

# **DOCTORAL THESIS**

Title UNDERSTANDING THE MOTIVATIONAL MECHANISM OF

**VALUE CONGRUENCE** 

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# Understanding the motivational mechanism of value congruence: A PhD thesis based on three connected papers

By

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#### **Preface**

This thesis is submitted in fulfillment of the requirements for the PhD (Doctor of Philosophy) in Management Sciences at the Future of Work Chair in ESADE (Escuela Superior de Administración y Dirección de Empresas) business school according to the rules of getting PhD degree from Ramon Llull University (URL). This thesis is in the format of "Monograph based on articles" in which "PhD candidates may present a monograph whose central chapters are derived from articles that have not all been published. The journal or conference where each respective chapter is to be published must be indicated. The thesis should have an introduction and general conclusions that justify the coherence and unity of the work done."

This thesis contains three papers that are written by the defendant during the PhD candidate research period. Among them, paper #1 is titled as "Value congruence: Concept, review, and future directions". It is currently in process of review and submission to a journal, and in the meanwhile will be published as an ESADE Working paper series. Paper #2 is titled as "The relationship between value incongruence and individual and organizational well-being outcomes: An exploratory study among Catalan nurses". It has been submitted to and accepted by the "Journal of Advanced Nursing". (Online ISSN: 1365-2648, The DOI number of the paper is: 10.1111/j.1365-2648.2012.06045.) "Journal of Advanced Nursing" an ISI impact factor journal. Paper #3 is titled as "The motivational mechanism of value congruence: A conceptual and empirical exploration using the self-concept based theory". It will

be submitted to the journal of "Management and Organization Review" (an ISI impact factor journal) during or after the defense of this thesis. The defendant is the leading author of all three papers included in this thesis and the coauthors are either the thesis supervisor (Simon L. Dolan) or colleagues in the Future of Work Chair (Rebekka Vedina, Scott Moodie) or scholars with whom the defendant collaborates outside of ESADE (Shay S. Tzafrir, Wei Hu). All co-authors have been notified and have agreed to include these papers in the defendant's doctoral thesis.

The central and common theme of this thesis is derived from these three papers. Naturally, some theoretical arguments and especially concept definitions may seem repetitive in Chapters 2, 3, and 4. Nonetheless, each paper/chapter has a different focus, design, sample characteristics (in the case of empirical study) and country. An effort has been made to minimize redundancies and make the thesis logical and coherent to ensure a common thread.

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#### 1: Introduction

#### 1.1 Research question

Value congruence means the compatibility of work values within the organization (Edwards & Cable, 2009; Meglino & Ravlin, 1998; Verquer, Beehr, & Wagner, 2003). It is usually treated as the compatibility of work values between individual to the organization (Erdogan & Bauer, 2005), although it can also mean compatibility of work values between coworkers within a working team (Adkins, Ravlin, & Meglino, 1996), between subordinates and their supervisor (Brown & Trevino, 2009), and between job applicant and the interviewer (Cable & Judge, 1997), etc. Value congruence is an important part of the Person-Organization fit (P-O fit) literature (Kristof-Brown, Zimmerman, & Johnson, 2005; Verquer et al., 2003) and hence is an interactional model (Chatman, 1989; Schneider, 1983; Terborg, 1981). The basic premise of value congruence is that when work values are shared within the organization, it will lead to optimum individual and organizational outcomes such as positive job attitudes and levered performance. Those positive effects are beyond the sole or additive effects of individual or organizational values. Thus, it is argued that it is not about what values do the employees possess or what values does the organizational culture emphasize, it is the joint effects of those values that matter.

Different researchers from different theoretical backgrounds have long recognized the importance of shared values within the organization. For example, deemed organizational culture as a way of social control (O'Reilly & Chatman, 1996), shared

value is defined as a major component of the organizational culture; shared values between subordinates and leaders is also an important part of the transformational leadership (Bass & Avolio, 1993) and charismatic leadership (Shamir, House, & Arthur, 1993); organizational selection and socialization literature (Schneider, 1987; Schneider, Goldstein, & Smith, 1995) also recognize the importance of value congruence and see it leading to organizational homogeneity, etc. Inspired by these various theoretical backgrounds and considered value congruence mainly as a positive phenomenon within the organization, interested organizational researchers conducted many theoretical and empirical studies on the subject and have made value congruence a prolific field of research in the previous three decades (Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Kristof, 1996; Verquer et al., 2003).

Empirical results of the extant literature generally support the positive effects of value congruence on employees' work attitudes and behaviors. It has been found that value congruence is positively related to job attitudes such as job satisfaction (Verquer et al., 2003), organizational commitment (Finegan, 2000), organizational identification (Cable & DeRue, 2002), and negatively related to turnover intention (van Vianen, 2000), and burnout (Siegall & McDonald, 2004). Also, value congruence has been found to positively relate to job performance and organizational citizenship behavior (Hoffman & Woehr, 2006).

As noted (Edwards & Cable, 2009), although the extant literature offers theoretical explanation on **why** value congruence has those positive effects, those explanations

are mostly speculative in nature. It is proposed by many researchers from various theoretical backgrounds on how exactly value congruence has its effects. For example, it is proposed that because values are the basic predispositions of human behavior, people who share similar values will have similar ways of receiving, processing, and transmitting information and thus a similar way of communication; similar ways of prioritizing among choices and thus a similar goal; similar ways of approaching others and thus a friendly and trusty behavior orientation. Those easy communication, coordinated actions, and friendly environment will render positive attitudes and behavior. The problems of those claims are threefold: firstly, they are mostly speculative and have not been empirically tested; secondly, those explanations are from various theories and thus not coherent; and thirdly, those explanations are only focusing on the social functions of value congruence, and are neglecting how value congruence may affect the individual's mind set, in other words, the motivational mechanisms of value congruence are not mentioned.

To my knowledge, there is only one study that tried to understand the process of value congruence's effect. It is proposed that value congruence literature will benefit from clarifying, synthesizing, and testing those theoretical claims aforementioned (Edwards & Cable, 2009). Edwards and Cable (2009) reviewed the various explanations and offered four mechanisms on how value congruence works, namely communication, predictability, interpersonal attraction, and trust. Empirically, they found that their outcomes are explained primarily by trust, followed by communication, and to a lesser extent, interpersonal attraction. In the end of their

paper, they suggested future research to investigate more on the effect process of value congruence because there might be other mechanisms. Although they theoretically synthesized and empirically tested those effect processes, it has to be pointed out that their approach is to integrate and synthesize existing theoretical explanations other than offering a new theoretical explanation; their focus is to see which theory applies best other than offering a coherent theoretical process; and their chosen mediating variables are social oriented other than focusing on the individual mind set or motivational factors.

This thesis is another attempt to understand the process of value congruence's effect. In other words, why value congruence works? Different from Edwards and Cable's work (2009), I applied a coherent theoretical approach to understand the motivational mechanism of value congruence's effect. That is, I used only self-concept based theory to understand and explain the effect process of value congruence. By doing this, this thesis has two assumptions.

Firstly, beyond the "social glue" function of culture to integrate social relationship and coordinate social activity, another function of culture is being the "self-definition" reference of individuals within the culture (Leonard, Beauvais, & Scholl, 1999; Shamir, 1991). Values help individuals to form self-definition and furthermore, self-identity. This self-definition function is an "individual" mechanism of organizational culture that explains the effect process of value congruence, paralleling the "social" mechanisms such as trust identified by Edwards and Cable. So, by

incorporating the self-definition function of values, we will add the "individual mind set" upon the "social relationship" and "behavior orientation" as discussed by Edwards and Cable (2009). We will be able to examine other mediators as they called in the end of their paper.

Secondly, I am using a single and coherent theoretical approach to understand the motivational mechanism of value congruence' effect. Although self theory has been referred in the value congruence research, it has not been identified and established as the motivational mechanism to explain its process. By refereeing to self-concept theory, this thesis will not only have a much more coherent understanding of the motivational process, it will also add the self-concept based theory to the current theoretical understandings of value congruence. We will have more perspectives to investigate the phenomenon of value congruence. A theoretically coherent and empirically tested motivational mechanism on how value congruence affects outcomes will not only clarify how value congruence actually works, but also provide us with the opportunities of choosing appropriate outcome variables. Given the abundance of empirical results and the clearly "muddy" condition of the extant literature (see Chapter 2), analyzing theoretically and testing empirically the process of value congruence's effect is in need for the field to develop further. Thus, the appropriateness of using self-concept based theory in the context of value congruence is theoretically proposed and empirically tested in this thesis, although to what extent this theory adds to the current debate is not clear yet in this stage. With the discussion

of chapter 3 and 4, I believe this theory is a useful perspective adding to the extent literature.

### 1.2 Theoretical approach

Different from those "social glue" mediators and theories as suggested above, the self-concept based theory is about the "individual" who seeks meaning in the organizational context. The theory was originally developed to overcome the limitations of "hedonistic" theories of motivation (Shamir, 1991). It was suggested that those motivation theories such as need theory, social comparison theory, expectancy theory, or goal-setting theory share some shortcomings such as too individualistic oriented; biased toward strong situations; emphasis on explanation and prediction on discrete behaviors, limited grasp on intrinsic motivation; and exclude motivational factors such as values and morals. Shamir proposed that a self-concept based theory of motivation can respond to those shortcomings and provide us with a boarder perspective on human work motivation. He assumed that individuals form a self-concept based on the interaction with their environment and this self-concept will influence their further interactions with the environment. This self-concept based motivation is another motivation working beyond the pragmatic and calculative nature of motivation. The self-concept of individual is partially formed by the knowledge, ability, skills, values, power, achievement, and position of the individual. Self-esteem, self-worth, and social identify are important elements of the self-concept (Shamir et al., 1993). When people from self-concept, their attitudes and actions are consistent with their self-concepts (self-consistency), and they have the tendency to strengthen

their self-concepts (self-strengthen). This self-concept theory is used to explain motivation in the context of work organization such as charismatic leadership (Shamir et al., 1993) and organizational support (Chen, Aryee, & Lee, 2005). It is proposed that self-concept theory can explain general work motivations especially in those situations when "calculative" motivations are not working well and when values or morals are involved. It can explain collective oriented motives such as sacrifice for the collective good.

The usage of self-concept based theory in the explanation process of value congruence is legitimate. Firstly, it is proposed that self-concept based theory is especially useful in the context of involving values. It is proposed that "self-concept based theory provides a potential link between management as symbolic action, organizational culture, and employee motivation." (Shamir, 1991, P 420). Secondly, self-concept based theory is useful in the context of non-calculative motivation. As will be mentioned in chapter 4, although some propose value congruence can fulfill psychological needs, value congruence is usually deemed as "supplementary", which is not calculative. And thirdly, for the individual to form a self-concept within the organization, environmental clues that provide feedback to the individual are crucial. Thus, the self-concept based theory is also an interactional model. In this regard, I see organizational culture as part of the environmental clues for individuals to form self-concept within the organization. Thus, value congruence and self-concept are all discussing the interaction and learning process.

Based on above reasons, I will use self-concept based theory to understand the motivational mechanisms behind value congruence's effect. To be specific, I used two approaches to understand how self-concept based theory can be applied in the context of explaining the motivational mechanism of value congruence's effect in two separate papers. Firstly in paper 2, I used the self-concept based theory as an underlying theory to explain the effect process. Self-concordance theory and conservation model were used as representations of self-concept to explain the reasons of value congruence's effect on burnout. Secondly, in paper 3, I used variables directly derived from the self-concept based theory to test my theoretical hypotheses. I used organizational based self esteem and organizational identification to be the variables derived from self-concept theory to test their mediation effect on the attitudinal outcomes including burnout.

#### 1.3 The thesis

The following parts of this thesis are organized as follows: firstly in Chapter 2, paper 1, "Value congruence: Concept, review, and future directions", is used as a literature review to understand the concept of value congruence and the theoretical developments and future directions of extent literature. In the following Chapter 3, paper 2, "The relationship between value incongruence and individual and organizational well-being outcomes: An exploratory study among Catalan nurses", was reported. And in Chapter 4, paper 3, "The motivational mechanism of value congruence: A conceptual and empirical exploration using the self-concept based theory" is reported. Chapter 5 makes general conclusions of the entire thesis,

discusses its contributions and limitations, and points out the directions for further theoretical developments as well as suggestions for practitioners. Appendixes and references are reported in each chapter, as well as in the end of the entire thesis.

