 + b_4PO + b_5O^2 + e \quad (\text{Equation 2})$$

In Equation 1 and 2, P and O represent personal work values and perceived organizational values respectively, and OC represents organizational commitment. In Equation 2, the squared terms of P and O were added to allow for the possibility that the relationships are curvilinear. Furthermore, the congruence term was also added to the regression equation, completing the supplementary P-O fit model. Value scores were scale centered prior to the quadratic regression analyses, which is necessary for reducing multicollinearity and facilitating interpretation (Edwards, 1994). To predict the scores on the three forms of commitment, the data were

analyzed in a hierarchical multiple regression, with the higher order terms entered as a set (Model 2 – Equation 2) after controlling for person and organization variables (Model 1 – Equation 1) (see Edwards & Cooper, 1990). By comparing Model 2 with Model 1, the additional explanatory value of non-linear effects and the congruence effects of P and O was tested. Model 2 was only interpreted if it accounted for significantly more of the variance than Model 1. In total, 18 polynomial regression analyses were conducted (six value types x three outcomes). To control the risk of Type I error associated with these analyses, we used the sequential Bonferroni procedure (Seaman, Levin, & Serlin, 1991).

Finally, we conducted for each type of commitment a multiple regression analysis with all values together as predictors to evaluate the overall contribution of the comprehensive value model. Predictors were entered the same way as in the previous analyses. In the first step, P and O terms were entered (Model 1) and in the second step, the quadratic terms and the congruence terms were added (Model 2).

RESULTS

Descriptive statistics and correlations for all study variables are presented in Table 5.3. The results of the polynomial regression analyses are summarized in Table 5.4.

AFFECTIVE COMMITMENT

The main effect of work values was significant in four analyses. Persons attaching high importance to conservation showed high levels of affective commitment. The opposite was true for self-transcendence, openness to change, and hedonism. Therefore, Hypothesis 1a was confirmed. The main effect of perceived organizational values was significant for all value types. Affective commitment was the highest for organizations perceived as operating by self-transcendence, openness to change, hedonism, and goal-orientedness values. Organizations perceived as operating by self-enhancement and conservation values showed lower levels of affective commitment. These results confirmed Hypothesis 1b.

Table 5.3. Means, standard deviations, and correlation coefficients among values and organizational commitment.

Constructs	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
Personal work values																
1. Self-enhancement	-1.29	0.73														
2. Self-transcendence	0.38	0.72	-0.65													
3. Openness to change	-0.19	0.84	-0.05	-0.00												
4. Conservation	0.18	0.88	-0.22	-0.12	-0.59											
5. Hedonism	0.29	1.01	-0.21	0.08	0.09	-0.16										
6. Goal-orientedness	1.03	0.75	-0.12	-0.28	-0.01	-0.14	-0.48									
Perceived organizational values																
7. Self-enhancement	-0.29	0.93	0.31	-0.07	0.05	-0.22	0.01	-0.12								
8. Self-transcendence	-0.38	0.76	-0.24	0.26	0.01	0.07	-0.02	-0.06	-0.71							
9. Openness to change	-0.81	0.80	0.12	-0.11	0.32	-0.16	0.09	-0.12	-0.19	0.13						
10. Conservation	0.79	0.80	-0.24	0.06	-0.24	0.46	-0.11	-0.00	-0.16	-0.10	-0.52					
11. Hedonism	-1.09	1.00	-0.02	-0.08	0.12	-0.07	0.35	-0.14	-0.42	0.38	0.34	-0.32				
12. Goal-orientedness	1.18	0.80	-0.03	-0.12	-0.12	-0.01	-0.17	0.39	-0.18	-0.31	-0.16	-0.02	-0.39			
Organizational commitment																
13. Affective commitment	4.63	0.99	-0.03	-0.08	-0.17	0.19	-0.07	0.10	-0.31	0.23	0.12	-0.03	0.07	0.12		
14. Normative commitment	4.13	1.01	-0.03	-0.01	-0.16	0.15	-0.01	-0.00	-0.26	0.26	0.17	-0.07	0.11	0.01	0.69	
15. Continuance commitment	4.08	1.28	0.00	0.00	-0.10	0.13	0.05	-0.13	0.11	-0.09	-0.09	0.17	-0.09	-0.09	-0.13	-0.03

Note. *N* = 591. Correlations greater than or equal to |0.08| were statistically significant ($p < 0.05$).

Table 5.4. Results of linear and quadratic regressions of organizational commitment on personal work values and perceived organizational values.

	Model 1			Model 2						
	P	O	R ²	P	O	P ²	PO	O ²	ΔR ²	R ²
Affective commitment										
Self-enhancement	0.097	-0.345**	0.097**	0.070	-0.321**	0.006	-0.009	-0.041	0.004	0.101**
Self-transcendence	-0.205**	0.344**	0.073**	-0.199**	0.327**	-0.109*	0.143**	0.071	0.017*	0.090**
Openness to change	-0.266**	0.234**	0.060**	-0.216**	0.184**	-0.155**	0.181**	-0.036	0.026**	0.086**
Conservation	0.279**	-0.172**	0.050**	0.259**	-0.131*	-0.057	0.194**	-0.164**	0.019*	0.069**
Hedonism	-0.103*	0.109*	0.015*	-0.072	0.081	-0.030	0.094*	0.013	0.012	0.027**
Goal-orientedness	0.095	0.115*	0.020**	0.143*	0.067	-0.030	0.212**	-0.200**	0.045**	0.065**
Full value model			0.156**						0.064**	0.219**
Normative commitment										
Self-enhancement	0.080	-0.306**	0.072**	0.031	-0.267**	-0.046	0.011	-0.058	0.008	0.080**
Self-transcendence	-0.119*	0.365**	0.071**	-0.104	0.339**	-0.088	0.144**	0.030	0.014	0.085**
Openness to change	-0.283**	0.312**	0.080**	-0.254**	0.272**	-0.100*	0.079	-0.066	0.011	0.091**
Conservation	0.274**	-0.230**	0.050**	0.262**	-0.190**	-0.019	0.127	-0.158**	0.014	0.064**
Hedonism	-0.048	0.127**	0.014*	-0.012	0.094*	-0.040	0.093*	-0.028	0.007	0.021*
Goal-orientedness	0.008	0.010	0.001	0.068	-0.039	-0.037	0.209**	-0.237**	0.056**	0.057**
Full value model			0.135**						0.058**	0.193**

	Model 1			Model 2						
	P	O	R ²	P	O	P ²	PO	O ²	ΔR ²	R ²
Continuance commitment										
Self-enhancement	-0.070	0.169**	0.014	-0.091	0.150*	-0.091	-0.062	0.001	0.005	0.019
Self-transcendence	0.041	-0.161*	0.009	0.032	-0.162*	0.008	-0.110	-0.066	0.007	0.016
Openness to change	-0.110	-0.107	0.013*	-0.152*	-0.079	0.070	-0.203*	0.015	0.012	0.025
Conservation	0.101	0.228**	0.034**	0.123	0.210**	0.051	-0.270**	0.121	0.017	0.051**
Hedonism	0.115*	-0.153**	0.015	0.101	-0.132*	0.050	-0.032	0.003	0.002	0.017
Goal-orientedness	-0.189*	-0.073	0.018*	-0.184*	-0.093	-0.001	0.090	-0.037	0.003	0.021
Full value model			0.070**						0.040	0.110**

Note. $N = 591$. For all columns, except those labeled ΔR^2 and R^2 , table entries are unstandardized regression coefficients for equations with all predictors entered simultaneously. For Model 1, the column labeled R^2 indicates the variance explained by two predictors (P, O); for Model 2, the column R^2 indicates the variance explained by five predictors (P, O, P², PO, O²). The column labeled ΔR^2 contains incremental variance explained by the quadratic terms (P², O²) and the congruence term (PO) over Model 1.

* $p < 0.05$; ** $p < 0.01$.

NORMATIVE COMMITMENT

Table 5.4 shows that the main effects of P and O were significant in five of six analyses. Persons valuing conservation reported higher levels of normative commitment. The opposite counts for self-transcendence and openness to change. This led to the confirmation of Hypothesis 2a. The main effect of perceived organizational values was significant for five value types. When self-transcendence, openness to change, and hedonism were perceived as typical organizational values, respondents reported higher levels of normative commitment. The opposite was true for self-enhancement and conservation. These results confirmed Hypothesis 2b.

CONTINUANCE COMMITMENT

The main effects of work and perceived organizational values were only significant in three cases. Persons attaching importance to goal-orientedness showed lower levels of continuance commitment. No significant effects of openness to change or conservation were found on the person side, therefore Hypothesis 3a was not confirmed. On organizational side, it seems that higher levels of conservation corresponded with higher levels of continuance commitment. This result partially confirmed Hypothesis 3b, because no significant negative effect was found for openness to change.

VALUE CONGRUENCE

For affective commitment, Model 2 significantly increased the amount of variance accounted for over Model 1 in four of the six tests. In all four cases, the congruence terms were positive and significant, indicating that value congruence corresponded with more affective commitment. In this way, Hypothesis 4a was confirmed. For normative commitment, Model 2 accounted for significantly more of the variance than Model 1 for goal-orientedness only. The congruence term was positive and significant, indicating that value congruence for goal-orientedness corresponded with a higher level of normative commitment of the respondents. Despite the fact that it

was only for one value type, Hypothesis 4b was confirmed. For continuance commitment, there was no significant increase in explained variance of Model 2 over Model 1 in any of the six cases. As a result, Hypothesis 4c was also confirmed.

COMPREHENSIVE VALUE MODEL

The total variance explained by the comprehensive value model is also shown in Table 5.4. The main effects of P and O were significant for all three forms of organizational commitment. The explained variance of work and perceived organizational values was 15.6% for affective commitment, 13.5% for normative commitment, and 7.0% for continuance commitment. Model 2 significantly increased the amount of variance accounted for over Model 1 for affective (6.4%) and normative commitment (5.8%), but not for continuance commitment.

RESPONSE SURFACES

To illustrate the preceding results, surfaces corresponding to Model 1 and Model 2 are displayed in Figures 5.1 and 5.2. Figure 5.1 shows the three-dimensional plot of the linear relationships between self-enhancement and affective commitment. As can be seen, affective commitment was highest for organizations that scored low on self-enhancement values. The effect on the person side was much smaller (only a small increase in affective commitment if a person attached more importance to self-enhancement values), which is a confirmation of the non-significant positive effect found in the regression analysis (see Table 5.4). Figure 5.2 depicts estimated surfaces relating the fit between person and organization for goal-orientedness to affective commitment. We see a curvilinear relationship indicating that affective commitment was the highest if personal work values and perceived organizational values were congruent. If we look along the line of congruence ($P = O$), we see the highest levels of affective commitment on the positive poles of P and O, indicating that individuals who attached great importance to goal-orientedness, working in organizations that were perceived as operating by goal-orientedness values, reported the highest levels of affective commitment with the organization. If we look along the

$P = -O$ line, we see that incongruence between work and perceived organizational values corresponds with lower levels of affective commitment. This three-dimensional surface graph clearly shows the ridge-shaped surface which is typical for congruence effects. Other surface graphs of the analyses with normative and continuance commitment show similar results, and are therefore not depicted.

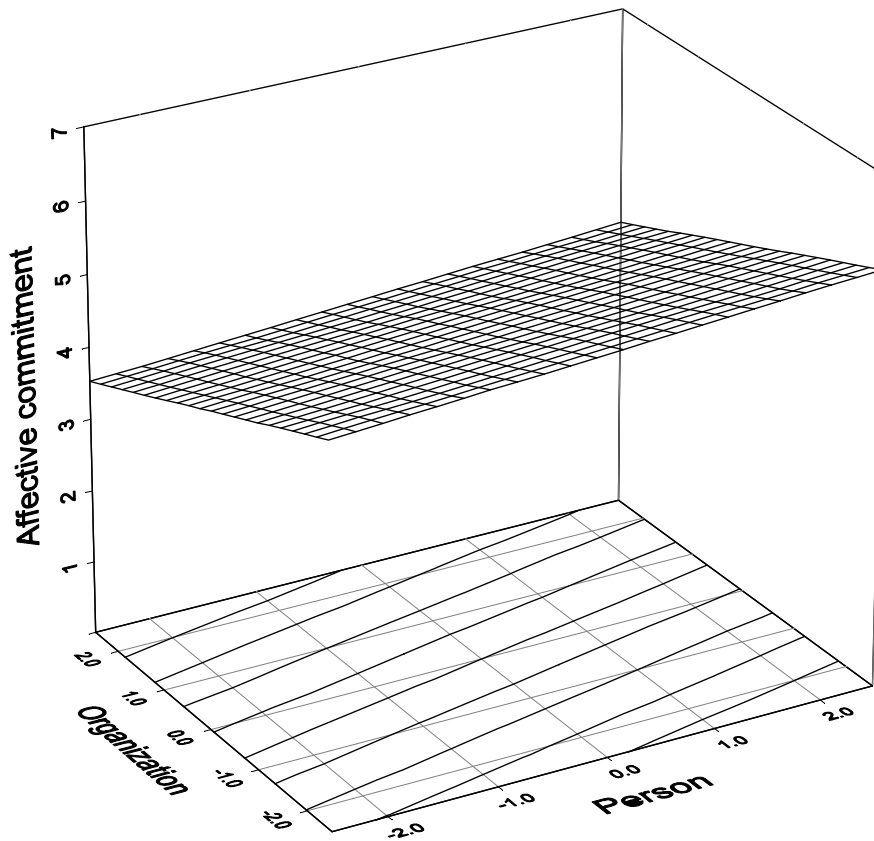


Figure 5.1. Three-dimensional surface graph showing the linear relationships between self-enhancement and affective commitment.