#### **References of Chapter 1**

- Adkins, C. L., Ravlin, E. C., & Meglino, B. M. 1996. Value congruence between co-workers and its relationship to work outcomes. *Group & Organization Management*, 21(4): 439-460.
- Bass, B. M., & Avolio, B. J. 1993. Transformational leadership and organizational culture. *Public administration quarterly*, 17(1): 112-121.
- Brown, M. E., & Trevino, L. K. 2009. Leader-follower values congruence: Are socialized charismatic leaders better able to achieve it? *Journal of Applied Psychology*, 94(2): 478-490.
- Cable, D. M., & DeRue, D. S. 2002. The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87(5): 875-884.
- Cable, D. M., & Judge, T. A. 1997. Interviewers' perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(4): 546-561.
- Chatman, J. A. 1989. Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review*, 14(3): 333-349.
- Chen, Z. X., Aryee, S., & Lee, C. 2005. Test of a mediation model of perceived organizational support. *Journal of Vocational Behavior*, 66(3): 457-470.
- Edwards, J. R., & Cable, D. M. 2009. The value of value congruence. *Journal of Applied Psychology*, 94(3): 654-677.
- Erdogan, B., & Bauer, T. N. 2005. Enhancing career benefits of employee proactive personality: The role of fit with jobs and organizations. *Personnel Psychology*, 58(4): 859-891.
- Finegan, J. E. 2000. The impact of person and organizational values on organizational commitment. *Journal of Occupational & Organizational Psychology*, 73(2): 149-169.

- Hoffman, B. J., & Woehr, D. J. 2006. A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68(3): 389-399.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. 2005. Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2): 281-342.
- Kristof, A. L. 1996. Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1): 1-49.
- Leonard, N. H., Beauvais, L. L., & Scholl, R. W. 1999. Work motivation: The incorporation of self-concept-based processes. *Human Relations*, 52(8): 969-998.
- Meglino, B. M., & Ravlin, E. C. 1998. Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24(3): 351-389.
- O'Reilly, C. A., & Chatman, J. A. 1996. Culture as social control: Corporations, cults, and commitment. In B. M. Staw, & L. L. Cummings (Eds.), *Research in organizational behavior*, Vol. 18: 157-200. Greenwich, Connecticut: Elsevier Science/JAI Press.
- Schneider, B. 1983. Interactional psychology and organizational behavior. *Research* in *Organizational Behavior*, 5: 1-31.
- Schneider, B. 1987. The people make the place. *Personnel Psychology*, 40(3): 437-453.
- Schneider, B., Goldstein, H. W., & Smith, D. B. 1995. The ASA framework: An update. *Personnel Psychology*, 48(4): 747-773.
- Shamir, B. 1991. Meaning, self and motivation in organizations. *Organization Studies*, 12(3): 405-424.
- Shamir, B., House, R. J., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4(4): 577-594.
- Siegall, M., & McDonald, T. 2004. Person-organization value congruence, burnout and diversion of resources. *Personnel Review*, 33(3): 291-301.
- Terborg, J. R. 1981. Interactional psychology and research on human behavior in organizations. *Academy of Management Review*, 6(4): 569-576.

- van Vianen, A. E. M. 2000. Person-organization fit: The match between newcomers' and recruiters' preferences for organizational cultures. *Personnel Psychology*, 53(1): 113-149.
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. 2003. A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3): 473-489.

## **2: Paper 1**

# Value congruence in organizations: Literature review, theoretical perspectives,

#### and future directions

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Value congruence in organizations: Literature review, theoretical perspectives,

#### and future directions

#### 2.1 Abstract

Extant literature on value congruence is fragmented due to different methodological treatments and theoretical perspectives. Proposing a typology of the value congruence concept, this paper reviews several key themes in value congruence research including staffing, socialization, leadership, job attitudes, performance, and others. By reviewing related antecedents and outcomes, discussing underlying theoretical perspectives, and highlighting future directions, this paper integrates value congruence research into a comprehensive framework. Managerial implications are also discussed where relevant.

#### 2.2 Key words

Fit; Interactional psychology; Organizational culture; Person-organization fit; Value congruence.

#### 2.3 Introduction

With its purported positive effects on employee attitudes and behaviors (Hoffman & Woehr, 2006; Verquer et al., 2003), value congruence is a prolific field of research. It has been studied from different angles such as staffing and socialization (e.g., Cable & Judge, 1997), job attitudes and performance (e.g., O'Reilly, Chatman, & Caldwell, 1991), and leadership (e.g., Brown & Trevino, 2006). Despite the abundant findings,

different methodological treatments and theoretical perspectives have made value congruence research fragmented, leading to confusion on the nature of the concept (Ostroff, Shin, & Kinicki, 2005), yielding perplexing empirical results (Kristof-Brown et al., 2005), and making the comparison and integration of different studies difficult. Given the research and practical importance of the field, researchers and practitioners can benefit from clarifying the concept, synthesizing the literature, discussing the theoretical development, and highlighting research directions. This paper aims to satisfy these four purposes.

The existence of several qualitative and quantitative reviews (Arthur, Bell, Villado, & Doverspike, 2006; Edwards, Cooper, & Robertson, 1991; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Kristof, 1996; Meglino & Ravlin, 1998; Piasentin & Chapman, 2006; Verquer et al., 2003) makes the necessity of another systematic qualitative review and its contribution to be clarified. Firstly, following previous research (Ostroff et al., 2005; Piasentin & Chapman, 2006), we propose a value congruence typology and posit it as a multi-type, multi-level, and multi-dimensional concept. Secondly, we incorporated person-person and person-group studies into our review whereas previous work has mainly focused on person-organization value congruence (e.g., Arthur et al., 2006; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Kristof, 1996; Verquer et al., 2003). Thus, we provide wider coverage of the literature. Thirdly, when identifying and reviewing the literature, we focuse on the underlying theoretical perspectives of each theme and how the respective research

contributes to those theoretical perspectives. Responding to the call for mechanistic research on value congruence (Edwards & Cable, 2009; Edwards & Shipp, 2007), a theoretical focus will help us better understand the reason for value congruence's effect and choose appropriate variables to study. Fourthly, we propose an integrative framework to summarize the current findings and highlight future directions of research. The proposed typology makes our paper different from previously published reviews.

#### 2.4 What is value congruence

We define value congruence as the compatibility of work values between the focal person and other organizational entities such as supervisors, interviewers, coworkers, work group, and the entire organization (Chatman, 1989; Edwards & Cable, 2009; Kristof, 1996). This definition is different from using value congruence to substitute the person-organization fit (P-O fit) (e.g., De Cooman et al., 2009). Firstly, value congruence can be the fit between personal work values and those at three different levels, namely those of other individuals, the group, and the organization, whereas P-O fit only refers to the organizational level. Secondly, value congruence only refers to value fit, whereas P-O fit can address other characteristics. And thirdly, value congruence is mainly treated as supplementary fit, whereas P-O fit can be supplementary, complementary or both (Kristof, 1996; Muchinsky & Monahan, 1987).

Different ways of measurement have also yielded different types of value congruence in the literature. Direct and indirect methods are used. Direct measurement, or perceived value congruence, exams to what extent the focal person thinks his/her personal values and the other entity's values are congruent. Contrarily, indirect measurement uses commensurate dimensions to measure the values of both, and then uses an algorithm to assess value congruence. Indirect measurement includes subjective and objective approaches. The difference is whether the other entity's values are measured from the focal person's perception or from that of other entities. Some researchers posit that objective value congruence is the real, "true score" of value congruence (Judge & Cable, 1997; Ravlin & Ritchie, 2006), while others claim that indirect value congruence really matters (Edwards & Cable, 2009; Finegan, 2000). Discussions on different types of value congruence are not settled in the literature (Dineen, Ash, & Noe, 2002; van Vuuren, Veldkamp, de Jong, & Seydel, 2007). Meta analyses reveal that perceived measurement explains outcome variance better (Kristof-Brown et al., 2005; Kristof, 1996).

Figure 2.1 below integrates the different levels and types of value congruence to propose a typology of value congruence. Because of the complex nature of the concept, we recommend dedicating greater attention to the representation of the concept rather than stating it in general. We claim that the muddled condition of extant research partially comes from garbling different types and levels of value

congruence and reporting value congruence's effects in general while studying specific conceptual facets.

#### Insert Figure 2.1 about here

#### 2.4.1 Value dimension and contextualization

When using indirect measurement techniques, researchers are obliged to provide rationales for their choice of value content dimensions. However, most fail to do so. Arbitrarily selected dimensions are generally used without discussing their appropriateness for the specific research context. Choosing irrelevant content dimensions for a particular organizational context may lead to complicated relationships with outcome variables. As discussed further below, congruencies on different dimensions are related to outcomes differently (Amos & Weathington, 2008; Taris & Feij, 2001). Thus, we should treat value congruence dimensionally. Our argument parallels Edward's criticism regarding the use of profile similarity indices (Edwards, 1993) which do not differentiate between dimensions, and the promotion of polynomial regression (Edwards, 2002). We also propose that the arbitrary choice of content dimensions and not treating value congruence dimensionally are additional reasons is another reasons explaining the confused research.

#### 2.5 Theoretical perspectives, literature review, and future directions

#### 2.5.1 Methodology

Several principles were applied when incorporating relevant studies. We first searched major academic databases for key words including "value congruence", "value congruency", "value alignment", "P-O fit", "person-environment fit" (P-E fit), and "culture fit". We then went through the reference list of every paper for relevant citations. We also tracked prolific researchers. Instead of doing an exhaustive review, our focus was on theoretical perspectives and future directions. Thus, only published papers were reviewed.

Because each theme of value congruence research tends to have specific theoretical perspectives, we reviewed studies by different themes, which not only made the antecedents and outcomes of value congruence clear, but also made the discussion of underlying theoretical development easier. When reviewing each theme, we first introduced the theories referred to and then reviewed empirical results to see how those theories were confirmed or questioned. Research gaps and future directions were then highlighted based on those discussions. We use Figure 2.2 as an integrative framework to summarize the current findings and highlight future directions.

#### Insert Figure 2.2 about here

#### 2.5.2 Antecedents of value congruence

#### 2.5.2.1 Staffing

The Attraction-Selection-Attrition (ASA) Model (Schneider, 1987; Schneider et al., 1995) posits that job applicants will be attracted to and selected by those organizations whose values are similar. After entering, those employees whose values do not fit with the organizational values will either leave voluntarily or be removed by the organization. Thus, the organization will become homogeneous in terms of work values over time. The relative stability of personal values (Meglino & Ravlin, 1998) implies that staffing maybe the best way to achieve value congruence.

We first examine this from the perspective of job applicants. Billsberry (2007) examined the attraction proposition. He found that when person-vocation fit (P-V fit) was controlled, value congruence with the organization, department, or coworkers had no effects. He attributed this lack of effect to the fact that sampled students did not have sufficient and objective information about the organization's values. He posited that, when applying for a job, perhaps a vocational choice was made before an organizational choice; also, he argued that in order for value congruence to function in the application process, applicants needed proximity, exposure, and familiarity with organizational values. This assumption is also found in the ASA model. Contrarily to these findings, Cable and Judge (1996) found that job seekers' PPO was predicted by SPO, not by demographic similarity with organizational representatives. PPO

predicted both job choice intentions and employee work attitudes after controlling for the attractiveness of job attributes. Most of the effects of SPO on outcomes are mediated PPO. Also, Cable and Judge reported that job seekers gave far less emphasis on person-job fit (P-J fit) than P-O fit when making their job choice decisions. They also examined the importance of fit to individuals and the perceived job opportunities. They reported that job seekers who placed more emphasis on P-O fit in their job choice decisions were more likely to experience PPO, suggesting that P-O fit has different effects on different people. In a following study (Cable & Judge, 1997), the same authors reported that "actual value congruence", the congruence between the applicant's values and the interviewer's report of organizational values, predicted "perceived value congruence", the congruence between the interviewer's perception of applicants' values and organizational values, then predicted the interviewers' hiring recommendations and organizational hiring decisions, although the effects of "actual value congruence" on interviewer hiring recommendations and organizational hiring decisions were weak. They also reported that gender and the interviewer liking of the applicants predicted "perceived value congruence". In a later study, Carless (2005) found that perceived P-O fit (which contains elements of value congruence) during the pre-selection and mid-selection phases was positively related to attraction to the organization, but that it did not predict intentions to accept job offers during the midor end-selection phases or actual job acceptance. The author suggested that P-J fit tended to be more important to applicants during the recruitment process. In an attempt to examine the effect of giving job applicants feedback on P-O fit, one study (Dineen et al., 2002) found that OPO and P-O fit feedback were positively related to attractiveness in an experimental setting. They also found that PPO mediated this relationship; that P-O fit feedback, OPO, and the level of agreement with feedback interact in predicting attraction; P-O fit feedback, OPO, and self esteem interacted in predicting attraction; and that PPO did not mediate the three-way interaction's effect on attraction. Also, OPO and PPO led to organizational attraction during the job application and interview process, and PPO mediated the effects of OPO on attraction (Judge & Cable, 1997).