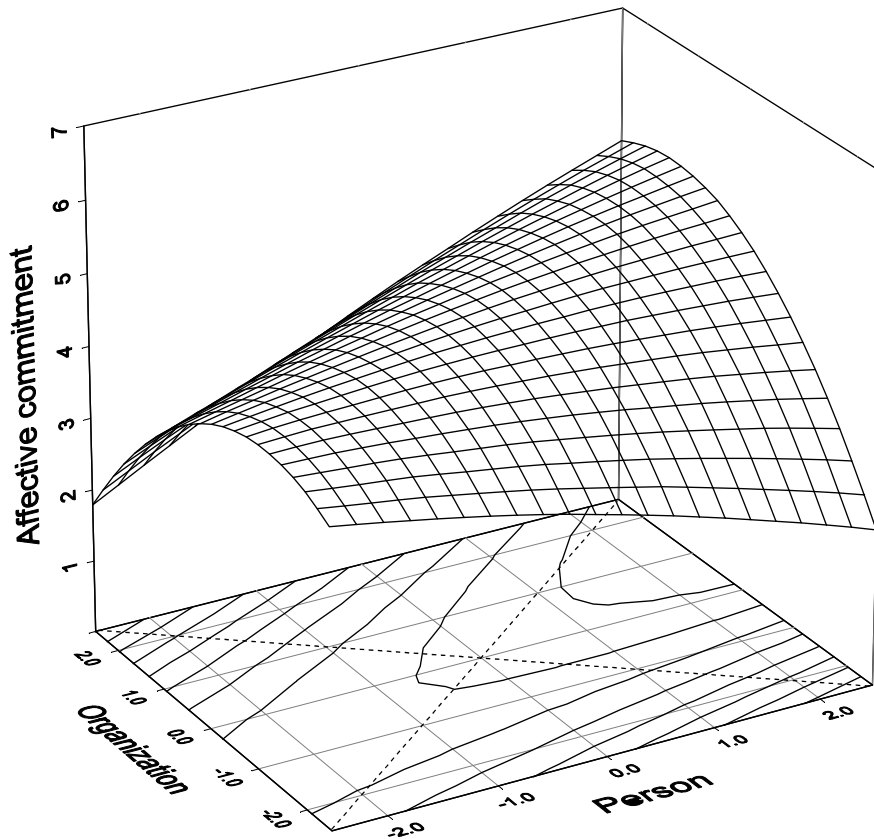


Figure 5.2. Three-dimensional surface graph depicting relations between P-O fit for goal-orientedness and affective commitment.

DISCUSSION

With the use of polynomial regression analysis, the present study was able to examine linear effects of work and perceived organizational values as well as their congruence effects. Our results confirm the importance of the recent growth in studies using this approach because both work and perceived organizational values have significant relationships with organizational commitment. The differential influence of these values would not have been identified when difference scores (e.g., Vigoda & Cohen, 2002) or other widely used techniques in organizational psychology research had been used (e.g., profile correlations; see Adkins & Caldwell, 2004).

Our first regression model was significant in 14 of 18 analyses, which highlights the importance of personal and organizational values for the explanation of the variance in organizational commitment. All hypotheses for affective and normative commitment were confirmed. In addition, other relationships were found. The fact that both hedonism and goal-orientedness are related to affective and/or normative commitment is an important finding, as this value dimension has not been explored in previous P-O fit research. Our findings are very similar for affective and normative commitment, which is in line with other studies (e.g., Ko et al., 1997; Meyer, Allen, & Smith, 1993; Meyer et al., 2002). For continuance commitment, only one predicted relationship was found. To our surprise, there was no significant relation between the importance an individual attaches to conservation values and continuance commitment. Moreover, only one additional relationship was found with goal-orientedness. Individuals scoring low on this value type report higher levels of continuance commitment. In general, the main effects of work and perceived organizational values are much more salient for affective and normative commitment compared to continuance commitment.

The incremental contribution of Model 2 over Model 1 was only significant in five of the 18 cases, which suggests that congruence effects are less important predictors of organizational commitment. Although the support for congruence effects is not quite substantial, it seems that this is particularly the case for certain forms of commitment and for certain value types. For instance, when we look at affective commitment, the additional explained variance of Model 2 was significant for four of the six value types. On the other hand, for normative commitment there was only one significant congruence effect, and for continuance commitment, no congruence effects reached significance. These results were a confirmation of our congruence hypotheses. A more detailed look tells us that the unstandardized regression coefficients of the significant congruence effects for affective and normative commitment were all positive, indicating that value congruence corresponds with higher levels of commitment. Interesting however, is the observation that these regression coefficients were negative in all but one case for continuance commitment. Although ΔR^2 was not significant in these cases, these findings could indicate that value congruence corresponds with lower levels of continuance commitment. People who

fit well in their organization could be committed for other reasons than the ones typical for continuance commitment. Or conversely, people who do not fit well could compensate the lack of fit by focusing on the costs associated with leaving, and therefore report higher levels of continuance commitment.

THEORETICAL IMPLICATIONS

Our findings provide some important theoretical implications for supplementary P-O fit theory. Contrary to the findings of Finegan (2000) and Kalliath et al. (1999), our results clearly suggest that value congruence is indeed important for the explanation of variance in organizational commitment. Given well-known statistical difficulties in detecting interactions and moderator effects (see McClelland & Judd, 1993), our additional explained variances of Model 2 – which go up to 5.6% – can be considered quite noteworthy (e.g., in reviews of Champoux and Peters (1987) and Chaplin (1991), field study interactions typically account for about 1% up to 3% of the variance). This can also be seen in Figure 5.2 which clearly shows the typical ridge-shaped surface of congruence effects. Similar surfaces were found for the other value types where Model 2 provided significant additional explained variance. In order to continue developing a better understanding of P-O fit and its consequences, we recommend further research to disentangle the complex interaction of work and organizational values. More specifically, it can be very interesting to explore the influence of value congruence in the socialization phase. During the first year of employment, fitting well in the organization could have an important impact on commitment, identification, intention to leave, etc. Only in this way, research can lead to practical suggestions that can enhance employee well-being and organizational effectiveness.

The use of the three-component model of Meyer and Allen (1991, 1997) gives us a more comprehensive view on the potential relations between values, their congruence, and organizational commitment. Although our results largely confirm the findings of Finegan (2000) that there are no significant relations between value congruence and both continuance and normative commitment, this was not the case for affective commitment. Congruence between self-transcendence, openness to

change, conservation, and goal-orientedness values is significantly related to affective commitment. This type of commitment is typical for employees who stay with their organization because they *want* to do so, and not because there are no alternatives or there is a feeling of obligation (Meyer & Allen, 1997, p. 11). Therefore, it could be of special importance to further examine the complicated influence of personal and organizational values on affective commitment. Furthermore, although no significant effects of Model 2 were found for continuance commitment, it is remarkable that most unstandardized regression coefficients of the PO-term are negative, indicating that value congruence corresponds with lower levels of continuance commitment. This clearly underlines the conceptual difference between this form of commitment and both other forms (see Meyer & Allen, 1984; Meyer et al., 2002).

Another salient implication of this study is the relevance of the use of a comprehensive value model. Together with the methodological requisite for commensurate measurement (see Kristof, 1996; Kristof-Brown et al., 2005), we believe that the use of a comprehensive value model gives researchers substantial benefits in further exploring the relationships between values, value congruence, and distinct forms of organizational commitment and other relevant attitudes and behaviors. For instance, for both affective and normative commitment, the strongest congruence effect was found for goal-orientedness. It seems that particularly this value type corresponds with higher levels of affective and normative commitment when there is congruence between the importance attached to it by the individual and the perceived importance of it for the organization. It is clear that this effect of goal-orientedness would not have been found if no attempts were made for comprehensive value measurement. Furthermore, distinct values have not only different relationships with commitment, there is also the considerable amount of explained variance for all three forms of commitment. The linear effects of work and perceived organizational values alone can account up to 15.6% of the variance. Moreover, when taking all linear, quadratic, and congruence effects into account, up to 21.9% of the variance can be explained by values. We believe this is quite impressive for antecedents with this level of abstractness.

PRACTICAL IMPLICATIONS

The insights of this study can have practical implications for improving the commitment of employees in organizations. Concerning value congruence, we believe that the findings for affective commitment are particularly worthwhile. Given that affective commitment corresponds with a stronger emotional attachment, a stronger identification, and more involvement in the organization (see Meyer & Allen, 1997) – all desired qualities for employees in contemporary organizations – it becomes very interesting to strive for higher levels of congruence between the employees' and organization's values.

Though we are convinced that congruence effects are important, we cannot deny the fact that the bulk of explanatory power stems from linear effects. When self-transcendence and openness to change are perceived as typical organizational values, this corresponds with higher levels of affective and normative commitment. As a result, it can be opportune for organizations to promote an open and humane-oriented culture. This, in combination with rather conservative and conscientious employees, can be the key to a more committed workforce.

LIMITATIONS

Although this study has yielded several important findings regarding the P-O fit approach to organizational commitment, it has also several limitations. First, common method variance may be inflating the correlations between personal work values, perceived organizational values, and the outcomes. Common method variance refers to the problem which occurs when the same participant completes all the measures using the same type of response format. However, according to Evans (1985), common method variance is unlikely to induce non-linear and interactive relationships such as those found here. Thus, although this form of bias is a potential problem, it is improbable that its effects were large in this study. In addition to this, Kristof-Brown et al. (2005) recently stated that having the same persons rate work values, organizational values, and outcome variables, does not necessarily compromise the integrity of the reported relationships, but instead reflects the reality

of how people's attitudes and behavior are influenced by fit as they experience it. Second, as our value questionnaire is based on self-reports, it is potentially vulnerable to the bias known as socially desirable responding: responses may reflect not only the importance of each value to the respondent, but also the respondent's tendency to give answers which make him or her look good (Paulhus, 1991). Nevertheless, past research has shown that the influence of the desirability response bias on value ratings is relatively weak (Schwartz, Verkasalo, Antonovsky, & Sagiv, 1997). Moreover, all questionnaires were filled in anonymously, which reduces social desirability distortion and increases self-disclosure (Rosenfeld, Giacalone, & Riordan, 1992; Zerbe & Paulhus, 1987). Finally, the data were cross-sectional, which hinders the causal inferences regarding the relationship between P-O fit and commitment. Although unlikely, it is possible that highly committed respondents adapt their own work values to those of the organization. Therefore, longitudinal research should be conducted to determine the exact nature of the causality between values, their congruence, and organizational commitment.

GENERAL CONCLUSION

Using a comprehensive value model enabled us to find different relationships between personal work values, perceived organizational values, their congruence, and organizational commitment. The different relations of the six value types with the outcomes illustrate the importance of studying various types of commitment with a comprehensive value model in supplementary P-O fit research. Different types of values turn out to be relevant for different types of commitment. Using a full set of value types offers considerable protection against the problem of overlooking values being important for understanding the true nature of the relation between value congruence and commitment (e.g., goal-orientedness as a congruence variable). Furthermore, the heterogeneity of our sample makes our results more generalizable across settings and supports the robustness of the findings. And finally, our results provide further evidence for the relevance of using separate measures of the person and the organization for studying the relation between value congruence and organizational commitment.

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CHAPTER 6

COMPREHENSIVE AND COMMENSURATE VALUE DIMENSIONS AS ANTECEDENTS OF ORGANIZATIONAL CITIZENSHIP BEHAVIOR¹

This study examines the question whether personal work values, perceived organizational values, and their congruence are related to organizational citizenship behavior (OCB). Data were collected from 591 employees in 26 Belgian organizations. Work and perceived organizational values were measured with a comprehensive value scale for which commensurability is demonstrated. All respondents rated the importance of their own personal work values and the perceived importance of these values for their organization. In general, the results indicated that different value types were related to OCB. The strongest relationships were found between personal work values and OCB. For relationships with perceived organizational values and value congruence, little support was found.

¹ This paper was co-authored by Johnny Fontaine and Frederik Anseel.