From the recruiter's perspective, C. L. Adkins, Russell and Werbel (1994) found OPP between applicants and recruiters to be related to general employability and perceived person-organization fit, but OPO between applicants and organizations was not related. An "invitation for a second interview" was predicted by general employability, which in turn was most predicted by OPP between applicants and recruiters. This implies that value congruence influences the personnel selection process in its later stage when the knowledge, skills, and ability fits are already fulfilled. This research suggested we should investigate the effect of value congruence in the selection process while paying detailed attention to the time factor. In their qualitative study to examine what constituted a recruiter's perception of applicant fit, Bretz, Rynes, and Gerhart (1993) did not find that value was part of the recruiter's consideration in the pre-hiring phase of P-O fit. They thought this might be because

the recruiters considered P-J fit before value fit when hiring college graduates; they also suggested that, in the pre-hire stage, values were perhaps very hard to identify through brief interviews and could not be accurately accessed. On the difference between P-J fit and value congruence, when values were used as the foundation for perceived P-O fit, recruiters could actually distinguish P-J fit and P-O fit (Kristof-Brown, 2000). Muchinsky and Monahan (1987) proposed that supplementary fit was more useful in predicting job attitudes while complementary fit was more useful in the context of personnel selection decisions. Another study proposed that P-J fit was suitable when the organization was seeking a transactional psychological contract, and P-O fit was suitable when the organization was seeking a relational psychological contract (Sekiguchi, 2007). Lastly, van Vianen (2000) found that during the selection process, SPP was related to organizational commitment and turnover intention on the concern for people value, but P-O fit was not related to them.

Except questioning the assumption that applicants or interviewers have enough information to understand each other's values, the ASA model is generally accepted by empirical studies. General findings in this theme are: applicants and recruiters will consider P-V fit and P-J fit before considering value congruence, though value congruence is an important factor in the later stage of staffing; value congruence tends to influence both the applicants' and recruiters' decisions; some contextual variables such as the importance of fit to the individual, the individual's self-concept, the

number of job opportunities, knowledge of the organizational values, and maturity of applicants moderate those relationships; and perceived value congruence tends to mediate the effects of objective and subjective value congruence. Research gaps in this theme are: Firstly, is it possible to fully understand the other party's values during the screening process given the limited time of interaction and sources of information? It is feasible that job applicants will display desired values based on their knowledge about the organizational culture. Organizations can also project a nice image of their culture that is different from their actual functioning culture. Understanding each other's values takes time and is mainly based on behavioral observation. This hinders the validity of staffing as a mean to achieve value congruence and the validity of the ASA model as well. Future research should address this assumption. Secondly, most of the studies used students or fresh graduates as a proxy of real job applicants. It is possible that those students did not have enough information about the hiring organization's culture. It is also possible that value congruence is less important to them than for experienced applicants because other factors such as P-J fit or salary, which may be more important to new graduates. Future studies should use experienced job applicants, and compare results to those fresh graduates. Thirdly, it is not clear how job applicant and recruiter manage value congruence and other types of fit over time. The literature suggests that they consider P-V fit and P-J fit before value congruence. We need to systematically test this time sequence of fit consideration. Fourthly, it is possible that the job interviewers may not actually represent

organizational values. It would be interesting to examine value congruence to job interviewer and to the organizations simultaneously in one study.

#### 2.5.2.2 Socialization

If values are difficult to detect through interviews, then socialization may be the means to achieve value congruence, assuming that work values can be changed. Theories of socialization tactics are referred to in this theme of research (Ashforth & Saks, 1996; Cable & Parsons, 2001; Grant & Bush, 1996). It is claimed that socialization tactics are used to assimilate employee values to organizational values and that it is only when individuals understand the underlying organizational values that they are fully socialized in the organization.

Cable and Parsons (2001) examined how different types of organizational socialization tactics affect perceived P-O fit (one of the two item is PPO) and post-entry value congruence. They reported that content and social aspects of the socialization predicted perceived P-O fit and post-entry value congruence, but context socialization did not. Pre-entry value congruence predicted post-entry value congruence and perceived P-O fit. The number of job offers an applicant got was negatively related to post-entry value congruence, meaning that those applicants could select the organization that fit them best or they could choose not to comply with the organizational values because they had more options.

Another study explored the impact of socialization tactics on the changes in newcomers' perceived and objective value congruence over time (Cooper-Thomas, van Vianen, & Anderson, 2004b). The authors found that socialization tactics (especially investiture tactics) were significantly related to PPO, job satisfaction, and organizational commitment after four months of socialization when controlling for pre-entry PPO and OPO. However, socialization tactics were not related to OPO after socialization when pre-entry PPO and OPO were controlled, indicating that socialization only changed the perceived fit but not the actual fit. This study suggested that values were hard to change, though changing the perceived fit was enough to influence job attitudes. The gap between PPO and OPO became smaller after socialization.

In an attempt to integrate the functions of attrition and socialization, one study found that PPO increased in the socialization process (De Cooman et al., 2009). Also, PPO measured retrospectively predicted retention status, indicating that attrition and socialization could function at the same time. Another study found that institutionalized socialization tactics led to perceived value congruence with this organization, and that this relationship was moderated by some proactive behaviors by employees (Kim, Cable, & Kim, 2005), suggesting that the organization should pay attention to the proactive behaviors capable of influencing the effects of socialization tactics.

These studies confirmed that some types of socialization tactics can actually increase value congruence, at least the perceived congruence. We are still not clear how organization should choose between staffing and socialization to achieve value congruence. Longitudinal study integrating staffing and socialization should tell organizations in which aspect they should invest their limited resources. Also, it is obvious that the effects of staffing and socialization depend on several organizational and job market contexts, and our knowledge of those moderators is not systematic. Studies have shown that different socialization tactics have different influences, and we need more evidence of this and why it is like this.

#### 2.5.2.3 Leadership

Various leadership theories have recognized the importance of shared values. By acting as role models, transformational and charismatic leaders assimilate subordinates values and motivate them towards an organizational vision that goes beyond job duty (Conger, 1999; Howell & Avolio, 1993; Kuhnert & Lewis, 1987). The self-concordance theory of transformational leadership (Bono & Judge, 2003; Shamir et al., 1993) suggests that, when the leader can instill values in subordinates, the latter will see the job as self-expressive and engage with it. Research has found that PPP with leader mediates the effects of both transformational and transactional leadership on followers' performance (Jung & Avolio, 2000). When transformational leadership has a direct effect on performance not mediated by value congruence, transactional leadership only has an indirect effect, mediated by value congruence.

SPP with supervisor was found to be related to job satisfaction, commitment, and a reduction in tardiness (Meglino, Ravlin, & Adkins, 1989). PPP with leader induced leader support and fewer work-family conflicts (Thompson, Brough, & Schmidt, 2006).

In their attempt to understand the impact process of socialized charismatic leadership, Brown and Trevino (2006) found that PPP between supervisors and followers mediated the effect of socialized charismatic leadership on interpersonal deviance but not on organizational deviance. They suggested that value congruence between senior managers instead of direct supervisors would probably explain the effect towards the organization. In the regression table they provide, social desirability and socialized charismatic leadership predicted value congruence. In a following study, it was found that socialized charismatic leadership was associated to value congruence in three of the four value dimensions (Brown & Trevino, 2009). They suggested that the "relationship between socialized charismatic leadership and value congruence depends on the types of values being transmitted." Using response surface plotting, they reported that socialized charismatic leadership could affect value congruence in two ways: the leader either offered a value laden vision that followers adopted, or the leader transmited "values that reflect follower's values." This finding suggests that the process of value congruence depends on the values being transmitted. By using the word "context", they advice us to pay attention to the occupational and organizational context when considering the value congruence effect process.

The relationship between value congruence and leader-member exchange (LMX) is still not clear. One study proposed that LMX leads to SPO (Steiner, 1988) or, in another study, PPP with leader results in LMX (Liden, Wayne, & Stilwell, 1993). Ashkanasy and O'Connor (1997) examined the effect of SPP on LMX and found that the exchange quality was higher when supervisors and subordinates shared achievement and obedience values. It was also proposed that LMX could be an alternative management tool to support subordinates when the perceived value congruence was low.

Also, SPP with leader mediated the relationship between autocratic leadership, age differences, and educational differences between leaders and subordinates and subordinates' feelings they were trusted by their leaders, but not the relationship between moral leadership and feeling trusted by leaders (Lau, Liu, & Fu, 2007).

In summary, the above studies confirm that transformational and charismatic leadership has an effect through a value-assimilating process and that values are an important element in the LMX process. However, we still do not know how leaders are able to instill values, through what process, and what kinds of values are instilled. The relationship between value congruence and LMX is still not very clear, whether

value congruence leads to better exchanges or encourages subordinates change their values because of better exchange quality.

### 2.5.3 Outcomes of value congruence

### 2.5.3.1 Job attitudes

Treating job attitudes as outcomes of value congruence is the most prolific theme in the field. Several theoretical perspectives are referred to. Among them, fit theory such as interactional psychology (Terborg, 1981), P-E fit theory (Caplan, 1987), and, especially, P-O fit theory (Kristof-Brown et al., 2005; Kristof, 1996) are the most important. The basic premise of fit theory is that the joint effects of individual and environmental attributes determine individual and organizational outcomes. When individual and environmental attributes match each other, optimum outcomes will be produced beyond the singular or additional effects of individual or environmental attributes. According to fit theory, individuals prefer this fit condition and will have positive attitudes under such conditions. Similarly, cognitive dissonance theory also suggests that, when values are shared, employees feel their inner belief and outer environment are coordinated, thus experiencing low level of cognitive dissonance (Elliot & Devine, 1994; Festinger, 1957) which leads to positive attitudes. Similar to this approach, self-concept theory also proposes that individuals tend to maintain their self concept by expressing positive attitudes towards environments that are consistent with their values (Shamir, 1991; Shamir et al., 1993).

Another line of theory comes from the strong organizational culture perspective. Defining value as a predisposition of human behavior (Meglino & Ravlin, 1998; Rokeach, 1973), these researchers claim that values are a fundamental cognitive mechanism underlying human cognition, decisions, and actions. Values determine how an individual perceives and processes information and how he/she communicates and responds to stimulus. People who share similar values will have similar goals, similar information processing mechanisms, similar communications styles, and similar action orientations. Thus, value congruence will lead to better communications and cooperation among people and make others more predictable. In turn, easy communications, improved cooperation, and prediction will lead to an easy working environment, making the work experience pleasant and satisfying.

Also, according to the similarity attraction paradigm (Byrne, 1971) and social categorization theory, value similarity leads to interpersonal trust and attraction. The friendly, interpersonal mechanisms also lead to positive job attitudes.

Empirical findings have confirmed those perditions in general and found value congruence to be an affectively salient construct that is positively correlated with positive job attitudes and negatively correlated with negative job attitudes across different settings. Similar findings have been reported in specific countries, including Turkey (Resick, Baltes, & Shantz, 2007), New Zealand (Cennamo & Gardner, 2008), Canada (Meyer, Hecht, Gill, & Toplonytsky, 2010), Norway (Verplanken, 2004), and

America in various industrial and organizational contexts such as financial services, consulting firms, hospitals, public agencies, schools, and restaurant chains.

Also, different types, levels, and dimensions of value congruence are related to job attitudes differently. Firstly, different value dimensions are related to outcomes differently; among these, human-related values are most affectively salient. Amos and Weathington (2008) used Peters and Waterman's seven values and found that "total value congruence" was significantly related to job satisfaction, organizational satisfaction, affective and normative commitment, and negatively related to turnover intention. But, when value congruence was considered dimensionally, only the "superior quality" and "importance of people" dimensions were significantly related to these job attitudes. This supports our proposition to treat value congruence dimensionally. Boxx, Odom, and Dunn (1991) also used the seven values and found that these values and value congruence between employee and organization had an impact on job satisfaction, organizational commitment and cohesion. Among the four value dimensions of the Competing Values Framework, one study found that only the congruence of human relations values was significantly related to favorable attitudes towards the work unit and job (Verplanken, 2004). Secondly, different types and levels of value congruence have separate effects. B. Adkins and Caldwell (2004) examined the difference between OPG and OPO and their effect on job satisfaction using the Organization Culture Profile (OCP). They found that OPG and OPO were highly correlated and that both were significant predictors of job satisfaction. OPO was significantly related to job satisfaction, commitment, and intention to leave (O'Reilly et al., 1991). In a following study (Vandenberghe, 1999), it was found that value congruence at entry predicts turnover rate after one year. Another study found that SPO was not a mediator of OPO's effects of OPO on attitudes and that they both had unique effects on attitudes (Ravlin & Ritchie, 2006). Another study also proved the additive effects of different types of fit (Scroggins, 2007). Objective fit was found to be more predictive of turnover intention then subjective fit (van Vianen, De Pater, & Van Dijk, 2007). Ostroff and colleagues examined different types, levels, and dimensions of value congruence simultaneously and found they related to outcomes differently (Ostroff et al., 2005).

Moreover, value congruence was different from complementary fit. Cable and DeRue (2002) ascertained that PPO, needs-supplies (NS), and demands-abilities (DA) fit were distinct constructs according to a confirmatory factor analysis and that they related to different outcome constructs such that PPO related to organizational identification, perceived organizational support, citizenship behavior, turnover decisions, and job satisfaction after controlling for NS and DA. By conceptualizing psychological need fulfillment as the amount and value congruence as the importance of value, Cable and Edwards (2004) found that psychological need fulfillment and value congruence were distinct constructs and that they had simultaneous effects on work attitudes. They proposed using an integrative framework of complementary and supplementary fit. PPO was more strongly related to satisfaction when N-S job fit was

low and to job choice decisions when D-A fit was low or was highly conscientious (Resick et al., 2007).

Value congruence and demographic similarity are distinct constructs and have separate influences, especially over time. One study (Elfenbein & O'Reilly, 2007) examined the joint effects of value congruence and demographic similarity within a team setting and found that OPG predicted performance ratings from staff and peers, but not being liked by peers and retention. As "deeper" similarity, effect of value congruence was stronger than demographic fit, suggesting that value congruence accounts more of the outcome variance over time. Other studies have also suggested that time moderates the effect of diversity on team outcomes, weakening the effects of demographic diversity and strengthening the effects of deep-level diversity including value diversity (Glaman, Jones, & Rozelle, 1996; Harrison, Price, Gavin, & Florey, 2002). Another study examined the different effects of ethnic and value diversity on job satisfaction and turnover intention (Cunningham & Sagas, 2004) and found that value dissimilarity was related to outcomes while ethnic dissimilarity was not, nor was their interaction.

Some studies questioned whether value congruence has an effect beyond the effects of organizational and personal values. Using polynomial regression, one study found that quadratic and interaction components had little effect, suggesting that the effect of value congruence was not important compared to that of personal and

organizational values (Kalliath, Bluedorn, & Strube, 1999). Also, using values measured from three independent sources, another study could not find sufficient evidence regarding the existence of value congruence (Knoppen, Dolan, Diez-Pinol, & Bell, 2006) and propose to focusing more on value incongruence in future research. Other studies reported that organizational commitment was affected mainly by personal and organizational values and that the effect of value congruence was marginal (Verplanken, 2004); that value congruence did not explain more variance than variance explained by the components alone (Taris, Feij, & van Vianen, 2005); and, that it was the value itself, not its congruence, that explained more variance regarding job involvement in a Kenyan organizational context (Nyambegera, Daniels, & Sparrow, 2001).

The above evidence confirms the purported effects of value congruence on job attitudes from the perspectives of shared culture, the similarity attraction paradigm, and cognitive dissonance theory. Also, the different effects of different types, levels, and dimensions of value congruence support our claim of treating value congruence by types. However, because some studies reported that the effect of value congruence is greater than the effects of its components, we should pay more attention to fit theory. As noted, fit theory may have effects in certain organizational and professional context. Some problems in this line of research include:

Firstly, the types of job attitudes studied are limited. Job satisfaction, organizational commitment, and turnover intention are the most extensively researched. These attitudes are all general attitudes towards the organization but not the job itself. Organizational and job values are not differentiated or, in other words, integrated in this respect. We know value congruence leads to general organizational oriented attitudes. Attitudes toward the work itself have also been receiving research attention recently. For example, in one study PPO led to all three components of work engagement (Koyuncu, Burke, & Fiksenbaum, 2006). Using a two-process model of burnout, value congruence was found to lead to burnout more than the factors identified in the job demand and resource model (Leiter, 2008). Baby-boomer nurses in Canada have more value congruence with their work than Generation X nurses and also less job burnout (Leiter, Jackson, & Shaughnessy, 2009). Value congruence negatively relates to burnout, and burnout mediates value congruence's effect on satisfaction and other outcomes (Siegall & McDonald, 2004). We thus need further reasoning to support why we choose to include specific attitudes into our research, and we also need to include more different attitudes in future studies.

Secondly, there is definitional ambiguity about organizational commitment. For example, the Organizational Commitment Questionnaire (Porter, Steers, Mowday, & Boulian, 1974) uses items like "I find that my values and the organization's values are very similar." In a multifaceted construct of commitment (O'Reilly & Chatman, 1986), the "internalization" dimension refers to congruence between personal and

organizational values. For those measurements, it was not clear whether value congruence is the manifestation of commitment or its antecedent. For example, using multifaceted commitment, Caldwell, Chatman, and O'Reilly (1990) found that organizations emphasize strong organizational value systems in their recruitment and socialization processes were positively related to higher levels of commitment based on internalization and identification. In Becker's view (1992), employee internalizes organizationally desired attitudes and behaviors because the content of those attitudes and behaviors is congruent with the employees' own value system. Becker defined it as the motivation behind employee commitment and called it internalization. This may also indicate that the relationship between value congruence and commitment can be reciprocal; committed employees can choose to internalize organizational values to a greater extent, something which has not been studied in extant literature.

Thirdly, the effect process of value congruence is largely a "black box". That is, why and through what process value congruence leads to positive job attitudes are unclear. To our knowledge, only two recent empirical research systematically investigated the effect value congruence identified process of and organizational-based-self-esteem, trust and communication as important mediators of value congruence's effect (Edwards & Cable, 2009; Naus, van Iterson, & Roe, 2007). In order to have more consistent scientific findings and rigorous theoretical reasoning, we should empirically test and confirm the mechanisms proposed by different theories. Also, different explanations of the effect process will help us choose appropriate

research outcomes in specific situations. For example, if the mediators are more interpersonal and psychologically-oriented, then value congruence will be more proximal to attitudinal outcomes than behavioral outcomes.

Fourthly, numerous studies report that some value dimensions, such as human oriented dimensions, are more affectively salient. These dimensions are important for managers to consider if positive attitudes are their concern. The remaining question is:

Why are those values related more to job attitudes than other dimensions?

Another question is whether those positive attitudes are beneficial to the organization. Some researchers claim that, by trying to create a friendly working relationship, employees may actually sacrifice working time and hurt organizational effectiveness by socializing (Verplanken, 2004). Also, the actual purpose of studying job attitudes is that, by promoting positive job attitudes, value congruence will contribute to individual and organizational performance, yet this linkage has not been empirically investigated.

### 2.5.3.2 Performance

The theoretical perspectives linking value congruence to individual performance are similar to those referred to in the job attitude theme. Fit theory also suggests that the fit of personal and organizational value will lead to positive job behavior. Also, when a strong culture is shared among an organization's employees, the latter will implicitly understand what is the fundamental norm within the organization (Schein,

1985, 1990), and act accordingly. Other than these two perspectives, another reason that value congruence should lead to better performance is through the aforementioned value congruence-job attitude-performance linkage. Research on the effects of value congruence on performance, whether in-role or contextual, is less frequent, less consistent, and smaller in terms of effect size than on job attitudes (Arthur et al., 2006). We partially attribute this to the inconsistent effects of positive attitudes on performance (Schleicher, Watt, & Greguras, 2004), and also propose that the relevance of value dimensions and research context has a significant impact on the results.

OPP with manager is associated with sales performance (Weeks, Chonko, & Kahle, 1989). C. L. Adkins, Ravlin, and Meglino (1996) examined the moderating effect of tenure and job-interdependence on the relationship between OPP (co-worker in mutually named dyads) and work outcomes. They found that OPP led positively to dimensions of satisfaction and attendance for lower-tenured employees. Also, when job-interdependence was high, OPP had positive performance outcomes that were easy to be affected by interpersonal interactions. These moderators suggested that the effect of value congruence differs on different employees and work characteristics, pointing to the need for contextualization. As a direct measure of value congruence and goal congruence, P-O fit mediated the effects of person-vocation fit on job attitudes, but not the effects on performance and citizenship behavior (Vogel & Feldman, 2009).

Even though value congruence did not necessarily lead to in-role performance, it was more related to contextual performance (Arthur et al., 2006). PPO led to contextual performance (Lauver & Kristof-Brown, 2001; Vogel & Feldman, 2009). PPO was related to organizational citizenship behavior (OCB) after controlling for NS and DA (Cable & DeRue, 2002). Anmoic feelings fully mediated the effect of PPO on OCB towards the organization (de Lara, 2008). SPO also led to OCB (Goodman & Svyantek, 1999).

In summary, one can observe that value congruence is related to attitudinal outcomes more than behavioral outcomes; to contextual performance more than in-role performance, and that there are systematic contextual moderators on the effect of value congruence on performance. Because the effect of value congruence on performance is complicated, we cannot confirm claims found in interactional psychology and organizational culture theory in this regard. As for the value congruence-job attitudes-performance linkage, there is no empirical evidence to draw any conclusion. Thus, remaining questions on the effect of value congruence on performance may include: Does value congruence have any effect on job performance and OCB? If it does, is there any mediator in this relationship? Are job attitudes mediators of this relationship? Is the effect of value congruence on job attitudes greater than the effects on performance? Is the effect on OCB greater than the effect on job performance? Also, we should systematically examine the possible moderators of those relationships.

#### 2.5.3.3 Other themes

Value congruence should also reduce conflict if the theoretical claims are true. Group value consensus, the degree of value similarity within the group, and group value fit, the degree of value similarity between the group and its supervisor, were found to be negatively related to emotional and task conflicts (Jehn, 1994). In a following study (Jehn, Chadwick, & Thatcher, 1997), value congruence within work teams was found to lead to less perceptual performance and satisfaction and that this relationship was mediated by relationship conflict. Using perceived value diversity in the group setting, Jehn and her colleagues examined the different effects of various kinds of diversity on group performance and morale through the mediating role of conflict (Jehn, Northcraft, & Neale, 1999). They found that value diversity was negatively related to performance and morale and also that this relationship was partially mediated by process and relationship conflict. Value diversity moderated the relationship between information diversity and group performance. When value diversity was low, information diversity led to better performance. This suggested that, in order for the beneficial diversity to function, there should be some sort of common ground for the group to communicate and interact. The authors proposed that value congruence can be a kind of common ground, and thus, it is crucial for the group to perform well. Also, they proved that task interdependence moderated the moderation effect of value diversity, when task interdependence was strong; the moderation effect of value diversity on the relationship between information diversity and performance

was stronger. Another study (Jehn & Mannix, 2001) confirmed that group value consensus was negatively related to task, process, and relationship conflicts during the middle and final stages of group interactions, suggesting that, for value congruence to be effective, it takes time for the group members to interact and become familiarized with each other. Also, this relationship is mediated by the concept called "group atmosphere" which includes trust, respect, cohesiveness, open discussion, liking, and competition. Another study found that when whistle-blowers had a low level of value congruence with top management, they experienced managerial retaliation (Miceli & Near, 1994).