INTRODUCTION

One critical factor determining organizational success for organizations in the 21st century is the willingness of employees to “go beyond that which is required”. The construct that has received most attention for capturing such discretionary behaviors is Organizational Citizenship Behavior (OCB). Empirical studies have repeatedly shown that OCB leads to improved organizational effectiveness (Podsakoff, Ahearne, & MacKenzie, 1997; Podsakoff & MacKenzie, 1994; Yen & Niehoff, 2004). Given the importance of OCB for organizational success, researchers have tried to identify individual and situational antecedents of OCB to answer the question: why do employees engage in behaviors which enhance organizational performance, but are not recognized or rewarded by their employer?

One potential important determinant of OCB that has received remarkable little attention in research today, is the influence of values. From a broader psychological perspective, values have been found to predict a wide range of behaviors, from antisocial behavior (e.g., Romero, Sobral, Luengo, & Marzoa, 2001) to managerial behavior (e.g., Smith et al., 2002). This is reflected in a recent statement by Bardi and Schwartz (2003, p. 1207) saying that “overt behavior is a particularly important potential consequence of values, worth extensive research”. Therefore, the current study examines relations of a comprehensive set of values with OCB. More particularly, as values can be considered as key characteristics of individuals and organizations, not only their independent contribution, but also their congruence will be addressed. In this way, we make an effort to further disentangle the complex relationships between OCB and its antecedents.

ORGANIZATIONAL CITIZENSHIP BEHAVIOR

In the past decade, there has been a rapid growth in research on OCB. This term, first proposed by Organ and his colleagues (Bateman & Organ, 1983; Smith, Organ, & Near, 1983), was later defined as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the

aggregate promotes the effective functioning of the organization” (Organ, 1988, p. 4). More particularly, OCB refers to the individual contributions in the workplace going beyond role requirements and contractually rewarded job achievements (Organ & Ryan, 1995). By the end of the past century, there was an exponential increase in research on OCB and related concepts, such as extra-role behavior and contextual performance (for a review, see Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Today, OCB has been studied in a variety of domains and disciplines and the current drive towards globalization has fostered more and more research outside the US (e.g., Ehigie & Otukoya, 2005; Farh, Zhong, & Organ, 2004; Lievens & Anseel, 2004).

Review of the literature reveals a lack of consensus about the dimensionality of the OCB construct (LePine, Erez, & Johnson, 2002; Podsakoff et al., 2000). The most common conceptualization identifies five major types of behavior: altruism (helping behaviors directed at specific individuals), conscientiousness (going beyond minimally required levels of attendance), sportsmanship (willingness of the employee to tolerate less than ideal circumstances on the job without complaining), courtesy (preventing work-related problems with others), and civic virtue (participating in and being concerned about the life of the company) (Organ, 1988). More recently, Podsakoff et al. (1997) advocated a three-factor model of OCB. They removed conscientiousness and combined altruism and courtesy to form a single helping dimension. In this way, the following factors emerged: helping behavior, civic virtue, and sportsmanship (see also MacKenzie, Podsakoff, & Fetter, 1991, 1993; Podsakoff & MacKenzie, 1994).

Already in 1988, Organ made the assumption that OCB enhances organizational effectiveness. In their meta-analysis, Podsakoff and colleagues (2000) found support for this fundamental assumption and in this way clearly justified the numerous studies that have examined the influence of antecedents on OCB (e.g., Bettencourt, Gwinner, & Meuter, 2001; Chiu & Chen, 2005; Rioux & Penner, 2001). These antecedents can be categorized into four major categories: individual characteristics, task characteristics, organizational characteristics, and leadership behaviors (Podsakoff et al., 2000). Most research on individual characteristics has focused on attitudes (e.g., satisfaction; Shoenfelt & Battista, 2004) and dispositional variables

(e.g., personality; Comeau & Griffith, 2005). However, although values have been linked to various organizational attitudes and behaviors (for an overview, see Hoffman & Woehr, 2006; Kristof-Brown, Zimmerman, & Johnson, 2005), little research has been conducted that considers values as antecedents of OCB. Sparse efforts were made by Moorman and Blakely (1995) who found that individuals holding collectivistic values or norms were more likely to perform citizenship behaviors. In addition, Goodman and Svyantek (1999) also found evidence for the influence of organizational values on contextual performance and Ryan (2002) found that two dimensions of the Protestant work ethic – hard work and independence – were positively and significantly related to OCB. However, the lack of attention is reflected in the meta-analysis of Podsakoff et al. (2000), because they do not mention values as feasible organizational characteristics that may influence OCB. Therefore, as both personal characteristics and work setting are important determinants of OCB, it is particularly interesting to investigate the potential influence of work and perceived organizational values and their congruence.

VALUES AND VALUE CONGRUENCE AS ANTECEDENTS OF OCB

The past decades, several value definitions and taxonomies have emerged (see Roe & Ester, 1999). However, the most elaborate definition is given by Schwartz and Bilsky (1987, p. 551), who defined values as “concepts or beliefs, about desirable end states or behaviors, that transcend specific situations, guide selection or evaluation of behavior and events, and are ordered by relative importance”. The link between values and behavior is clearly articulated in this definition. Nevertheless, there seems to be little agreement regarding the role of values in guiding behavior. Although numerous studies link values to behavior, it is still unclear whether values relate to behavior generally or if only some values relate to some behaviors (Bardi & Schwartz, 2003). This clearly highlights the importance of the use of a comprehensive set of values.

In 1992, Schwartz has proposed a systematic theory about the content and organization of value systems of individuals. Later, the comprehensiveness of his value theory has been empirically validated (see Schwartz, in press; Schwartz et al.,

2001). Although it was originally developed as a theory of life values, it inspired other authors to measure work values as well (e.g., Cable & Edwards, 2004). Furthermore, De Clercq and Fontaine (2006a, 2006b) have shown that Schwartz' value theory can serve as a comprehensive framework to measure work and perceived organizational values. With a few adaptations, Schwartz' value model is highly suitable in a work context. In their adapted version, De Clercq and Fontaine (2006b) identified three bipolar factors that can be summarized as self-enhancement (enhancement of own personal interests, even at the expense of others) versus self-transcendence (transcending selfish concerns and promotion of the welfare of others, close and distant, and nature), openness to change (following own intellectual and emotional interests in unpredictable and uncertain directions) versus conservation (preservation of the status quo and valuing certainty in relationships with close others, institutions, and traditions), and hedonism (pleasure and sensuous gratification for oneself) versus goal-orientedness (living and working to fulfill a purpose, not giving up). The first two factors comprise the four higher-order value types of Schwartz (1992); the third factor emerged as a typical factor for work and perceived organizational values. As a result of the bipolarity of these three factors, actions in pursuit of any value are expected to have psychological, practical, and social consequences that may conflict with their opposite value type. In other words, opposite relations can be expected between two values that constitute the poles of a bipolar factor and a third variable. This structure of relations among values is a key aspect of Schwartz' value theory (Schwartz, 1992).

When we examine the relationships between work and perceived organizational values and OCB, another major research tradition cannot be neglected. Value congruence or the compatibility between individual work values and perceived organizational values is widely accepted as the defining operationalization of supplementary person-organization (P-O) fit (Hoffman & Woehr, 2006; Kristof, 1996; Kristof-Brown et al., 2005; Verquer, Beehr, & Wagner, 2003). P-O fit theory postulates that there are characteristics of organizations that have the potential to be congruent with characteristics of individuals, and that this congruence or fit can influence individuals' attitudes and behaviors (Hoffman & Woehr, 2006; Pervin, 1989). More specifically, supplementary P-O fit occurs when a person "supplements,

embellishes, or possesses characteristics which are similar to other individuals” in an environment or organization (Muchinsky & Monahan, 1987, p. 269). In their recent meta-analysis, Hoffman and Woehr (2006) made an appeal for additional research examining the relationship between P-O fit and behavioral outcomes, because there is a lack of research in this area. Furthermore, research that abandons the more traditional methodological techniques for assessing fit or congruence is needed. Therefore, we will use polynomial regression analysis as an alternative to difference scores, which are – despite their widespread use – prone to numerous methodological problems (see Edwards, 2002). The basic assumption of supplementary P-O fit is that the component measures are commensurate – i.e., both person and organization are described with the same content dimensions (Kristof, 1996). This need for commensurability was recently emphasized by Kristof-Brown and colleagues (2005), because only studies that measured personal and environmental characteristics on commensurate dimensions were included in their meta-analysis.

AIM OF THE CURRENT STUDY

The relationship between values and behavior clearly needs further attention. It is often unclear which values relate to certain behaviors (see Bardi & Schwartz, 2003). Therefore, this study tries to disentangle the link between a comprehensive set of values and OCB. An aim that is justified given the importance of OCB for modern organizations and the lack of research linking values to OCB. As values are fundamental properties of both persons and organizations (see Cable & Edwards, 2004; Kristof-Brown et al., 2005), we focus on their independent relationships with OCB as well as on the relationship between their congruence (P-O fit) and OCB. Although there are different operationalizations of supplementary P-O fit (for an overview, see Kristof-Brown et al., 2005), we will assess the subjective fit – i.e., the match between the person and the organization as it is perceived and reported by that same person – or the congruence between individuals’ personal work values and their perception of their company’s organizational values. By doing so, we are following the historical argument in interactional psychology that people can only be

influenced by fit as they perceive it (e.g., Caplan, 1987). Finally, we also take a look at the explanatory effect of the full set of values regarding OCB. Using a comprehensive set of values can give an indication of the overall importance of values as antecedents of OCB.

HYPOTHESIS DEVELOPMENT

It is appealing to believe that some people will exhibit OCB because certain values function as guiding principles in their work environment. Organ (1990) suggested that individual differences could play an important role in predicting OCB. Moreover, Roe and Ester (1999) stated that values could be seen as a source of motivation for individual action. Therefore, we believe that there will be a relationship between the importance people attach to certain values and OCB. Due to the scarce research on this topic, our hypotheses will be formulated for OCB as a single measure. In addition to this, we will investigate the potential differential relationships between values and three OCB types (i.e., helping behavior, civic virtue, and sportsmanship) in an explorative manner.

Personal work values. In earlier studies, results showed various relationships between dispositional characteristics of individuals and OCB. Moorman and Blakely (1995) found that individuals, who hold collectivistic values or norms, are more likely to perform citizenship behaviors. Collectivists allow the interests of the group to take precedence over their own personal interests. They greatly value membership in a group and are prepared to look out for the well-being of the group even at the expense of their own personal interests (Wagner, 1995). Therefore, we hypothesize:

Hypothesis 1a: For personal work values, there will be a positive relationship between self-transcendence and OCB.

Although no previous research can support the proposition that there will be a negative relationship between self-enhancement and OCB, the bipolar factor structure of our value model points into that direction. Consequently, this brings us to:

Hypothesis 1b: For personal work values, there will be a negative relationship between self-enhancement and OCB.

Conscientiousness as a personality trait appears to capture the personal qualities of order, dutifulness, self-discipline, etc. (Costa & McCrae, 1992). Individuals high in conscientiousness tend to be careful, thorough, and responsible, which is in line with the definition of conservation as a value type. Furthermore, Roccas, Sagiv, Schwartz, and Knafo (2002) found a positive relationship between conscientiousness and conformity values. Because this personality trait was positively related to OCB in a study by Konovsky and Organ (1996), we believe that there will be a positive relationship between conservation and OCB. This belief is strengthened by the findings of Ryan (2002). He found that people who were aware of the dangers of self-indulgence and who valued an ascetic existence showed higher levels of OCB. For openness to change, we can expect opposite relationships based on our bipolar value model. Moreover, Ryan (2002) found a negative relationship between the importance people attach to independence and Puffer (1987) also found that a high need for autonomy led to a lower propensity for OCB. This line of reasoning leads us to:

Hypothesis 2a: For personal work values, there will be a positive relationship between conservation and OCB.

Hypothesis 2b: For personal work values, there will be a negative relationship between openness to change and OCB.

For the third value dimension, empirical evidence for possible relationships with OCB is rather scarce. Nevertheless, Ryan (2002) found that people who valued hard work showed higher levels of OCB. These findings were a confirmation of the positive correlation between need for achievement and OCB found by Puffer (1987). Given that achievement and goal-orientedness were merged into one value category in previous research (De Clercq & Fontaine, 2006b), we believe that there will be a positive relationship between goal-orientedness and OCB. Consequently, based on the opposite between goal-orientedness and hedonism, we expect a negative relationship between hedonism and OCB. Thus:

Hypothesis 3a: For personal work values, there will be a positive relationship between goal-orientedness and OCB.

Hypothesis 3b: For personal work values, there will be a negative relationship between hedonism and OCB.