Using the perceived measure of value difference, one study found that value difference with supervisors was significantly related to minority workers' health problems but that value difference with peers was not related to their health (James, Lovato, & Khoo, 1994), suggesting that value congruence with supervisors was more important than coworkers in this situation.

Aryee, Chay, and Tan (1994) examined the effect of PPO on subjective career success and found that PPO was a consistent predictor of subjective career success. They also proposed to use longitudinal study to examine the reciprocal relationship between value congruence and career success. Ballout (2007) theoretically examined the impact of P-J fit, P-O fit and person-culture fit on career success, and proposed that person-culture fit (value congruence) was positively related to career success.

Balazs (1990) examined the value congruence condition of two financial service firms. The "socially responsible" firm had more congruent values with its employees than the other one, yet there were less socially responsible values found among its employees, so the company failed on instilling its values to its employees. This suggests that employees can resist organizational values and share other values among them, highlighting the importance of instilling and sharing the important (or desired) values among employees. By treating corporate ethics as part of work values, one theoretical study (Coldwell, Billsberry, van Meurs, & Marsh, 2008) proposed that P-O ethical fit had effects on the attitudes and behaviors of potential recruits and employees. Another theoretical paper proposed that when value congruence between employees and the organization was low and when employees had strong feelings about those incongruent values, employees would behave in a detrimental fashion (Kraimer, 1997). SPO was found to correlate to organizational cynicism and that this relationship was partially mediated by self-esteem (Naus et al., 2007).

Apasu (1987) reported that the degree of PPO affects sales representatives' perception of rewards. When value congruence exists, the sales manager can use job security, promotion and social recognition in the rewards system to motivate the sales force. Badovick and Beatty (1987) proposed that shared values may have an important effect on the successful implementation of marketing strategy. They found that the values that can aid in the successful implementation of one particular marketing strategy were not shared within the organization and that this may have

explained the lack of support for this particular marketing strategy (Badovick & Beatty, 1987).

In a study examining person-innovation fit and affect and behavior related to innovation implementation (Choi & Price, 2005), the authors found that subjective value congruence between personal values and values of the innovation did not have a positive effect on commitment to the implementation and implementation behavior. Instead, the effect was linear. Innovation values positively affected commitment, and personal values positively affected implementation behavior. Another study proposed that value sharing within professional service firms can help those organization get a better management of their knowledge (Morris & Empson, 1998).

### 2.6 Conclusions

Defining value congruence as a multi-type, multi-level, and multi-dimensional concept, we have reviewed the extant literature on value congruence to obtain a comprehensive understanding of the field. We reviewed the literature according to different themes and especially how each theme contributes to the management theories applied. General conclusions and statements derived from the above discussion include:

Firstly, because of the different types, operationalizations and analyzing methods applied, value congruence is a rather complex concept. Instead of discussing the concept in general, we should pay more care in our research to the concept's

representation, clearly stating which type we are discussing to avoid any confusion. Also, we should have clear reasons about why we use given value dimensions, and treat differing dimensions differently. We should also study different types of value congruence and compare value congruence with other types of fit in the same study. Some have argued that value congruence has a greater effect size than other types of fit (Verquer et al., 2003; Westerman & Cyr, 2004) and we should integrate different types of fit in the same study to examine their joint effects (Kristof-Brown et al., 2005; Kristof, 1996; Ostroff et al., 2005). We are still not sure how different levels of value congruence are related to each other. Is value congruence with leaders is more important than with the organization because employees are close to their leaders on a daily basis? How do employees treat subcultures within the organization (Gregory, 1983) and develop value congruence accordingly? The relationships between value congruence and other types of fit such as P-J fit, P-V fit, demographic diversity, personality fit, etc., are not clear. Do they interact with each other or is a specific time sequence needed among them when individuals and organizations make decisions?

Secondly, although different theories have been referred to in different themes, the explanation of value congruence's effect is still not clear. Empirical findings are fragmented and complicated because of the lack of theoretical work. Profound theoretical discussions integrating the different theories mentioned above are needed to foster our fundamental understanding of the field.

Thirdly, although it seems that value congruence already has a rich nomological network according to Figure 2.2, there is still a large void in each theme which has to be filled as discussed above. Except developing the different themes, another approach is to study different themes such as staffing and socialization together. Yet another is to include more variables that are not traditionally examined, such as organizational supportive or leader supportive behavior. In addition, the "dark side" of value congruence, as suggested in the literature, has not yet been examined empirically: namely how value congruence affects individual creativity and organizational innovation. The dilemma is that organizations need diversity to boost their creativity and also a global norm and culture to coordinate employees' efforts. The symbiosis of diversity and fit within organization can be a fruitful field (Powell, 1998).

Fourthly, value congruence can also be used as a strategic management tool to gain competitive advantage. Employees' value congruence can lead to a brand value perception that is similar to the brand value proposed by management, and this can lead to better brand perception among customers (Yaniv & Farkas, 2005). Another study proposed that value congruence can be used as a type of strategic human resource management tool to align different human resource management practices within the organization (Werbel & DeMarie, 2005). Others have proposed that stakeholders' needs play an important role in determining the organization's values (McDonald & Gandz, 1992), thus benefiting stakeholders. Paarlberg and Perry (2007)

demonstrated that strategic values can motivate employees to the extent that those values are preexisting in the employees, thus benefiting employees. We propose here a value projection chain that top management can instill its values to employees through various culture management tools. If the employees' values are congruent with the values desired by management, then the daily behaviors will manifest those values and those values will be perceived by the customers. This value projection chain will help to gain competitive advantage.

Fifthly, more attention needs to be given to the organizational development stage. Is value congruence stable over time (DeRue & Morgeson, 2007)? How does value congruence function in organizational change? In one study, SPO's effect was examined in a cultural transformation context (Harris & Mossholder, 1996), determining that congruence on different value dimensions has different affective implications. A follow-up study (Meyer et al., 2010) found that the effect of SPO on affective commitment and intention to stay during a process of organizational change depends on different value components, time periods, and criterion variables. In addition, value congruence may not be as influential as organizational culture or other management tools in the early development stage of the management system (Nyambegera et al., 2001). Other than time, organizational and professional contexts (Johns, 2006; Rousseau & Fried, 2001) are also important factors. Systematic moderators such as job interdependence, (Adkins et al., 1996), job mobility (Wheeler, Gallagher, Brouer, & Sablynski, 2007), and time (Meyer et al., 2010) are reported.

These differences in findings may be partially due to the various organizational and professional contexts in particular research settings. For example, we should examine whether value congruence is examined in an interpersonal environment because it is an interpersonal phenomenon (Pervin, 1968). Also, some professions such as accountancy and nursing are more value-oriented, while other professions may not be so value-laden and, thus, less affected by value congruence.

Our study has revealed important phenomena in organizational complexity. It would be beneficial for future HR research to examine our model within different organizational frameworks and different national and cultural settings in order to understand the specific HR practices that foster fit. Drawing on Johns' (2006) multilevel contextual framework, we examined whether the relationship between values and better performance was moderated by organizational and environmental situations. We recommend that HR and OB researchers focus in the future not only on the simple bi-variate relationship but that they take into account the omnibus context (Johns, 2006, p. 391), namely, societal culture as well as industry.

To summarize, the extant literature on value congruence is prolific yet weak on several aforementioned points. In order to have a comprehensive theoretical understanding and derive solid managerial implications, those weak points need to be thoroughly addressed.

# **References of Chapter 2**

- Adkins, B., & Caldwell, D. 2004. Firm or subgroup culture: Where does fitting in matter most? *Journal of Organizational Behavior*, 25(8): 969-978.
- Adkins, C. L., Ravlin, E. C., & Meglino, B. M. 1996. Value congruence between co-workers and its relationship to work outcomes. *Group & Organization Management*, 21(4): 439-460.
- Adkins, C. L., Russell, C. J., & Werbel, J. D. 1994. Judgments of fit in the selection process: The role of work value congruence. *Personnel Psychology*, 47(3): 605.
- Amos, E. A., & Weathington, B. L. 2008. An analysis of the relation between employee-organization value congruence and employee attitudes. *Journal of Psychology: Interdisciplinary and Applied*, 142(6): 615-631.
- Apasu, Y. 1987. The importance of value structures in the perception of rewards by industrial salespersons. *Journal of the Academy of Marketing Science*, 15(1): 1-10.
- Arthur, W., Jr., Bell, S. T., Villado, A. J., & Doverspike, D. 2006. The use of person-organization fit in employment decision making: An assessment of its criterion-related validity. *Journal of Applied Psychology*, 91(4): 786-801.
- Aryee, S., Chay, Y. W., & Tan, H. H. 1994. An examination of the antecedents of subjective career success among a managerial sample in Singapore. *Human Relations*, 47(5): 487-509.
- Ashforth, B. E., & Saks, A. M. 1996. Socialization tactics: Longitudinal effects on newcomer adjustment. *Academy of Management Journal*, 39(1): 149-178.
- Ashkanasy, N. M., & O'Connor, C. 1997. Value congruence in leader-member exchange. *Journal of Social Psychology*, 137(5): 647-662.
- Badovick, G., & Beatty, S. 1987. Shared organizational values: Measurement and impact upon strategic marketing implementation. *Journal of the Academy of Marketing Science*, 15(1): 19-26.
- Balazs, A. L. 1990. Value congruency: The case of the 'socially responsible' firm. *Journal of Business Research*, 20(2): 171-181.
- Ballout, H. I. 2007. Career success: The effects of human capital, person-environment fit and organizational support. *Journal of Managerial Psychology*, 22(8): 741-765.

- Becker, T. E. 1992. Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal*, 35(1): 232-244.
- Billsberry, J. 2007. Attracting for values: An empirical study of ASA's attraction proposition. *Journal of Managerial Psychology*, 22(2): 132-149.
- Bono, J. E., & Judge, T. A. 2003. Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46(5): 554-571.
- Boxx, W. R., Odom, R. Y., & Dunn, M. G. 1991. Organizational values and value congruency and their impact on satisfaction, commitment, and cohesion: An empirical examination within the public sector. *Public Personnel Management*, 20(2): 195-205.
- Bretz, R. D., Rynes, S. L., & Gerhart, B. 1993. Recruiter perceptions of applicant fit: Implications for individual career preparation and job search behavior. *Journal of Vocational Behavior*, 43(3): 310-327.
- Brown, M. E., & Trevino, L. K. 2006. Socialized charismatic leadership, values congruence, and deviance in work groups. *Journal of Applied Psychology*, 91(4): 954-962.
- Brown, M. E., & Trevino, L. K. 2009. Leader-follower values congruence: Are socialized charismatic leaders better able to achieve it? *Journal of Applied Psychology*, 94(2): 478-490.
- Byrne, D. E. 1971. *The attraction paradigm*. New York: Academic Press.
- Cable, D. M., & DeRue, D. S. 2002. The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87(5): 875-884.
- Cable, D. M., & Edwards, J. R. 2004. Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology*, 89(5): 822-834.
- Cable, D. M., & Judge, T. A. 1996. Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67(3): 294-311.
- Cable, D. M., & Judge, T. A. 1997. Interviewers' perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(4): 546-561.

- Cable, D. M., & Parsons, C. K. 2001. Socialization tactics and person-organization fit. *Personnel Psychology*, 54(1): 1-23.
- Caldwell, D. F., Chatman, J. A., & O'Reilly, C. A. 1990. Building organizational commitment: A multifirm study. *Journal of Occupational Psychology*, 63(3): 245-261.
- Caplan, R. D. 1987. Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior*, 31(3): 248-267.
- Carless, S. A. 2005. Person-job fit versus person-organization fit as predictors of organizational attraction and job acceptance intentions: A longitudinal study. *Journal of Occupational and Organizational Psychology*, 78(3): 411-429.
- Cennamo, L., & Gardner, D. 2008. Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8): 891-906.
- Chatman, J. A. 1989. Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review*, 14(3): 333-349.
- Choi, J. N., & Price, R. H. 2005. The effects of person-innovation fit on individual responses to innovation. *Journal of Occupational & Organizational Psychology*, 78(1): 83-96.
- Coldwell, D. A., Billsberry, J., van Meurs, N., & Marsh, P. J. G. 2008. The effects of person-organization ethical fit on employee attraction and retention: Towards a testable explanatory model. *Journal of Business Ethics*, 78(4): 611-622.
- Conger, J. A. 1999. Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *Leadership Quarterly*, 10(2): 145-179.
- Cooper-Thomas, H. D., van Vianen, A., & Anderson, N. 2004b. Changes in person-organization fit: The impact of socialization tactics on perceived and actual P-O fit. *European Journal of Work and Organizational Psychology*, 13(1): 52 78.
- Cunningham, G. B., & Sagas, M. 2004. Examining the main and interactive effects of deep- and surface-level diversity on job satisfaction and organizational turnover intentions. *Organizational Analysis*, 12(3): 319-332.
- De Cooman, R., De Gieter, S., Pepermans, R., Hermans, S., Du Bois, C., Caers, R., & Jegers, M. 2009. Person-organization fit: Testing socialization and

- attraction-selection-attrition hypotheses. *Journal of Vocational Behavior*, 74(1): 102-107.
- de Lara, P. Z.-M. 2008. Should faith and hope be included in the employees' agenda? Linking P-O fit and citizenship behavior. *Journal of Managerial Psychology*, 23(1): 73-88.
- DeRue, D. S., & Morgeson, F. P. 2007. Stability and change in person-team and person-role fit over time: The effects of growth satisfaction, performance, and general self-efficacy. *Journal of Applied Psychology*, 92(5): 1242-1253.
- Dineen, B. R., Ash, S. R., & Noe, R. A. 2002. A web of applicant attraction: Person-organization fit in the context of Web-based recruitment. *Journal of Applied Psychology*, 87(4): 723-734.
- Edwards, J. R. 1993. Problems with the use of profile similarity indices in the study of congruence in organizational research. *Personnel Psychology*, 46(3): 641-665.
- Edwards, J. R. 2002. Alternatives to difference scores: Polynomial regression analysis and response surface methodology. In Fritz Drasgow, & Neal Schmitt (Eds.), *Measuring and analyzing behavior in organizations: Advances in measurement and data analysis.*: 350-400. San Francisco, CA: Jossey-Bass.
- Edwards, J. R., & Cable, D. M. 2009. The value of value congruence. *Journal of Applied Psychology*, 94(3): 654-677.
- Edwards, J. R., Cooper, C. L., & Robertson, I. T. 1991. Person-job fit: A conceptual integration, literature review, and methodological critique, *International review of industrial and organizational psychology*, Vol. 6: 283-357. Oxford England: John Wiley & Sons.
- Edwards, J. R., & Shipp, A. J. 2007. The relationship between person-environment fit and outcomes: An integrative theoretical framework. In C. Ostroff, & T. A. Judge (Eds.), *Perspectives on organizational fit.*: 209-258. Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Elfenbein, H. A., & O'Reilly, C. A., III. 2007. Fitting in: The effects of relational demography and person-culture fit on group process and performance. *Group & Organization Management*, 32(1): 109-142.
- Elliot, A. J., & Devine, P. G. 1994. On the motivational nature of cognitive dissonance: Dissonance as psychological discomfort. *Journal of Personality* and *Social Psychology*, 67(3): 382-394.

- Festinger, L. 1957. *A theory of cognitive dissonance*. Stanford, Calif.: Stanford University Press.
- Finegan, J. E. 2000. The impact of person and organizational values on organizational commitment. *Journal of Occupational & Organizational Psychology*, 73(2): 149-169.
- Glaman, J. M., Jones, A. P., & Rozelle, R. M. 1996. The effects of co-worker similarity on the emergence of affect in work teams. *Group & Organization Management*, 21(2): 192-215.
- Goodman, S. A., & Svyantek, D. J. 1999. Person-organization fit and contextual performance: Do shared values matter. *Journal of Vocational Behavior*, 55(2): 254-275.
- Grant, E. S., & Bush, A. J. 1996. Salesforce socialization tactics: Building organizational value congruence. *Journal of Personal Selling & Sales Management*, 16(3): 17-32.
- Gregory, K. L. 1983. Native-view paradigms: Multiple cultures and culture conflicts in organizations. *Administrative Science Quarterly*, 28(3): 359-376.
- Harris, S. G., & Mossholder, K. W. 1996. The affective implications of perceived congruence with culture dimensions during organizational transformation. *Journal of Management*, 22(4): 527-547.
- Harrison, D. A., Price, K. H., Gavin, J. H., & Florey, A. T. 2002. Time, teams, and task performance: Changing effects of surface- and deep-level diversity on group functioning. *Academy of Management Journal*, 45(5): 1029-1045.
- Hoffman, B. J., & Woehr, D. J. 2006. A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68(3): 389-399.
- Howell, J. M., & Avolio, B. J. 1993. Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78(6): 891-902.
- James, K., Lovato, C., & Khoo, G. 1994. Social identity correlates of minority workers' health. *Academy of Management Journal*, 37(2): 383-396.
- Jehn, K. A. 1994. Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management*, 5(3): 223-238.

- Jehn, K. A., Chadwick, C., & Thatcher, S. M. B. 1997. To agree or not to agree: The effects of value congruence, individual demographic dissimilarity, and conflict on workgroup outcomes. *International Journal of Conflict Management*, 8(4): 287-305.
- Jehn, K. A., & Mannix, E. A. 2001. The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, 44(2): 238-251.
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. 1999. Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, 44(4): 741-763.
- Johns, G. 2006. The essential impact of context on organizational behavior. *Academy of Management Review*, 31(2): 386-408.
- Judge, T. A., & Cable, D. M. 1997. Applicant personality, organizational culture, and organization attraction. *Personnel Psychology*, 50(2): 359-394.
- Jung, D. I., & Avolio, B. J. 2000. Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, 21(8): 949-964.
- Kalliath, T. J., Bluedorn, A. C., & Strube, M. J. 1999. A test of value congruence effects. *Journal of Organizational Behavior*, 20(7): 1175-1198.
- Kim, T.-Y., Cable, D. M., & Kim, S.-P. 2005. Socialization tactics, employee proactivity, and person-organization fit. *Journal of Applied Psychology*, 90(2): 232-241.
- Knoppen, D., Dolan, S. L., Diez-Pinol, M., & Bell, R. 2006. A triangulation analysis of value congruency in corporate Spain: American dream or Spanish reality? *International Journal of Human Resource Management*, 17(3): 539-558.
- Koyuncu, M., Burke, R., J, & Fiksenbaum, L. 2006. Work engagement among women managers and professionals in a Turkish bank: Potential antecedents and consequences. *Equal Opportunities International*, 25(4): 299-310.
- Kraimer, M. L. 1997. Organizational goals and values: A socialization model. *Human Resource Management Review*, 7(4): 425-447.
- Kristof-Brown, A. L. 2000. Perceived applicant fit: Distinguishing between recruiters' perceptions of person–job and person–organization fit. *Personnel Psychology*, 53(3): 643-671.

- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. 2005. Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2): 281-342.
- Kristof, A. L. 1996. Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1): 1-49.
- Kuhnert, K. W., & Lewis, P. 1987. Transactional and transformational leadership: A constructive/developmental analysis. *Academy of Management Review*, 12(4): 648-657.
- Lau, D., C., Liu, J., & Fu, P. P. 2007. Feeling trusted by business leaders in China: Antecedents and the mediating role of value congruence. *Asia Pacific Journal of Management*, 24(3): 321.
- Lauver, K. J., & Kristof-Brown, A. 2001. Distinguishing between employees' perceptions of person-job and person-organization fit. *Journal of Vocational Behavior*, 59(3): 454-470.
- Leiter, M. P. 2008. A two process model of burnout and work engament: Distinct implications of demands and values. *Supplemento A, Psicologia*, 30(A): 52-58.
- Leiter, M. P., Jackson, N. J., & Shaughnessy, K. 2009. Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between Baby Boomers and Generation X. *Journal of Nursing Management*, 17(1): 100-109.
- Liden, R. C., Wayne, S. J., & Stilwell, D. 1993. A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology*, 78(4): 662-674.
- McDonald, P., & Gandz, J. 1992. Getting value from shared values. *Organizational Dynamics*, 20(3): 64-77.
- Meglino, B. M., & Ravlin, E. C. 1998. Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24(3): 351-389.
- Meglino, B. M., Ravlin, E. C., & Adkins, C. L. 1989. A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology*, 74(3): 424-432.

- Meyer, J. P., Hecht, T. D., Gill, H., & Toplonytsky, L. 2010. Person-organization (culture) fit and employee commitment under conditions of organizational change: A longitudinal study. *Journal of Vocational Behavior*, 76(3): 458-473.
- Miceli, M. P., & Near, J. P. 1994. Relationships among value congruence, perceived victimization, and retaliation against whistle-blowers. *Journal of Management*, 20(4): 773-794.
- Morris, T., & Empson, L. 1998. Organisation and expertise: An exploration of knowledge bases and the management of accounting and consulting firms. *Accounting Organizations and Society*, 23(5-6): 609-624.
- Muchinsky, P. M., & Monahan, C. J. 1987. What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior*, 31(3): 268-277.
- Naus, F., van Iterson, A., & Roe, R. A. 2007. Value incongruence, job autonomy, and organization-based self-etseem: A self-based perspective on organization cynicism. *European Journal of Work and Organizational Psychology*, 16(2): 195-219.
- Nyambegera, S. M., Daniels, K., & Sparrow, P. 2001. Why fit doesn't always matter: The impact of HRM and cultural fit on job involvement of Kenyan employees. *Applied Psychology: An International Review*, 50(1): 109-140.
- O'Reilly, C. A., & Chatman, J. 1986. Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3): 492-499.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. 1991. People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3): 487-516.
- Ostroff, C., Shin, Y., & Kinicki, A. J. 2005. Multiple perspectives of congruence: Relationships between value congruence and employee attitudes. *Journal of Organizational Behavior*, 26(6): 591-623.
- Paarlberg, L. E., & Perry, J. L. 2007. Values management: Aligning employee values and organization goals. *The American Review of Public Administration*, 37(4): 387-408.
- Pervin, L. A. 1968. Performance and satisfaction as a function of individual-environment fit. *Psychological Bulletin*, 69(1): 56-68.

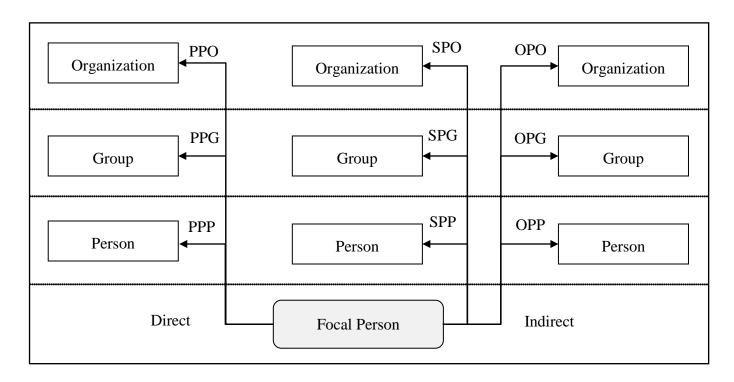
- Piasentin, K. A., & Chapman, D. S. 2006. Subjective person-organization fit: Bridging the gap between conceptualization and measurement. *Journal of Vocational Behavior*, 69(2): 202-221.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. 1974. Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5): 603-609.
- Powell, G. N. 1998. Reinforcing and extending today's organizations: The simultaneous pursuit of person–organization fit and diversity. *Organizational Dynamics*, 26(3): 50-61.
- Ravlin, E. C., & Ritchie, C. M. 2006. Perceived and actual organizational fit: Multiple influences on attitudes. *Journal of Managerial Issues*, 18(2): 175-192.
- Resick, C. J., Baltes, B. B., & Shantz, C. W. 2007. Person-organization fit and work-related attitudes and decisions: Examining interactive effects with job fit and conscientiousness. *Journal of Applied Psychology*, 92(5): 1446-1455.
- Rokeach, M. 1973. The nature of human values. New York: Free Press.
- Rousseau, D. M., & Fried, Y. 2001. Location, location, location: contextualizing organizational research. *Journal of Organizational Behavior*, 22(1): 1-13.
- Schein, E. H. 1985. *Organizational culture and leadership*. San Francisco: Jossey-Bass Publishers.
- Schein, E. H. 1990. Organizational culture. *American Psychologist*, 45(2): 109-119.
- Schleicher, D. J., Watt, J. D., & Greguras, G. J. 2004. Reexamining the job satisfaction-performance relationship: The complexity of attitudes. *Journal of Applied Psychology*, 89(1): 165-177.
- Schneider, B. 1987. The people make the place. *Personnel Psychology*, 40(3): 437-453.
- Schneider, B., Goldstein, H. W., & Smith, D. B. 1995. The ASA framework: An update. *Personnel Psychology*, 48(4): 747-773.
- Scroggins, W. A. 2007. An examination of the additive versus convergent effects of employee perceptions of fit. *Journal of Applied Social Psychology*, 37(7): 1649-1665.
- Sekiguchi, T. 2007. A contingency perspective of the importance of PJ fit and PO fit in employee selection. *Journal of Managerial Psychology*, 22(2): 118-131.