Perceived organizational values. Up to now, little can be said about the relationship between perceived organizational values and citizenship behaviors. Goodman and Svyantek (1999) have reported that perceived organizational values have an influence on contextual performance. However, in their research, no clear picture was given concerning the nature of this relationship. Although we believe that certain values which are endorsed by the organization will have positive or negative relationships with OCB, the lack of empirical findings regarding these potential relationships prevents us from forming well-reasoned hypotheses. As a result, the potential relations between perceived organizational values and OCB are tested in an explorative manner.

Value congruence. In their recent meta-analysis about the consequences of P-O fit, Kristof-Brown et al. (2005) have reported influences of fit on contextual performance. This was also done in another meta-analysis by Hoffman and Woehr (2006), although in this study, results were derived from difference scores and correlation-based measures, which have been highly criticized by Edwards (2002). Based on these findings, we believe that the congruence between the importance attached by individuals to certain work values and the perceived importance of these values for the organization, can have a positive relation with OCB. Therefore, our last hypothesis states:

Hypothesis 4: There will be significant positive relationships between value congruence and OCB.

METHOD

PARTICIPANTS AND PROCEDURE

Participants were 591 employees (42% females and 58% males) of 26 Belgian organizations. Mean age was 40.2 years ($SD = 10.4$) and the range was between 20 and 62 years. Following the suggestions of van Vianen (2001), organizations were selected from various sectors to obtain sufficient variation across organizational settings. This variation is a key requirement in P-O fit research (see Schneider, 2001). Our sample consisted of 17 organizations from the public services, four organizations from the private sector, and five schools. Participation in this study was voluntary and all responses were anonymous.

QUESTIONNAIRES

Work and organizational values. The Work and Organizational Values Survey (WOVS) is a newly developed comprehensive (see De Clercq & Fontaine, 2006b) value questionnaire based on the value theory of Schwartz (1992). Respondents were asked to rate the importance of 50 single values in their work (personal work values) and for the organization they work for (perceived organizational values). Responses ranged from 7 (*of supreme importance*) to 3 (*important*) to 0 (*not important*) to -1 (*opposed to my or my organization's principles*). This asymmetrical scale was adopted from Schwartz (1992) and reflects the desirable nature of values. The WOVS measures six value types that constitute the three bipolar factors mentioned earlier in this manuscript. Coefficient alphas ranged from 0.77 (openness to change) to 0.89 (goal-orientedness) with an average of 0.84 for personal work values, and from 0.79 (openness to change) to 0.90 (goal-orientedness) with an average of 0.86 for perceived organizational values. Commensurability of the value structure was tested with a confirmatory factor analytic (CFA) method (Vandenberg & Lance, 2000) and orthogonal Procrustes rotations (Schönemann, 1966). The CFA model tested the equality of variance-covariance matrices and all fit indices were acceptable (with the exception of the χ^2 goodness-of-fit statistic which is overly sensitive; see Byrne, 1998). Fit indices were: $\chi^2(1275) = 2140.53$ ($p < 0.01$); the

Goodness-of-Fit Index (GFI; Jöreskog & Sörbom, 1996) = 0.93; the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990) = 0.035; the Tucker-Lewis Index (TLI; Tucker & Lewis, 1973) = 0.93; and the Comparative Fit Index (CFI; Bentler, 1990) = 0.96. These fit indices corresponded with the minimum fit requirements for measurement invariance suggested by Vandenberg and Lance (2000). In addition, orthogonal Procrustes rotations produced congruence measures for the three value factors that gave evidence of factor replication between work and perceived organizational values (see Barrett, 1986). The Tucker's phi (Tucker, 1951) was 0.968 for the first factor (self-enhancement versus self-transcendence), 0.983 for the second factor (openness to change versus conservation), and 0.961 for the third factor (hedonism versus goal-orientedness). Taken together, these results guaranteed the commensurability of the three bipolar work and perceived organizational value factors.

OCB. A Dutch translation of the OCB measure of Podsakoff, MacKenzie, Moorman, and Fetter (1990) was used in this study. According to LePine et al. (2002), this survey is a sound measure of Organ's (1988) OCB types and it has been used in several excellent empirical studies (e.g., Hui, Lee, & Rousseau, 2004). The questionnaire consists of 24 items designed to measure different dimensions of OCB. The rating scale was a 7-point Likert type scale, varying from 1 (*strongly disagree*) to 7 (*strongly agree*). The coefficient alpha of the single OCB scale was 0.82. Furthermore, following Podsakoff et al. (1997), we calculated scores for helping behavior, civic virtue, and sportsmanship. Coefficient alphas were 0.78, 0.70, and 0.65 respectively.

ANALYSES

Given limitations of traditional congruence measures, we used analytical procedures recommended by Edwards (1994, 2002). The following quadratic regression equation was used to determine whether our research hypotheses were supported:

$$OCB = b_0 + b_1P + b_2O + b_3P^2 + b_4PO + b_5O^2 + e \quad (\text{Equation 1})$$

In Equation 1, P and O represent personal work values and perceived organizational values, respectively. To reduce multicollinearity, the midpoint of the scale was subtracted from all value measures prior to the quadratic regression analyses (see Edwards, 1994). The squared terms allow for the possibility that the relationships are curvilinear. To predict the OCB scores, the data were analyzed in a hierarchical multiple regression, with the higher order terms (i.e., both quadratic terms and the congruence term) entered as a set (Model 2) after controlling for person and organization variables (Model 1) (see Edwards & Cooper, 1990). By comparing Model 2 with Model 1, the additional explanatory value of non-linear effects and congruence effects of P and O was tested. Model 2 was only interpreted if it accounted for significantly more of the variance than Model 1. When Model 2 was significant, this was additionally illustrated by its three-dimensional representation (for an overview of response surface methodology, see Edwards, 1994, 2002). In total, 24 polynomial regression analyses were conducted. The sequential Bonferroni procedure was used to control the risk of Type I error associated with these analyses (see Seaman, Levin, & Serlin, 1991).

To assess the total influence of the comprehensive value model on OCB, multiple regression analyses were conducted with all value types together as predictors. These analyses were done the same way as the previous polynomial regression analyses. In the first step, P and O terms of all value types were entered (Model 1) and in the second step, all quadratic and congruence terms were added (Model 2).

RESULTS

Table 6.1 presents descriptive statistics and correlations for all study variables. The results of the regression analyses for the single OCB measure are summarized in Table 6.2. Subsequently, Table 6.3 displays the results for the three OCB subtypes.

Table 6.1. Means, standard deviations, and correlation coefficients among values and OCB.

Constructs	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
Personal work values																	
1. Self-enhancement	-1.29	0.73															
2. Self-transcendence	0.38	0.72	-0.65														
3. Openness to change	-0.19	0.84	-0.05	-0.00													
4. Conservation	0.18	0.88	-0.22	-0.12	-0.59												
5. Hedonism	0.29	1.01	-0.21	0.08	0.09	-0.16											
6. Goal-orientedness	1.03	0.75	-0.12	-0.28	-0.01	-0.14	-0.48										
Perceived organizational values																	
7. Self-enhancement	-0.29	0.93	0.31	-0.07	0.05	-0.22	0.01	-0.12									
8. Self-transcendence	-0.38	0.76	-0.24	0.26	0.01	0.07	-0.02	-0.06	-0.71								
9. Openness to change	-0.81	0.80	0.12	-0.11	0.32	-0.16	0.09	-0.12	-0.19	0.13							
10. Conservation	0.79	0.80	-0.24	0.06	-0.24	0.46	-0.11	-0.00	-0.16	-0.10	-0.52						
11. Hedonism	-1.09	1.00	-0.02	-0.08	0.12	-0.07	0.35	-0.14	-0.42	0.38	0.34	-0.32					
12. Goal-orientedness	1.18	0.80	-0.03	-0.12	-0.12	-0.01	-0.17	0.39	-0.18	-0.31	-0.16	-0.02	-0.39				
OCB																	
13. OCB single measure	5.48	0.50	-0.26	0.13	-0.11	0.11	-0.18	0.26	-0.17	0.04	-0.08	0.09	-0.07	0.19			
14. Helping behavior	5.51	0.55	-0.30	0.21	-0.09	0.11	-0.05	0.11	-0.12	0.01	-0.11	0.14	-0.09	0.14	0.86		
15. Civic virtue	5.18	0.74	-0.12	-0.00	-0.10	0.11	-0.25	0.29	-0.17	0.08	0.03	-0.00	-0.01	0.14	0.80	0.51	
16. Sportsmanship	5.87	0.75	-0.15	0.06	-0.06	0.03	-0.10	0.20	-0.10	0.01	-0.11	0.06	-0.05	0.14	0.58	0.30	0.27

Note. *N* = 591. Correlations greater than or equal to |0.08| were statistically significant ($p < 0.05$).

Table 6.2. Results of linear and quadratic regressions of OCB as a single measure on personal work values and perceived organizational values.

	Model 1			Model 2						
	P	O	R^2	P	O	P ²	PO	O ²	ΔR^2	R^2
Self-enhancement	-0.157**	-0.052*	0.073**	-0.167**	-0.030	-0.014	0.054	-0.015	0.005	0.078**
Self-transcendence	0.088**	0.006	0.017*	0.100**	-0.008	-0.020	0.089**	0.006	0.017	0.034**
Openness to change	-0.054*	-0.030	0.013*	-0.046	-0.031	-0.035	0.045	0.042	0.013	0.026*
Conservation	0.052	0.030	0.015*	0.046	0.045	-0.028	0.050	-0.053	0.008	0.023*
Hedonism	-0.084**	-0.006	0.030**	-0.077**	-0.009	0.008	0.023	-0.004	0.003	0.033**
Goal-orientedness	0.148**	0.064*	0.077**	0.159**	0.061*	-0.028	0.021	-0.029	0.006	0.083**
Full value model			0.147**						0.029	0.176**

Note. $N = 591$. For all columns, except those labeled ΔR^2 and R^2 , table entries are unstandardized regression coefficients for equations with all predictors entered simultaneously. For Model 1, the column labeled R^2 indicates the variance explained by two predictors (P, O); for Model 2, the column R^2 indicates the variance explained by five predictors (P, O, P², PO, O²). The column labeled ΔR^2 contains incremental variance explained by the quadratic terms (P², O²) and the congruence term (PO) over Model 1.

* $p < 0.05$; ** $p < 0.01$.

Table 6.3. Results of linear and quadratic regressions of all three OCB subtypes on personal work values and perceived organizational values.

	Model 1			Model 2						
	P	O	R ²	P	O	P ²	PO	O ²	ΔR ²	R ²
Helping behavior										
Self-enhancement	-0.219**	-0.019	0.089**	-0.227**	-0.008	-0.048	0.050	-0.002	0.006	0.095**
Self-transcendence	0.168**	-0.033	0.046**	0.171**	-0.044	-0.059*	0.070*	0.020	0.013	0.059**
Openness to change	-0.036	-0.063*	0.015*	-0.032	-0.059	-0.029	0.025	0.058*	0.011	0.026*
Conservation	0.035	0.082*	0.023**	0.027	0.100**	-0.036	0.042	-0.053	0.010	0.033**
Hedonism	-0.014	-0.043	0.008	-0.006	-0.051	-0.006	0.029	0.008	0.005	0.013
Goal-orientedness	0.053	0.078**	0.025**	0.058	0.075*	-0.032	0.027	-0.005	0.002	0.027*
Full value model			0.120**						0.029	0.149**
Civic virtue										
Self-enhancement	-0.077	-0.114**	0.033**	-0.080	-0.085*	0.053	0.052	-0.023	0.007	0.040**
Self-transcendence	-0.026	0.084*	0.007	-0.012	0.077	0.020	0.068	0.005	0.006	0.013
Openness to change	-0.107**	0.065	0.014*	-0.097*	0.069	-0.024	0.071	0.054	0.012	0.026*
Conservation	0.122**	-0.063	0.017*	0.114**	-0.055	-0.028	0.074	-0.034	0.003	0.020
Hedonism	-0.205**	0.064*	0.070**	-0.211**	0.076*	0.032	-0.011	0.002	0.003	0.073**
Goal-orientedness	0.282**	0.029	0.089**	0.305**	0.025	-0.011	0.014	-0.077*	0.010	0.099**
Full value model			0.149**						0.024	0.173**

	Model 1			Model 2						
	P	O	R ²	P	O	P ²	PO	O ²	ΔR ²	R ²
Sportsmanship										
Self-enhancement	-0.128**	-0.046	0.023**	-0.161**	0.004	-0.045	0.106*	-0.036	0.012	0.035**
Self-transcendence	0.064	-0.005	0.004	0.104*	-0.038	0.020	0.174**	-0.029	0.036**	0.040**
Openness to change	-0.020	-0.099*	0.013	0.005	-0.125**	-0.080*	0.082	-0.023	0.011	0.024*
Conservation	0.003	0.059	0.004	-0.001	0.071	-0.017	0.030	-0.041	0.002	0.006
Hedonism	-0.064	-0.013	0.009	-0.045	-0.021	0.010	0.047	-0.034	0.005	0.014
Goal-orientedness	0.176**	0.069	0.046**	0.187**	0.067	-0.059	0.028	-0.011	0.004	0.050**
Full value model			0.063**						0.049	0.112**

Note. $N = 591$. For all columns, except those labeled ΔR^2 and R^2 , table entries are unstandardized regression coefficients for equations with all predictors entered simultaneously. For Model 1, the column labeled R^2 indicates the variance explained by two predictors (P, O); for Model 2, the column R^2 indicates the variance explained by five predictors (P, O, P², PO, O²). The column labeled ΔR^2 contains incremental variance explained by the quadratic terms (P², O²) and the congruence term (PO) over Model 1.

* $p < 0.05$; ** $p < 0.01$.

PERSONAL WORK VALUES

For the first value factor, we found significant relationships for both value types and OCB. Persons attaching high importance to self-enhancement showed lower levels of OCB and persons attaching high importance to self-transcendence showed higher levels of OCB. Although both relationships were significant, it seems that the influence of the first value factor on OCB stemmed in particular from self-enhancement compared to self-transcendence (explained variances were 0.073 and 0.017 respectively). Both Hypothesis 1a and 1b were confirmed. When we look at the three OCB subtypes, we see that self-enhancement had a significant negative relationship with helping behavior and sportsmanship, but not with civic virtue. On the other hand, self-transcendence had only one significant positive relationship with helping behavior. For the second value factor, one significant negative relationship was found. People who scored high on openness to change, reported lower levels of OCB. In this way, Hypothesis 2b was confirmed. The opposite relationship between conservation and OCB was in the predicted positive direction, although not significant. As a result, Hypothesis 2a was not confirmed. When we look at the subtypes of OCB, the only significant relationships were those with civic virtue. These relationships were in the expected direction. Finally, for the third value factor, we found significant relationships for both value types with OCB. Persons attaching importance to hedonism reported lower levels of OCB and persons attaching importance to goal-orientedness showed higher levels of OCB. These results confirmed both Hypotheses 3a and 3b. Goal-orientedness was positively related to civic virtue and sportsmanship and hedonism was negatively related to civic virtue.

PERCEIVED ORGANIZATIONAL VALUES

Table 6.2 shows that perceived organizational values were significantly related to OCB, although to a much lesser extent than personal work values. When an organization was perceived as operating by self-enhancement values, lower levels of OCB were reported by the respondents. The opposite was found for goal-orientedness values. For the other value types, no significant relationships with OCB were found. When we look at the OCB subtypes, there were only significant

relationships between organizational values and helping behavior and civic virtue. No significant relationships were found between organizational values and sportsmanship. When organizations were perceived as operating by conservation and goal-orientedness values, the employees reported higher levels of helping behavior. The opposite was true for organizations where openness to change was a typical organizational value. For civic virtue, there were relations with self-enhancement and hedonism. When self-enhancement was a typical organizational value, respondents reported lower levels of civic virtue, whereas the opposite was true for hedonism.

VALUE CONGRUENCE

Table 6.2 shows no significant increase in explained variance of Model 2 over Model 1, indicating that value congruence was not significantly related to OCB. Therefore, Hypothesis 4 was rejected. The more detailed results of Table 6.3 show similar findings. Despite the fact that 12 of the 18 regression analyses were significant for Model 1, there was only one case where Model 2 significantly increased the amount of variance accounted for over Model 1. For self-transcendence, value congruence corresponded with higher levels of sportsmanship. No quadratic effects were found whereas the congruence term accounted for an additional R^2 of 0.036. This significant congruence effect is not in line with the rejection of Hypothesis 4. However, only one significant congruence effect does not plead for the acceptance of value congruence as an important predictor of OCB.

To illustrate this congruence effect, we refer to Figure 6.1. This figure shows that the lowest levels of sportsmanship were found when P and O were not congruent. The highest levels of sportsmanship were situated along the line of congruence ($P = O$), more particularly, when P and O were maximized (both positive and negative).

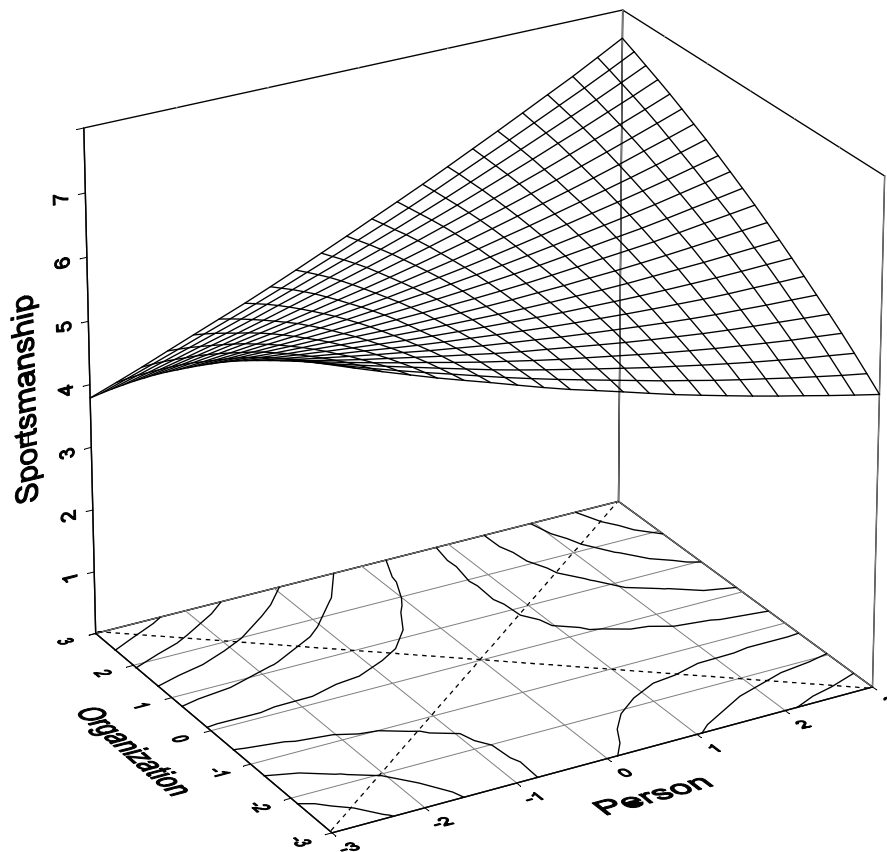


Figure 6.1. Three-dimensional surface graph depicting relations between P-O fit for self-transcendence and sportsmanship.

COMPREHENSIVE VALUE MODEL

Table 6.2 and 6.3 also show the total variance explained by the comprehensive value model. The main effects of P and O explain 14.7% of the variance in OCB. Quadratic and congruence effects did not significantly increase the R^2 . When we look at the OCB subtypes, similar findings emerge. We only found significant main effects of P and O for helping behavior (12.0%), civic virtue (14.9%), and sportsmanship (6.3%). Similar with OCB as a single measure, Model 2 did not significantly increase the amount of variance accounted for over Model 1 in any of the three subtypes. This is an additional indication that quadratic effects and, more importantly, congruence effects are mainly absent.

DISCUSSION

The most important contribution of the present study is that it incorporates a comprehensive value model in the assessment of values as antecedents of OCB. Moreover, not only personal work values, but also perceived organizational values and the congruence between both, were taken into account. By using the polynomial regression procedure of Edwards (1994, 2002), a clearer picture of the relationships between values and OCB has emerged. In this way, not only linear effects of work and perceived organizational values, but also quadratic and congruence effects were examined. This is a major advantage compared to the use of difference scores or other techniques that are predominantly present in P-O fit research (see Hoffman & Woehr, 2006).

When we take a look at OCB as a single measure, we see that the first regression model (linear effects) was significant for all six value types. However, the strongest relationships were found with personal work values. More specifically, self-enhancement and goal-orientedness showed the strongest relationships with OCB. On the organizational side, there were only two significant relations with OCB. Moreover, when we look at the incremental contributions of the quadratic and the congruence terms, none of them were significant. Although these findings were in line with previous research – where almost no effects of organizational values and no congruence effects were found for positive work behaviors (see De Clercq, Fontaine, & Anseel, 2006) – we were surprised not having found significant congruence effects in relation to OCB. This surprise originates from the findings of Hoffman and Woehr (2006). In their quantitative review of the relationship between P-O fit and behavioral outcomes, they found that P-O fit was related to OCB. A possible explanation for these contradictory findings could be the fact that all studies included in their meta-analysis were based on difference scores and correlation measures, calculated between person and organization factors. This can lead to ambiguous interpretations because these scores collapse measures of conceptually distinct constructs into a single score. In this way, it captures nothing more than the combined effects of its components (see Edwards, 2002). Following this line of reasoning, it would appear that the relationships reported in the Hoffman and Woehr (2006) study could be an

artefact of the linear effects of personal and organizational variables, instead of real congruence or fit effects.

In general, the results for the OCB subtypes reveal similar patterns. For both helping behavior and civic virtue, the first regression model is significant for five of the six value types. However, for sportsmanship, only two significant relationships were found. For helping behavior, we found the strongest relationships with self-enhancement and self-transcendence. As could be expected, people who value self-transcendence were more concerned about their co-workers and therefore reported higher levels of helping behavior, opposite to people who value self-enhancement and are therefore more self-focused. For civic virtue, the strongest relationships were found with hedonism and goal-orientedness. Goal-oriented people seem to be most concerned about the life of the company, opposite to people laying an emphasis on hedonism values. Finally, with regard to sportsmanship, it seems that people who value self-enhancement are less tolerant for poor job circumstances, compared to people who value goal-orientedness.

Openness to change and conservation were less related to OCB compared to the other value types. Furthermore, the lack of congruence effects found for OCB as a single measure was also confirmed with the OCB subtypes. Only one of the 18 polynomial regression analyses showed a significant increase in explained variance when comparing Model 2 with Model 1.

From a theoretical point of view, our study highlights the importance of a comprehensive and commensurate value model. Not only do different value types relate differently to OCB, there is also evidence that personal and perceived organizational values have a different impact on citizenship behaviors. It seems that most influence stems from personal work values, compared to perceived organizational values and value congruence. By using a commensurate value structure, we have confidence that the lack of congruence effects found here, is not a problem of reliability. Moreover, our findings also have important implications for the use of values and P-O fit by organizational practitioners. It is interesting to know that values being considered important in someone's work are related to OCB. Our study

gives indications from whom to expect these beneficial behaviors for the organization.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Our study suffers from common limitations of cross-sectional field research. The most important one is the inability to make causal inferences. Although we believe that values influence OCB and not vice versa, it can be possible that employees showing OCB alter their values so that they are in line with their overt behavior. Therefore, we believe that additional longitudinal research can be very elucidatory. Not only causal relationships between values and OCB are worth examining, also the impact of value change (whether it is change in personal work values or organizational values) can be an interesting subject of research. As rapid growth and organizational change (e.g., mergers, acquisitions) are characteristic of the contemporary labor market, organizations could find it interesting to estimate the potential impact of such changes on employee behaviors.

A second limitation that stems from our cross-sectional research design is common method variance. It is possible that this has inflated the results of this study. Therefore, we think that future research can benefit from the use of other sources of data. The addition of supervisor and co-worker ratings can be a very satisfying line of research to obtain more insights about the influence of values and P-O fit on OCB.

CONCLUSION

Despite these limitations, this study contributes to the literature by investigating the relationships between personal work values, perceived organizational values, their congruence, and OCB. More specifically, the use of a comprehensive value model for which commensurability between work and perceived organizational values has been demonstrated, gives us a more extensive and broad view on this topic. Our results confirm largely previous findings about the relationships between work values and OCB. For perceived organizational values, our findings were less convincing, as

only a few significant relationships were found. This was also the case for value congruence, where all but one relationship were trivial and non significant. At first sight, these results are somewhat surprising, because our findings give strong indications that P-O fit is not very relevant for the prediction of citizenship behaviors. However, one important conclusion we can draw is that individual differences – in this case, values which people consider important in their work – are related to OCB. People with a clear vision, who are concerned about the welfare of their fellow workers, appear more likely to perform those behaviors which help to promote the effective functioning of the organization.

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APPENDIX
CORRELATIONS BETWEEN ALL OUTCOME VARIABLES OF THIS
DISSERTATION (SEE CHAPTER 4, 5, AND 6)

Outcome variables	1.	2.	3.	4.	5.	6.	7.	8.
1. Overall job satisfaction								
2. Positive work behavior	0.03							
3. Affective commitment	0.61	0.17						
4. Normative commitment	0.52	0.13	0.69					
5. Continuance commitment	-0.08	-0.11	-0.13	-0.03				
6. OCB single measure	0.34	0.33	0.45	0.29	-0.08			
7. Helping behavior	0.21	0.21	0.30	0.19	-0.05	0.86		
8. Civic virtue	0.32	0.42	0.44	0.33	-0.06	0.80	0.51	
9. Sportsmanship	0.23	0.08	0.23	0.08	-0.11	0.58	0.30	0.27

Note. $N = 591$. Correlations greater than or equal to $|0.08|$ were statistically significant ($p < 0.05$).