- Shamir, B. 1991. Meaning, self and motivation in organizations. *Organization Studies*, 12(3): 405-424.
- Shamir, B., House, R. J., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4(4): 577-594.
- Siegall, M., & McDonald, T. 2004. Person-organization value congruence, burnout and diversion of resources. *Personnel Review*, 33(3): 291-301.
- Steiner, D. D. 1988. Value perceptions in leader-member exchange. *The Journal of Social Psychology*, 128(5): 611-618.
- Taris, R., & Feij, J. A. 2001. Longitudinal examination of the relationship between supplies-values fit and work outcomes. *Applied Psychology: An International Review*, 50(1): 52-80.
- Taris, R., Feij, J. A., & van Vianen, A. E. M. 2005. Met expectations and supplies-values fit of Dutch young adults as determinants of work outcomes. The International Journal of Human Resource Management, 16(3): 366-382.
- Terborg, J. R. 1981. Interactional psychology and research on human behavior in organizations. *Academy of Management Review*, 6(4): 569-576.
- Thompson, B. M., Brough, P. A., & Schmidt, H. 2006. Supervisor and subordinate work-family values: Does similarity make a difference? *International Journal of Stress Management*, 13(1): 45-63.
- van Vianen, A. E. M. 2000. Person-organization fit: The match between newcomers' and recruiters' preferences for organizational cultures. *Personnel Psychology*, 53(1): 113-149.
- van Vianen, A. E. M., De Pater, I. E., & Van Dijk, F. 2007. Work value fit and turnover intention: Same-source or different-source fit. *Journal of Managerial Psychology*, 22(2): 188-202.
- van Vuuren, M., Veldkamp, B. P., de Jong, M. D. T., & Seydel, E. R. 2007. The congruence of actual and perceived person-organization fit. *International Journal of Human Resource Management*, 18(10): 1736-1747.
- Vandenberghe, C. 1999. Organizational culture, person-culture fit, and turnover: a replication in the health care industry. *Journal of Organizational Behavior*, 20(2): 175-184.

- Verplanken, B. 2004. Value congruence and job satisfaction among nurses: A human relations perspective. *International Journal of Nursing Studies*, 41(6): 599-605.
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. 2003. A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3): 473-489.
- Vogel, R. M., & Feldman, D. C. 2009. Integrating the levels of person-environment fit: The roles of vocational fit and group fit. *Journal of Vocational Behavior*, 75(1): 68-81.
- Weeks, W., Chonko, L., & Kahle, L. 1989. Performance congruence and value congruence impact on sales force annual sales. *Journal of the Academy of Marketing Science*, 17(4): 345-351.
- Werbel, J. D., & DeMarie, S. M. 2005. Aligning strategic human resource management and person-environment fit. *Human Resource Management Review*, 15(4): 247-262.
- Westerman, J. W., & Cyr, L. A. 2004. An integrative analysis of person-organization fit theories. *International Journal of Selection and Assessment*, 12(3): 252-261.
- Wheeler, A. R., Gallagher, V. C., Brouer, R. L., & Sablynski, C. J. 2007. When person-organization (mis)fit and (dis)satisfaction lead to turnover: The moderating role of perceived job mobility. *Journal of Managerial Psychology*, 22(2): 203-219.
- Yaniv, E., & Farkas, F. 2005. The impact of person-organization fit on the corporate brand perception of employees and of customers. *Journal of Change Management*, 5(4): 447-461.

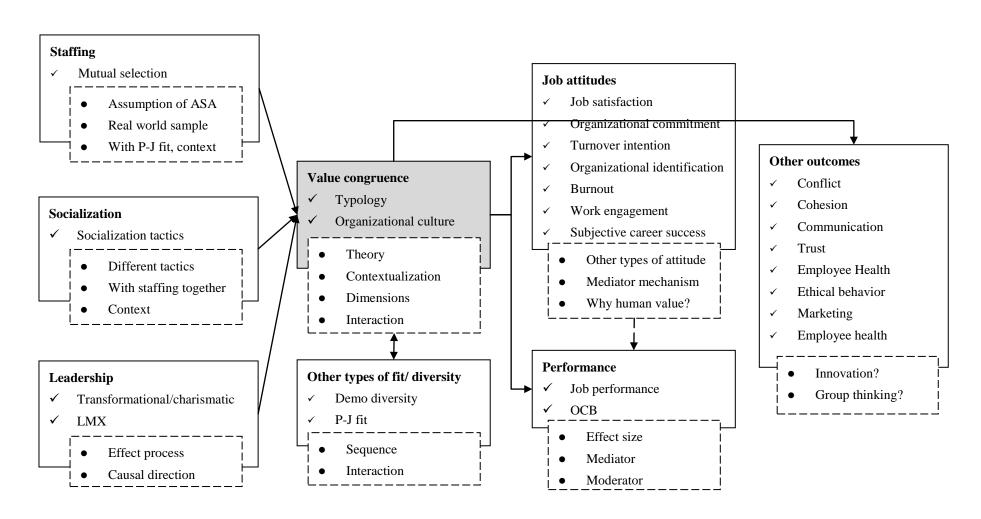
# **Appendix of Chapter 2**

Figure 2.1: Different types and levels of value congruence



Note: PPO stands for the perceived person-organizational value congruence; SPG refers to subjective person-group value congruence; and OPP represents objective person-person value congruence, etc.

Figure 2.2: Integrative framework for value congruence research according to different themes (dotted lines indicate research gaps)



# 3: Paper 2

The relationship between value incongruence and individual and organizational well-being outcomes: An exploratory study among Catalan nurses

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### 3.1 Abstract

**Aims**: This paper is a report of a correlational study of the relations of value incongruence to the individual and organizational well-being variables of self-rated health, turnover intention and accident propensity, as mediated by burnout.

**Background**: Previous literature found that value incongruence may lessen individual and organizational well-being through the psychological mechanism of burnout. Empirical investigation is needed to validate these claims.

**Design**: A cross-sectional between-cases correlational design was used.

**Methods**: A survey was conducted in one of the largest university hospitals in a large metropolitan city in Spain in the spring of 2009, using a cross-sectional design. 234 nurses participated in the study. Stepwise regression was used to test the direct and mediation relationships.

Results: Hypotheses were confirmed for certain axes of values and outcome variables. In particular, Economical and Ethical value incongruence were found to be correlated with burnout. Economical, Ethical and Emotional value incongruence were found to be correlated with turnover intention. Ethical and Emotional value incongruence were found to be correlated with accident propensity. Burnout partially mediated the relationship between Economical and Ethical value incongruence and turnover intention and fully mediated the relationship between Ethical value incongruence and accident propensity.

Conclusion: The purported mediation of burnout on the relationship between value incongruence and individual and organizational well-being outcomes is valid on certain axes of values and outcome variables. This calls for caution when discussing value incongruence in organizations. Instead of advocating broad organizational culture congruence, we should target specific axes of values.

# 3.2 Summary statement

# What is already known about this topic?

- Burnout is frequent among nurses, resulting in higher turnover intention,
   propensity to be engaged in accidents and poorer health conditions.
- Value incongruence is negatively related to nurses' job satisfaction.
- Value incongruence induces burnout and turnover intention in other professions.

# What this paper adds?

- An original way to measure key facets of organizational culture was developed,
   consisting of a Tri-axial values approach. Of the three proposed axes, Economical
   and Ethical value incongruence was found to be correlated with burnout.
- None of the three types of value incongruence were significantly related to self-rated health.
- Burnout partially mediated the relationship between Economical and Ethical value incongruence and turnover intention and fully mediated the relationship between Ethical value incongruence and accident propensity.

# Implications for practice and/or policy

• Creating an organizational culture that focuses on aligning employees with

organization, namely on Economical and Ethical values will greatly lessen burnout.

- Instead of advocating a generic change in organizational culture, we should be specific about which axes of values should be the prime focus of culture reengineering, because different axes of values relate to outcomes differently.
- Hospital mangers should try to use culture management tools to reduce burnout among nurses. This will increase nurse's retention rates and reduce accidents.

## 3.3 Keywords

Burnout, Nursing, Turnover intention, Value incongruence, Well-being, Work values,

## 3.4 Introduction

Nursing culture in hospitals is gaining research attention both as a social phenomenon and also from a managerial perspective (Holland, 1993; Suominen, Kovasin, & Ketola, 1997). Nursing is often considered a stressful profession where specific work characteristics adversely affects nurses' emotional, psychological and physical states (Corley, 2002; Hsu, Chen, Yu, & Lou, 2010; Thorne, 2010). Burnout is frequently reported in nursing (Demerouti, Bakker, Nachreiner, & Schaufeli, 2000; Duquette, Kérouac, Sandhu, & Beaudet, 1994; Prins et al., 2007). Stressed and burnt-out nurses can threaten the well-being of patients, hospitals and themselves. Researchers have been trying to identify the key variables to mitigate the negative effects of burnout. Among them, organizational culture is thought to be a factor hindering nurses' burnout (Raiger, 2005).

Among the various stressors leading to burnout, the configuration and balance of environmental demands and resources is the theme of current theoretical debate (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Hakanen, Schaufeli, & Ahola, 2008). A shortcoming of this job demand-resource model is that it focuses on the environmental characteristics and thus neglects the personal characteristics that can lead to burnout. It cannot explain why some people burn out and others do not when subject to the same environmental influence. By integrating Levine's conservation model (Levine, 1969) from nursing theory and self-concordance theory (Ryan & Deci, 2000; Sheldon & Elliot, 1999) from the organizational literature, an interactional approach was used to examine how differences between personal values and

organizational values link to burnout and through burnout, to individual and organizational well-being outcomes, namely: self-rated health, turnover intention and accident propensity. It is proposed that incongruence between personal and organizational values is one of the main reasons for a lessening of nurses' well-being and negative hospital outcomes. This approach corresponds to two main principles of Levine's conservation model – conservation of personal integrity and social integrity, when applied to nurses.

## 3.5 Background

## 3.5.1 Value incongruence

Personal value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite mode of conduct or end-state of existence (Rokeach, 1973, P5). Values act as predisposition of human behavior and help one decide what is right and wrong. Values are part of our cognitive process, helping us to perceive, interpret, understand and communicate information. At the organizational level, it is often said that when specific set of values are shared, one can talk about organizational culture (Dolan, 2011; Dolan, Garcia, & Richley, 2006). Organizational culture is defined as 'a system of shared values defining what is important and norms, defining appropriate attitudes and behaviors, that guide members' attitudes and behaviors.' (O'Reilly & Chatman, 1996, P166). When personal values and organizational values do not match, there will be value incongruence, which is the difference between personal values and

organizational values (Edwards & Cable, 2009; Kristof, 1996). We treat value incongruence as the opposite of value congruence in this study.

As values reflect a predisposition of behavior, people who share similar values will prioritize similar goals, communicate in similar ways and be able to predict each other's action. Similar values will also foster trust and attraction (Edwards & Cable, 2009). Because of these mechanisms, value congruence will lead to better personal attitudes and behavior (Dolan, 2011). Empirical evidence from previous studies has found that value congruence leads to job satisfaction, organizational commitment, interpersonal trust and better performance (Hoffman & Woehr, 2006; Verquer et al., 2003). On the other hand, value incongruence can lead to conflict, burnout and turnover intention and other negative outcomes (Dolan, 2011). Because of these profound effects, value incongruence has become an important topic in organizational literature over the last two decades. This general conclusion was also reported in health care settings (Glazer & Beehr, 2002; Leiter et al., 2009; Tzeng, Ketefian, & Redman, 2002; Vandenberghe, 1999; Verplanken, 2004). For instance, after finding similar value profiles across countries in a cross-cultural study among nurses in four countries, Glazer & Beehr (2002) assumed a fit between personal values and the nursing profession. Vandenberghe (1999) found that congruence between the preferred values of hospital and nursing recruits' was predictive of nurses staying on the job one year after congruence was measured. A study among Norwegian nurses revealed that congruence between perceived and desired human relations values determined attitudes toward the nurse's ward and those nurses who adhered to human relation values and perceived these values to prevail at their ward held positive attitudes toward the ward and exhibited high levels of job satisfaction (Verplanken, 2004).