CHAPTER 7

GENERAL CONCLUSIONS

The main objective of this doctoral dissertation was extending the Schwartz value theory (Schwartz, 1992) and thereby providing a new value framework for the measurement of supplementary person-organization (P-O) fit. By doing this, we tried to answer the call for more comprehensive and commensurate value measurement in P-O fit research (see Kristof-Brown, Zimmerman, & Johnson, 2005). Given the fact that the comprehensiveness of the value theory of Schwartz (1992) has received extensive cross-cultural support (see Schwartz, 1992, in press; Schwartz et al., 2001) and because this theory has been applied in various psychological research areas (e.g., Rice, 2006; Ryckman & Houston, 2003), it formed the thread throughout this dissertation. More specifically, we extended Schwartz' value theory in a way that it could be applied for the comprehensive measurement of work and organizational values. Moreover, we demonstrated that this extended value model is commensurate for work and perceived organizational values, and therefore can serve as an instrument to measure value congruence and supplementary P-O fit. In this final chapter, the main findings of this dissertation are summarized and discussed. Furthermore, theoretical contributions and practical implications are provided and we conclude with the strengths, limitations, and possible directions for future research.

RESEARCH OVERVIEW

Given the amount of time people spend working in their life, P-O fit is a topic that deserves the attention it has received in the literature. A great amount of research has shown the importance of P-O fit for a variety of workplace outcomes like turnover intention, organization attraction, etc. (e.g., Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). This doctoral dissertation wanted to contribute to this literature by focusing on comprehensive and commensurate value measurement when studying supplementary P-O fit. More specifically, this dissertation presented five studies that addressed the four main objectives listed in Chapter 1: (a) providing a value framework that is comprehensive and commensurate for work and perceived organizational values; (b) developing a new value survey to measure these values; (c) examining two operationalizations of indirect supplementary P-O fit – subjective and objective fit – in terms of their relationships with an attitudinal and a behavioral outcome; and (d) applying the new value framework for the assessment of supplementary P-O fit. In what follows, the main findings in terms of these four objectives will be discussed first.

OBJECTIVE 1: PROVIDING A VALUE FRAMEWORK THAT IS COMPREHENSIVE AND COMMENSURATE FOR WORK AND PERCEIVED ORGANIZATIONAL VALUES

The first objective of this dissertation was addressed in two chapters. In Chapter 2, we tested the conceptual comprehensiveness of the Schwartz value model based on an extensive literature search. The value theory of Schwartz encompasses a comprehensive set of 10 different value types that can be identified across cultures. The cross-cultural support for this claimed comprehensiveness is substantial (see Schwartz, 1992, in press; Schwartz et al., 2001). Therefore, the main idea of this first study was to examine to what extent this value model could be generalized to work and organizational values, and therefore be appropriate as a value framework for the assessment of value congruence and supplementary P-O fit.

The first research question of Chapter 2 tackled the issue whether values and value categories found in the literature could be categorized into the 10 motivational value types of Schwartz (1992). It was shown that this was the case for 92.5% of the value items found in life, work, and organizational value questionnaires. However, 7.5% of the items were not categorizable into the 10 types of Schwartz. The second research question focused on these items and it was shown that two possible new value types emerged: goal-orientedness and relations. Furthermore, due to the heterogeneity and abstraction of certain value types of Schwartz, there was a third research question about their univocality. Here, we found that for most value types of Schwartz, the existing work and organizational value literature did not suggest multidimensionality, pointing to their univocal meaning. However, this was not the case for power and universalism. Our findings suggested to split up power into materialism, power, and prestige; and to split up universalism into social commitment and universalism. In general, this first study proposed a comprehensive set of 15 distinct value types based on an extensive screening of 42 life, work, and organizational value theories, typologies, and questionnaires. These 15 value types were: achievement, benevolence, conformity, goal-orientedness, hedonism, materialism, power, prestige, relations, security, self-direction, social commitment, stimulation, tradition, and universalism.

In Chapter 3, it was tested whether these 15 value types were viable in a life, work, and organizational context. Furthermore, the structure or dimensionality of this new value framework was investigated and we also tested the commensurability of the factor structures of life, work, and perceived organizational values. A final research goal of this chapter was the construction of a new value questionnaire and will be discussed next, because this constitutes the second main objective of this doctoral dissertation.

By means of principal component analysis (PCA), we identified 11 homogeneous and differentiable value types. Thus, of the 15 potential value types proposed in Chapter 2, only 11 were retained (i.e., conformity, goal-orientedness, hedonism, materialism, nature (which was derived from the universalism items), power, prestige, relations, security, social commitment, and stimulation). When we looked at the dimensionality of these values, three bipolar value factors emerged: self-enhancement (consisting of

materialism, power, and prestige) versus self-transcendence (consisting of nature, relations, and social commitment), openness to change (consisting of stimulation) versus conservation (consisting of conformity and security), and hedonism versus goal-orientedness. The first two factors had already been identified by Schwartz (1992); the third factor was new. The poles of these three bipolar value factors formed six higher-order value types. In summary, the 11 value types constitute the lower-order value model and the six higher-order value types constitute the higher-order value model.

Finally, the commensurability of the three-dimensional factor structures of life, work, and perceived organizational values was investigated. Although measurement equivalence was demonstrated for the three value domains, orthogonal Procrustes rotations (Schönemann, 1966) revealed a deviation for the third value factor in the life value domain (however, only for the lower-order values). Although this deviation on the third dimension is relevant for value research, it was considered only marginally relevant for the construction of a comprehensive and commensurate value instrument in order to investigate supplementary P-O fit, because of the focus on work values instead of life values. The commensurability between work and perceived organizational values was guaranteed by the high congruence coefficients between the three work and perceived organizational value factors.

Four appendices were added to Chapter 3 to further test the three-dimensional structure of our value model. In Appendix A, we examined whether confirmatory factor analysis (CFA) corroborated the three-dimensional structure of life, work, and perceived organizational values. The results of the CFAs showed a poor fit for both the lower-order and the higher-order value model. However, in this appendix we argued against the use of CFA to test the fit of our value models and proposed orthogonal Procrustes rotations to test the invariance of the factor structures of life, work, and perceived organizational values. This was done in Appendix B and C, where we confirmed our three-dimensional structure with a sample of key respondents and a new sample of respondents. The results indicated that our value structure is stable, robust, and replicable across samples. Finally, in Appendix D, we also confirmed the value structure on organizational level, indicating its stability and replicability across levels of analysis.

In summary, the findings of Chapter 2 and 3 suggest that the proposed value framework is comprehensive and commensurate for life, work, and perceived organizational values. However, for life values, we observed a small deviation for the third factor of the lower-order value types; a deviation that disappeared when looking at the higher-order value types.

OBJECTIVE 2: DEVELOPING A NEW VALUE SURVEY TO MEASURE THESE VALUES

The second objective of this dissertation is inherently connected with the first objective. In Chapter 3, a new value questionnaire was introduced. Originally, a pilot version was constructed based on the findings of Chapter 2. This new survey – which was in essence an adapted version of the Schwartz Value Survey (Schwartz, 1992) – was labeled the Life, Work, and Organizational Values Survey (LWOVS).¹ It consisted of 82 value items and respondents had to rate the importance of each item on a 9-point scale adopted from Schwartz (1992). More specifically, respondents had to indicate the importance of each item in their life (personal life values), for their work (personal work values), and for the organization they were working for (perceived organizational values).

The original 82-item pilot version was reduced to a shorter, more manageable instrument of 50 items. These items comprised 11 psychometrically sound value scales to measure the 11 value types proposed in Chapter 3. With these items, it is also possible to calculate scores for the six higher-order value types. We used a split-half procedure that guaranteed the replicability of the properties of the reduced 50-item value survey.

¹ In subsequent chapters, this survey was labeled the Work and Organizational Values Survey (WOVS) because life values were not further included.

OBJECTIVE 3: EXAMINING TWO OPERATIONALIZATIONS OF INDIRECT SUPPLEMENTARY P-O FIT – SUBJECTIVE AND OBJECTIVE FIT – IN TERMS OF THEIR RELATIONSHIPS WITH AN ATTITUDINAL AND A BEHAVIORAL OUTCOME

In recent meta-analyses (e.g., Hoffman & Woehr, 2006; Verquer, Beehr, & Wagner, 2003), the need for research that examines the impact of measurement strategy on the relationship between fit and outcomes was repeatedly underlined. Therefore, the aim of our third study (presented in Chapter 4) was to contribute to the clarification of two conceptualizations for measuring supplementary P-O fit: indirect individual-level measurement or subjective fit and indirect cross-levels measurement or objective fit. In the perspective of subjective fit, respondents are asked to report their own value priorities and their perceptions of the value priorities of their organization. In contrast, the perspective of objective fit is based on the aggregated employee perceptions of the organizational values without taking the individual's subjective perception of the organizational values into account (Kristof-Brown et al., 2005). In addition, we investigated whether there were differences between subjective and objective fit when comparing their relationships with an attitudinal and a behavioral outcome, as suggested by Kristof (1996).

In general, this study contributed to the call for more comparative research between different operationalizations of P-O fit (see Kristof-Brown et al., 2005) and their relationship with attitudinal and behavioral outcomes (see Kristof, 1996). In other words, the aim of this study was to take a closer look at differences between subjective and objective P-O fit for different individual outcome variables (i.e., an attitudinal and a behavioral outcome) that are of particular relevance in organizations.

Overall job satisfaction was selected as attitudinal outcome and positive work behavior was selected as behavioral outcome. The results indicated that subjective fit was significantly stronger related to the attitudinal outcome than objective fit. However, this was not the case for the behavioral outcome, where no significant differences were found between subjective and objective fit. More specifically, the explained variance of subjective fit was much higher than the explained variance of objective fit for overall job satisfaction, but not for positive work behavior. Aggregating the scores of the perceived organizational values of the respondents (i.e., objective

fit) only affected the attitudinal outcome. A possible explanation was that perceived organizational values were not strongly related to positive work behavior in general, a finding that was replicated in Chapter 6 for organizational citizenship behavior (OCB). As a consequence, aggregating ratings of perceived organizational values did not seem to play an important role for the behavioral outcome. Furthermore, the results of Chapter 4 showed little support for the presence of congruence effects. Only for subjective P-O fit, we found significant relations between value congruence and overall job satisfaction.

Taken together, these findings suggested that aggregating scores of perceived organizational values to determine objective supplementary P-O fit gives an underestimation of the importance of organizational values, particularly for the attitudinal outcome. Therefore, we suggested to consider the use of subjective measures of fit instead of objective measures of fit obtained with aggregated scores. In this way, organizational influences on individual outcome variables are not underestimated.

OBJECTIVE 4: APPLYING THE NEW VALUE FRAMEWORK FOR THE ASSESSMENT OF SUPPLEMENTARY P-O FIT

The final objective of this dissertation was to apply this new comprehensive and commensurate value framework for the assessment of values and supplementary P-O fit in relation to individual outcome variables. In a trade-off between informativity and complexity, the higher-order value types were chosen as predictors in the regression analyses (this was also done in Chapter 4). In line with Chapter 4, we chose an attitudinal outcome and a behavioral outcome. In Chapter 5, we focused on organizational commitment and in Chapter 6, we concentrated on OCB.

The results presented in Chapter 5 highlighted the importance of personal and perceived organizational values as potential antecedents of organizational commitment. Personal work values and perceived organizational values seemed to be strongly related to both affective and normative commitment. Moreover, our findings were very similar for affective and normative commitment, confirming

previous research (see Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). The relationships with values were less pronounced for continuance commitment. Besides linear relationships, there were also indications that value congruence was related to organizational commitment. This was particularly the case for affective commitment. In contrast, there were nearly no significant congruence effects for normative and continuance commitment. It seemed that only affective commitment was substantially related to supplementary P-O fit. The fact that different types of values were relevant for different types of commitment, clearly illustrated the importance of using a comprehensive value model in P-O fit research. For instance, value congruence for goal-orientedness was significantly related to affective and normative commitment, but not to continuance commitment.

A second application was presented in Chapter 6 where we examined whether personal work values, perceived organizational values, and their congruence were related to OCB. In this study, we first examined the relationships with OCB as a single measure. In addition, three dimensions of OCB were investigated in more detail. These were helping behavior, civic virtue, and sportsmanship (see Podsakoff, Ahearne, & MacKenzie, 1997). For OCB as a single measure, the strongest relationships were found with personal work values. Furthermore, there were no significant congruence effects, a finding that was in line with the results presented in Chapter 4 (where we also did not find congruence effects for the behavioral outcome). For the three OCB subtypes, the results showed similar patterns. Personal work values were more often significantly related to OCB than perceived organizational values and the lack of congruence effects found for OCB as a single measure was confirmed for the OCB subtypes. Summarized, our findings gave strong indications that P-O fit was not very relevant for the prediction of citizenship behaviors, because the bulk of explained variance stemmed from linear effects.

THEORETICAL CONTRIBUTIONS

The most important theoretical contribution of this study is that we introduced a new comprehensive value model for the assessment of life, work, and perceived

organizational values. Furthermore, by proving the commensurability of the value structure of personal work values and perceived organizational values, we demonstrated that this model could also be used for the measurement of value congruence and supplementary P-O fit.

Although we expected a two-dimensional value structure similar to Schwartz' value model, our data clearly suggested three dimensions. The first two dimensions or bipolar factors (self-enhancement versus self-transcendence and openness to change versus conservation) were comparable with the two dimensions of Schwartz (1992). The third dimension opposed hedonism and goal-orientedness.

The fact that goal-orientedness did not fit with the self-enhancement values came as a surprise. More particularly, we could not separate goal-orientedness items and achievement items by means of PCA. Achievement is one of the 10 original value types identified by Schwartz (1992) and is situated in the self-enhancement quadrant of his value model (see Figure 1.2). Therefore, we expected that goal-orientedness would also be located in the self-enhancement quadrant. Instead, goal-orientedness constituted a third bipolar factor together with hedonism.

Schwartz (1992) located hedonism between achievement and stimulation in his circumplex value model because it was hypothesized to share elements of both self-enhancement and openness to change. However, the uncertain position of hedonism was reflected by the fact that, until recently, the theory did not specify whether hedonism was more related to self-enhancement or openness to change. Although Schwartz and Boehnke (2004) suggested that hedonism was more related to openness to change, its position remains uncertain to date (Schwartz, in press). The introduction of a third value dimension, particularly for work and organizational values, could be an alternative explanation for this uncertain position.

We have given two conceptual explanations for the appearance of this third factor in Chapter 3 (i.e., the opposition between gratification and delay of gratification and the opposition between a short-term orientation and a long-term orientation). In addition to this, the results proposed in Chapter 4, 5, and 6 provided further reasons for existence of this factor because goal-orientedness and self-enhancement were

differentially related to the outcome variables. If both value types would be situated in the same spatial region of Schwartz' value model, similar relationships with outcome variables would be expected. For instance, for OCB as a single measure, we saw that people who valued self-enhancement reported lower levels of OCB, whereas people who valued goal-orientedness reported higher levels OCB. The same was true for perceived organizational values. Here, self-enhancement was negatively related to OCB and goal-orientedness corresponded with higher levels of OCB. These empirical results clearly demonstrated the conceptual and intrinsic difference between these two (higher-order) value types. Furthermore, the results also indicated the benefits of considering hedonism as a higher-order value, especially in relation with civic virtue.

For certain attitudinal outcomes, goal-orientedness also seemed to be an important *congruence* variable. More specifically, congruence between personal work values and perceived organizational values for goal-orientedness corresponded with higher levels of affective commitment, normative commitment, and overall job satisfaction. A possible explanation for this finding is that goal-orientedness could be an important value in work environments. Therefore, people who consider goal-orientedness as an important motivational goal for themselves, could fit well in an organization for which goal-orientedness is an important value as well. For hedonism, the correspondence between personal work values and perceived organizational values did not seem to be important in relation to the attitudes and behaviors studied in this dissertation.

In general, these combined results highlight the benefits of the application of our extended version of the Schwartz value model. Our findings about the relationships between individual outcome variables and both hedonism and goal-orientedness would otherwise not have been discovered.

A next theoretical implication concerns the importance of congruence effects compared to linear effects of work and perceived organizational values. Although congruence effects seemed to exist for attitudinal outcomes, they were mainly absent for the two behavioral outcomes. More specifically, our results indicated that value congruence was not significantly related to positive work behavior and OCB as a single measure. This was in contrast with our attitudinal outcomes, where we found

congruence effects for overall job satisfaction, affective commitment, and normative commitment. Even though congruence effects were significant for the attitudinal outcomes, we cannot deny the fact that our overall results indicated that congruence effects were less important compared to linear effects in explaining variance in the outcome variables.

Finally, other theoretical contributions have already been discussed in relation to the four main objectives of this dissertation. They concern our attention to the call for more comparative research between different operationalizations of P-O fit (Chapter 4) and our research about potential consequences of individuals' fit at work; more particularly from the perspective of a comprehensive value model that is commensurate for work and perceived organizational values (Chapter 5 and 6).

PRACTICAL IMPLICATIONS

The first two practical implications are situated in the methodological field. Subsequently, two additional practical implications are discussed in the more general field of P-O fit research.

A first practical recommendation concerns the use of the Life, Work, and Organizational Values Survey (LWOVS). In Chapter 3, we have introduced this new survey for the measurement of life, work, and perceived organizational values. Although we have presented this survey mainly as an instrument to measure values in relation to P-O fit, this certainly does not have to be the only focus of interest. This value survey can be an appropriate questionnaire for practitioners who are interested in mapping the values of their department or organization. In addition, the survey is also suitable to measure the personal life and/or work values of their employees. As mentioned before, the LWOVS can be used to measure 11 lower-order and six higher-order value types that constitute the poles of three bipolar value dimensions. For our purposes, we chose to work with the higher-order value types. However, we believe it can also be useful for researchers and practitioners to focus on the lower-order value types, depending on their research interests. We are convinced that the

practical use of this value survey is enhanced as a result of this potential dual application.

Second, for the assessment of value congruence in supplementary P-O fit research, we recommend focusing on the fit between personal work values and perceived organizational values. This recommendation stems from the higher congruence found between these value structures. As discussed in Chapter 3, we are convinced that the third value dimension (i.e., goal-orientedness versus hedonism) is of particular importance in a work and organizational context. Focusing on the fit between personal life values and perceived organizational values can be more problematic, because of the lower congruence between both value domains for the third factor (i.e., for the lower-order value types).

Third, the results of this study have also implications for the use of P-O fit by organizational practitioners. According to Rynes, Brown, and Colbert (2002), the use of P-O fit for selection purposes appears to be on the increase. There has been a migration of P-O fit from its historical origins in the post-hire arena to pre-hire prescriptive use in personnel selection. However, there seems to be some cautiousness regarding this migration of P-O fit in personnel selection (see Arthur, Bell, Villado, & Doverspike, 2006). Although Hoffman and Woehr (2006) underlined this for the use of subjective and perceived measures of P-O fit because “both are self-reported and require respondent familiarity with the organizational value system” (p. 396), they did suggest the opposite regarding the use of objective measures of fit, because objective fit measures do not require respondent familiarity with organizational characteristics. Our results, however, do not endorse this proposition, there were no significant congruence effects between personal work values and the aggregated organizational values used to measure objective fit (see Chapter 4). Moreover, the congruence effects found for subjective fit were rather small compared to the linear effects of work and perceived organizational values and in general restricted to the attitudinal outcomes. Taken together, on the basis of previous research and the results obtained in this study, we recommend that organizational practitioners should exercise caution when using P-O fit to make pre-hire selection decisions. A recommendation that is supported by another issue: the rising awareness among corporations to promote organizational diversity (Richard, 2000).

Selecting individuals based on how similar they are to existing organizational members or on how well they fit with the organizational culture may be detrimental to organizations because the resulting homogeneous workforce may impede their ability to adapt to diverse or changing circumstances (Piasentin & Chapman, 2006; Schneider, 1987). Nevertheless, our results did indicate that fit is in particular related to attitudes of employees in organizations. Therefore, the use of P-O fit in organizations can be useful, however, limited to post-hire use, such as placement, career opportunities, etc. (see also Arthur et al., 2006).

A final practical implication stems from the strong linear relationships of perceived organizational values with attitudinal outcomes reported in Chapter 4 and 5. When self-transcendence and openness to change were perceived as typical organizational values, we found higher levels of overall job satisfaction, affective commitment, and normative commitment. The opposite was found for self-enhancement and conservation. Given these consistent results, we believe organizations could benefit from an open and humane-oriented organizational culture. For hedonism and goal-orientedness, we found similar, albeit less strong, results (i.e., both hedonism and goal-orientedness being positively related to satisfaction and commitment). As reported earlier, the relationships between perceived organizational values and behavioral outcomes were less pronounced. There, our findings suggest that practicing managers should focus in particular on personal values when trying to predict behaviors at work.

STRENGTHS, LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

The strengths of this dissertation are (a) the comprehensive and commensurate measurement of work and perceived organizational values; (b) the use of polynomial regression analysis instead of other methods of fit assessment (e.g., difference scores); (c) the use of a varied sample, comprising several organizations from three different sectors, in this way establishing not only the variability across people, but also across organizational settings; and (d) the attention for both attitudinal and behavioral outcomes in P-O fit research. We studied P-O fit in relation with individual

outcome variables that are of particular relevance in a work and organizational setting (job satisfaction, positive work behavior, organizational commitment, and OCB) (see meta-analyses of Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). For a detailed discussion of these strengths, we refer to the five main chapters of this dissertation.

The limitations of this study are also summarized to some extent and linked with possible suggestions for future research. A first limitation is that common method variance may be inflating the correlations between values and P-O fit and outcome variables. However, we do not believe that this was a large problem. Following the suggestions of Schwartz (1992), the mean of the value ratings of each individual was partialled out. In this way, acquiescence or the tendency to agree with statements regardless of content could not heighten the correlations among value ratings and outcomes. Moreover, Spector (2006) found that using self-report methodology – as applied here – is no guarantee of finding significant results, even with very large samples. In addition, Kristof-Brown et al. (2005) suggested that particularly direct assessments of perceived fit are more susceptible to common method bias compared to other measures like subjective fit.

This first limitation can be linked with the second limitation: the cross-sectional research design. This hinders the causal inferences regarding the relationship between values and P-O fit and the outcome variables. In this regard, we believe that longitudinal research linking values and P-O fit to various outcome variables could be an interesting line of future research. Doing this, researchers also have the opportunity to explore whether or not an individual's conceptualization of fit is susceptible to change. For example, how individuals evaluate their fit with an organization can depend largely on whether it is measured prior to organizational entry or after they have become organizational members (Piasentin & Chapman, 2006). Furthermore, such a temporal separation of measurement is also beneficial for the prevention of common method variance (see Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Third, although the variability of our sample is considered as a strength, all organizations and respondents were still from the same culture (Flanders in

Belgium). This is relevant, because values can also be used to characterize and distinguish between cultures (e.g., Schwartz, 1994). Cultural values represent shared ideas about what is good, right, and desirable in a society and they are the bases for the specific norms telling people what is appropriate in various situations (Schwartz, 1999). Therefore, an important question is to what extent the results of this study are influenced by prevailing cultural value priorities. In future studies, it could be interesting to add new organizations coming from different cultures or national groups to our sample. In this way, it will be possible to test the generalizability of our results in other cultural groups. Moreover, in addition to the confirmation of our value model across two levels of analysis (see Appendix D of Chapter 3), adding new cultural groups will also allow for the possibility of testing the value model on a third level: the cultural level.

In addition to these suggestions for future research based on certain limitations, other recommendations can be made. For instance, from a theoretical perspective, comparing our value model with other established value models and theories of organizational culture is desirable. The value structure proposed in this dissertation was based on the value theory of Schwartz (1992). However, other theories have been very prevalent in the literature. Important examples are Hofstede's theory about values and cultural dimensions (Hofstede, 1980, 2001), the Organizational Culture Profile (Chatman, 1991; O'Reilly, Chatman, & Caldwell, 1991), and the competing values approach (Quinn, 1988; Quinn & Rohrbaugh, 1983). The question is to what extent the value model proposed in this dissertation and these other models can be unified or not.

Future research about the three-dimensional value model presented in Chapter 3 is also necessary. Specifically, the third dimension that emerged above the two already identified by Schwartz (1992) needs further attention. What is the exact meaning and nature of this third dimension? This question can only be answered through extensive research that links various individual and organizational characteristics with this value dimension. For example, is goal-orientedness perceived as more important in organizations with a clear mission statement (given the fact that previous studies already indicated that general corporate level goals are often specified in the content of mission statements; see Bart, 1999)? Or from another theoretical perspective: can

self-determination theory and the distinction between intrinsic and extrinsic motivations (Deci & Ryan, 1985) provide further evidence for the existence of a third bipolar value factor in our model? According to Kasser (2002), a self-determination theory of values must recognize that some values are conducive to growthful, intrinsically motivated actions and others tend to prompt extrinsically motivated behaviors focused on rewards and people's praise. In other words, values can be distinguished on whether they are intrinsic or extrinsic. A possible hypothesis could be that goal-orientedness values are intrinsic because they are congruent with actualizing and growth tendencies, whereas hedonism values are extrinsic because of their focus on immediate rewards.

In addition, although the focus of this dissertation was on individual-level measurement, we briefly tackled the issue of cross-levels measurement, where the organization as a whole is considered as unit of analysis. In Appendix D of Chapter 3, we examined the value structure on organizational level and in Chapter 4, we made the comparison between subjective and objective fit (where we aggregated the individual perceptions of the organizational values). However, it is clear that our studies are distinct from research that aggregates individuals' fit to the unit level (e.g., Ostroff, 1993). The outcome variables we addressed are all individual-level criteria (e.g., job satisfaction), which is in contrast with aggregate-level studies that predict unit-level (or organizational level) outcomes (e.g., organizational effectiveness). This need to differentiate aggregate-level studies from others was recently underscored by Kristof-Brown et al. (2005), because fit-outcome relationships can differ when they are assessed at higher levels of analysis (e.g., Ostroff & Rothausen, 1997). Therefore, in concordance with Kristof-Brown et al. (2005), we are convinced that more research is needed which addresses levels of analysis issues in relation to fit.

Subsequently, future studies could also consider multilevel analysis, because data structures in person-environment (P-E) fit research are often hierarchical (e.g., Molleman, Nauta, & Jehn, 2004). This was also the case in the present dissertation, in which the population consisted of organizations and respondents within these organizations. In other words, the respondents in our data set were nested in organizations. Therefore, it could be interesting to reanalyze our data with this statistical procedure. However, despite the fact that we already disposed of a sample

of 26 organizations in the outcome studies (Chapter 4, 5, and 6), this is still considered as marginally sufficient (Snijders, 2003). As a consequence, more organizations should be added to our sample before applying multilevel analysis.

In addition to this, we suggest a continued attention for the variability between organizations and sectors. After all, this variability is a key requirement in P-O fit research (Schneider, 2001; van Vianen, 2001). In this study, special attention has been given to this issue, but nevertheless, we still had an overrepresentation of organizations from the public services. As a consequence, more organizations from the private sector are desired.

Finally, in accordance with Piasentin and Chapman (2006), it would be useful to examine the role of P-O fit within the broader framework of P-E fit. This was also emphasized by Kristof-Brown et al. (2005). In their meta-analysis, they found that various types of fit have influence on attitudes and behavior. Therefore, we suggest that future research incorporates other forms of P-E fit within the same study design (e.g., person-job and person-group fit). Rather than a continued focus on P-O fit, comparative research is called for.

FINAL CONCLUSION

In this dissertation, we have constructed a new comprehensive and commensurate value framework for work and perceived organizational values, based on the value theory of Schwartz (1992). More specifically, in a work and organizational context, we found 11 relevant value types that constitute six higher-order value types. To measure these values, a new survey – which is an adaptation of the Schwartz Value Survey – was developed. The 50-item LWOVS is a psychometrically sound value questionnaire that can be used to measure life, work, and organizational values in a comprehensive way. Furthermore, as the value structures of work and perceived organizational values are commensurate, this instrument can also be used to measure supplementary P-O fit.

Concerning the measurement of supplementary P-O fit, we suggest considering the use of subjective measures of fit, especially in relation to attitudinal outcomes. Our results indicated the importance of values as potential antecedents of attitudes and behaviors. In addition, the importance of value congruence for particularly attitudinal outcomes was also highlighted.

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NEDERLANDSE SAMENVATTING

DE UITBREIDING VAN SCHWARTZ' WAARDENTHEORIE VOOR HET BEOORDELEN VAN SUPPLEMENTAIRE PERSOON-ORGANISATIE FIT

Persoon-organisatie (P-O) fit wordt gedefinieerd als de compatibiliteit tussen mensen en organisaties die voorkomt wanneer: (a) tenminste één entiteit voorziet in wat de andere nodig heeft, of (b) ze gelijkaardige fundamentele karakteristieken delen, of (c) aan beide voorwaarden is voldaan (Kristof, 1996). Het eerste wordt complementaire fit genoemd en het tweede supplementaire fit. Complementaire fit komt zowel voor wanneer de organisatie voorziet wat een medewerker nodig heeft (loon, goede arbeidsvoorwaarden,...) als omgekeerd, wanneer de medewerker voorziet wat de organisatie nodig heeft (bepaalde kennis, vaardigheden,...). Supplementaire fit daarentegen, veronderstelt dat dezelfde psychologische karakteristieken kunnen worden gevonden voor zowel het individu als de organisatie. De psychologische concepten die daarvoor bij uitstek in aanmerking komen, zijn waarden. Zowel binnen het onderzoek naar individuele verschillen als binnen het onderzoek naar het functioneren van organisaties spelen waarden een belangrijke rol. Het ligt dan ook voor de hand om de mate waarin beide entiteiten dezelfde waarden belangrijk vinden, te gebruiken als een indicator van de fit tussen persoon en organisatie. P-O fit wordt verondersteld verregaande gevolgen te hebben voor zowel individuen als organisaties, gaande van de rekruteringsfase tot lange termijn consequenties (zie Kristof, 1996; Kristof-Brown, Zimmerman, & Johnson, 2005).

De hoofddoelstelling van dit doctoraatsproefschrift was het uitbreiden van de waardentheorie van Schwartz (1992) voor het beoordelen van supplementaire P-O fit. Vanuit de literatuur is er een oproep naar een meer comprehensieve en commensurate benadering van het waardendomein in onderzoek naar supplementaire P-O fit (Kristof-Brown et al., 2005). Aangezien de comprehensiviteit van Schwartz' waardentheorie uitvoerig werd bestudeerd en aangetoond in cross-cultureel onderzoek (zie Schwartz, 1992, in press; Schwartz et al., 2001) en

aangezien deze waardentheorie reeds vaak werd aangewend in een variëteit aan psychologisch onderzoek (e.g., Rice, 2006; Ryckman & Houston, 2003) vormt ze de rode draad doorheen dit proefschrift.

Deze dissertatie is opgebouwd uit twee grote delen. In het eerste deel (Hoofdstuk 2 en 3) werd een nieuw waardenmodel voorgesteld om levens-, werk-, en organisatiewaarden te meten. Er werd aangetoond dat dit model een comprehensieve benadering is van het waardendomein en bovendien werd ook de commensurabiliteit ervan bevestigd. Het tweede deel (Hoofdstuk 4, 5, en 6) richtte zich op toepassingen van dit model voor het meten en beoordelen van supplementaire P-O fit.

In Hoofdstuk 2 werd de conceptuele comprehensiviteit van het waardenmodel van Schwartz getest. Items van 42 waardenvragenlijsten werden gecategoriseerd volgens de 10 types van Schwartz (1992). Uit deze studie bleek een groot deel van de 1578 onderzochte items te passen binnen deze 10 types. Toch waren er aanwijzingen om het model uit te breiden binnen een werk- en organisatiecontext. Uiteindelijk werden 15 waardentypes voorgesteld: altruïsme*, conformisme*, doelgerichtheid, hedonisme*, macht*, materialisme, prestatie*, prestige, relaties, sociale betrokkenheid, stimulatie*, traditie*, universalisme*, veiligheid*, en zelfbepaling*.¹

Hoofdstuk 3 bouwde verder op de resultaten van Hoofdstuk 2. Eerst werd onderzocht welke waardentypes weerhouden konden worden na empirische verificatie. Uiteindelijk werden 11 types behouden (conformisme, doelgerichtheid, hedonisme, macht, materialisme, natuur (afgeleid uit universalisme), prestige, relaties, sociale betrokkenheid, stimulatie, en veiligheid) die konden gestructureerd worden volgens drie bipolaire dimensies: zelfverheffing versus zelftranscendentie, openheid voor verandering versus behoud, en hedonisme versus doelgerichtheid. De polen van deze drie dimensies vormen bijgevolg zes hogere-orde waardentypes. De eerste twee dimensies werden reeds uitvoerig beschreven door Schwartz (1992), de derde dimensie was nieuw en bleek vooral voor te komen bij werk- en organisatiewaarden.

¹ Waardentypes gevolgd door een sterretje (*) behoren tot het originele model van Schwartz (1992).

In dit hoofdstuk werd ook de commensurabiliteit (de vraag of de drie waardendomeinen dezelfde structuur vertonen) van levens-, werk-, en organisatiewaarden onderzocht. Voor werk- en organisatiewaarden vonden we een zeer hoge congruentie voor de drie dimensies. Voor levenswaarden was er een afwijking voor de derde dimensie. Hoewel deze afwijking heel relevant kan zijn voor waardenonderzoek in het algemeen, was deze minder belangrijk in deze studie aangezien de focus in de volgende hoofdstukken de congruentie tussen werk- en organisatiewaarden betrof. Tenslotte werd in Hoofdstuk 3 de Life, Work, and Organizational Values Survey (LWOVS) voorgesteld, een waardeninstrument bestaande uit 50 items voor het meten van waarden op een comprehensieve en commensurate manier. Deze vragenlijst kan gebruikt worden voor het meten van zowel de 11 lagere-orde als de zes hogere-orde waardentypes.

De empirische studies beschreven in de volgende hoofdstukken waren gebaseerd op de zes hogere-orde waardentypes. Verder werd gebruik gemaakt van polynomiale regressie analyse, een methode voorgesteld door Edwards (1993, 2002) voor het bepalen van de relatie tussen waarden, hun congruentie, en de outcomevariabelen.

In Hoofdstuk 4 werd onderzocht hoe twee strategieën voor het meten van supplementaire P-O fit (subjectieve en objectieve fit) gerelateerd zijn aan attitudes en gedrag. Bij subjectieve fit wordt gekeken naar de congruentie tussen de waarden van het individu en zijn of haar perceptie van de waarden van de organisatie, terwijl bij objectieve fit gekeken wordt naar de congruentie tussen de waarden van het individu en een objectieve meting van de organisatiewaarden (in dit geval, de geaggregeerde score van de percepties van de organisatiewaarden van andere leden van de organisatie) (Kristof-Brown et al., 2005). Verschillende auteurs hebben gewezen op de nood aan dergelijk vergelijkend onderzoek (e.g., Cable & DeRue, 2002; Hoffman & Woehr, 2006). De keuze voor een attitudinale (jobsatisfactie) en een gedragsoutcome (positief werkgedrag) was gebaseerd op suggesties van Kristof (1996). Onze resultaten toonden aan dat subjectieve fit sterker gerelateerd is aan de attitudinale outcome dan objectieve fit. Dit is echter niet het geval voor de gedragsoutcome, waar geen significante verschillen tussen subjectieve en objectieve fit werden gevonden. Het aggregeren van subjectieve percepties van organisatiewaarden om objectieve P-O fit te meten geeft een onderschatting van het

belang van organisatiewaarden, vooral wat betreft de attitudinale outcome. Verder werden alleen significante congruentie-effecten gevonden bij subjectieve fit met betrekking tot jobsatisfactie. Blijkbaar zijn vooral lineaire effecten van belang, en in mindere mate congruentie-effecten, wanneer waarden gelinkt worden aan jobsatisfactie en positief werkgedrag.

Hoofdstuk 5 en 6 zijn empirische toepassingen van het waardenmodel voorgesteld in Hoofdstuk 3. In Hoofdstuk 5 werd voor een attitudinale outcome gekozen (organisatiebetrokkenheid) en in Hoofdstuk 6 werd voor een gedragsoutcome gekozen (contextuele prestatie). De resultaten van Hoofdstuk 5 toonden het belang aan van persoonlijke werkwaarden en gepercipieerde organisatiewaarden als potentiële antecedenten van organisatiebetrokkenheid. Vooral affectieve en normatieve betrokkenheid waren sterk gerelateerd aan waarden. Voor continue betrokkenheid was dit minder het geval. Daarnaast werd ook aangetoond dat P-O fit of waardencongruentie gerelateerd is aan affectieve betrokkenheid. Voor de andere twee vormen van organisatiebetrokkenheid speelde waardencongruentie weinig tot geen rol. De verschillende invloed van diverse waarden op verschillende vormen van organisatiebetrokkenheid, toonde het belang aan van een comprehensief waardenmodel bij onderzoek naar supplementaire P-O fit. Een gelijkaardig onderzoek werd voorgesteld in Hoofdstuk 6. Zowel voor contextuele prestatie als algemeen construct, als voor drie subtypes (bereidheid tot helpen, participatie, en sportief gedrag) werden vooral relaties gevonden met persoonlijke werkwaarden. Gepercipieerde organisatiewaarden en waardencongruentie waren minder sterk gerelateerd aan contextuele prestatie.

In Hoofdstuk 7 werd tenslotte ingegaan op theoretische en praktische implicaties van deze studie. Bovendien werden sterktes, zwaktes, en suggesties voor toekomstig onderzoek besproken.

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