## 3.5.2 Self-concordance theory and conservation model

Value incongruence is an interactional model in nature. The premise of this model is that it is the interaction between the environmental and personal characteristics that determines attitudinal and behavioral outcomes (Schneider, 1983; Terborg, 1981). The interaction between individual and organizational values explains more variances then those explained by either individual or organizational values alone (Edwards, 2008). Individuals experience organizational culture and respond based on their personal values. Self-concordance theory can explain the psychological mechanism of this interactional model of value incongruence. Self-concordance means the extent to which activities express personal interests and values (Sheldon & Elliot, 1999). Self-concordance theory posits that individual behavior is guided by individual decisions, which in turn is affected by internal and external constraints (Ryan & Deci, 2000). When external environment characteristics fit the individual's internal characteristics, the later are regarded as self-concordant with the environment. Such individuals see their work as a form of self-expression and build a positive self-concept based on that. When individuals find that personal values and organizational values are similar, they see the working environment as self-fulfilling and as a way of maintaining their self-integrity. Positive job attitudes and behavior follows. On the other hand, when they find that personal values and organizational

values are different, they see the working environment as discordant with their self-identity, which give rise to negative attitudes and behaviors. This explanation of the effect process of value incongruence parallels the claim of cognitive dissonance theory which posits that when individuals and their environments have prioritized different values, there will be higher levels of cognitive dissonance (Elliot & Devine, 1994; Festinger, 1957) which diminish the sense of self-integrity.

Levine's conservation model (Levine, 1969, 1996) is traditionally used to explain the effect of nursing practice on patients. The 'wholeness' of patients is the goal of nursing intervention. The balancing of patients' internal and external environments to achieve integrity is used to explain nursing effectiveness. We claim that, like anyone else, nurses also need to feel a sense of integrity in their work, especially personal integrity and social integrity. To achieve this integrity and wholeness, the 'fit' of personal values and organizational values is crucial. It helps nurses to build a positive self-concept and find concordance with the work environment. In this way, value incongruence affects the attitudes and behaviors of nurses through interaction between personal and organizational values, which facilitates the building of self-concordant cognition. By using this approach, we integrate the self-concordance theory from organizational literature and the conservation model of nursing theory to explain the negative effects of value incongruence on nurses' attitudes and behaviors.

## 3.5.3 Value incongruence and burnout

Burnout is a prolonged negative state of experience responding to various stressors in the job (Maslach, Schaufeli, & Leiter, 2001). Dysfunctional elements like physical fatigue, emotional exhaustion and cognitive weariness lead to various costly consequences for both the employee and organization, including negative job attitudes, poor health conditions, greater staff turnover and lower performance (Lee & Ashforth, 1996; Lindblom, Linton, Fedeli, & Bryngelsson, 2006; Maslach et al., 2001). According to above self-concordance theory and conservation model, value incongruence should lead to negative job attitudes and even burnout, if self-concordance cannot be achieved.

Furthermore, there is empirical evidence linking value incongruence and burnout. For example, Siegall & McDonald (2004) and Lindblom *et al* (2006) found that value incongruence leads to burnout, non-work activities and intent to leave. Leiter (2008) found that value congruence is inversely related to all three dimensions of burnout. Leiter *et al.* (2009) found that members of Generation X experience more value misfit and burnout than Baby Boomers, implying the positive correlation between value incongruence and burnout. Value congruence between a person and the organization predicts, what recent research calls the opposite of burnout-work engagement (Koyuncu et al., 2006). Thus, the first hypothesis can be deduced:

**H1:** Value incongruence is positively related to burnout.

## 3.5.4 Value incongruence and well-being outcomes

Burnout has been proposed as the main determinant of negative well-being (both individual and organizational). We define negative individual and organizational well-being as those outcomes that are harmful to the individual and organization. In this study, some selected well-being outcomes were studied: self-rated health, turnover intention and accident propensity. Burnout in itself is an important indicator of individual psychological well-being. We consider burnout and self-rated health as individual well-being outcomes and turnover intention and accident propensity as organizational well-being outcomes based on their influence.

There is ample evidence supporting the claim that burnout triggers poor health (Lee & Ashforth, 1996; Lindblom et al., 2006; Wright & Bonett, 1997). Extending this logic, this study will test whether values incongruence affects individual and organizational well-being directly or via the mediating role of burnout. Thus, the above leads to the second set of hypotheses:

**H2a:** Value in congruence is negatively related to self-rated health.

**H2b:** Burnout mediates the relationship between value incongruence and self-rated health.

Turnover intention is an interesting organizational outcome examined in the value congruence literature. It was found that value congruence is inversely related to turnover intention (Amos & Weathington, 2008; Cennamo & Gardner, 2008;

Scroggins, 2007). Also, burnout is positively related to turnover intention (Leiter et al., 2009). Thus, the third set of hypotheses can be stated as following:

**H3a:** Value incongruence is positively related to turnover intention.

**H3b:** Burnout mediates the relationship between value incongruence and turnover intention.

To the best of our knowledge, accident propensity has not been studied within the context of value incongruence. There are, however, anecdotal stories connecting burnout with higher rates of accidents in hospital settings. Interviews between our researchers and nursing administrators proposed that there is a link between burnout and on-the-job accidents. These accidents covered both patient care (for example, the incorrect delivery of medication) and personal danger (for example, self injury from needles or sharps). Thus, the fourth set of hypotheses is:

**H4a:** Value incongruence is positively related to accident propensity.

**H4b:** Burnout mediates the relationships between value incongruence and accident propensity.

A summary of the proposed model and hypotheses is given in Figure 3.1.

#### Insert Figure 3.1 about here

## 3.6 The study

#### 3.6.1 Aims

The aim of this study was to examine the relations of value incongruence to the individual and organizational well-being variables of self-rated health, turnover intention and accident propensity, as mediated by burnout.

## **3.6.2 Design**

A cross-sectional correlational design was used.

## 3.6.3 Participants

Convenience sampling was used to survey nurses from 36 departments in one of the largest public university hospitals in Spain during the spring of 2009. Of the 950 nurses asked, 234 responded, yielding a response rate of 24.6%.

## 3.6.4 Measures

The tri-axial model of values developed and validated by Dolan and his colleagues (Dolan, 2011; Dolan, Diez-Pinol, Fernandez-Alles, Martin-Prius, & Martinez-Fierro, 2004; Dolan et al., 2006) was used to measure values. The model has been tested previously in Spain (Knoppen et al., 2006). This model defines culture in terms of three complementary axes, namely Economical-pragmatic, Ethical-social and Emotional-developmental axes. Based on the Semi-Delphi procedure employed by the research team, five values (i.e. five items) were used for each axis. Economic-pragmatic values included competitiveness, money, achievement, order and task focus, Ethical-social values included cooperation, family, professional ethic,

justice and integrity and Emotional-developmental values included love, passion, satisfaction, empathy and happiness. We used subjective measurement (Edwards & Cable, 2009) to operationalize value incongruence. Respondents rated the importance of each of the values on the Likert scale from 1-4 (1 meaning 'not important' and 4 meaning 'very important'.) in double contexts: a) How important is this value to me and b) how dominant is this value in the day to day hospital activity. By using these commensurate items, we obtained comparable information of personal and organizational values on the same dimensions. The Cronbach's alpha for Emotional, Economical and Ethical values for personal values were 0.68, 0.59, 0.66 respectively and for organizational values were 0.91, 0.63, 0.86 respectively.

Burnout was measured using Shirom-Melamed's increasingly popular and highly-validated scale (Shirom & Melamed, 2006). It includes three dimensions and twelve items on a 7-point Likert scale. We averaged the items to obtain the total burnout score. The Cronbach's alpha was 0.94.

The single-item measure of Benyamini & Idler (1999) was used to measure self-rated health on a 5-point Likert scale. The single-item construct has been found to be a valid predictor of all-cause morbidity and mortality (DeSalvo, Bloser, Reynolds, He, & Muntner, 2006a) and has demonstrated comparable reliability and validity when compared with other multi-item measures (DeSalvo et al., 2006b). The question was: 'What is your general state of health?' Turnover intention was measured using

the three items proposed by Adams & Beehr (1998) on a 5-point Likert scale. The Cronbach's alpha was 0.92.

The accident propensity questionnaire was developed specially for this study to evaluate the perception of the nurses' perceptions of the probability of being involved in any of seven common nursing accidents. A 4-point Likert scale was used ranging from not at all likely to very likely. Examples of items included are: 'Medication not given/given at the wrong time', 'Incorrect medication given' and 'Incorrect medication dosage'. The Cronbach's alpha was 0.88.

Gender, age, tenure as nurse and work status (part-time or full-time) were included as control variables. Previous studies found that demographic variables such as gender and age can be related to well-being outcomes. Also, tenure and interpersonal relationship tend to moderate the relationship between value congruence and outcome variables (Adkins et al., 1996). Thus, we included tenure and work status as control variables because they should be related to the effect of value incongruence.

#### 3.6.5 Ethical considerations

The questionnaires were distributed in a way that guaranteed anonymity and the participants were assured that the purpose of the study was purely academic and no personal information would be publicly revealed. Informed consent was achieved by prefacing all surveys with a letter stating the purpose and academic nature of the study and stating that all surveys would be completely anonymous with respect to individual nurses. No nurse name was asked for and the questionnaires were collected by the

researchers from a common site that they were dropped. The hospital's research director presented the instrument to an ethics committee, which approved the project. In addition, the survey was supported and approved by the provincial Nursing Association.

#### 3.6.7 Data analysis

We used an absolute difference score between personal and organizational values on different axes to obtain subjective value incongruence. The larger the difference, the more incongruent the values are on that axis. Correlation analysis and stepwise regression were used to test the hypotheses using SPSS 17.0.

#### 3.7 Results

## 3.7.1 Participant demographics

Of the 234 respondents, 8.5% were men and 90.6% were women, which reflects the typical gender composition of the nursing profession in Catalonia. Average age was 43. The mean tenure as a nurse was 19.1 years and the mean tenure in their current position was 11.5 years. 11.6% were working as part-time nurses and 88.4% were full-time nurses. The 234 nurses represented 31 hospital departments or units. These are: Delivery Room (n=2, 0.9%), Emergency (n=10, 4.3%), Emergency – Maternity (n=2, 0.9%), General Hospital (n=14, 6.0%), Gynecology (n=1, 0.4%), Gyno Oncology (n=6, 2.6%), Hematology (n=1, 0.4%), Hepatology (n=4, 1.7%), ICU – Neonatal (n=30 12.8%), Infection Control (n=5, 2.1%), Infectious Diseases (n=5, 2.1%), Internal Medicine (n=5, 2.1%), Maternity (n=5, 2.1%), Neonatal (n=18, 7.7%),

Neurology (n=3, 1.3%), Neurosurgery (n=2, 0.9%), Obstetrics (n=3, 1.3%), Oncology (n=4, 1.7%), Osteoarticular Rehabilitation (n=15, 6.4%), Pediatrics (n=17, 7.3%), Physiotherapy (n=11, 4.7%), Psychiatry (n=1, 0.4%), Pulmonology (n=4, 1.7%), Rehabilitation (n=1, 0.4%), Rotation (n=1, 0.4%), Sleep Studies (n=1, 0.4%), Spinal Cord Injuries (n=5, 2.1%), Surgery (n=26, 11.1%), Thoracic and Respiratory (n=1, 0.4%), Trauma (n=18, 7.7%) and Urology (n=1, 0.4%). And twelve of them (5.1%) were missing department information.

## 3.7.2 Descriptive statistics and Correlation Matrix

Table 3.1 illustrates that of the three value axes, Economical and Ethical value incongruence are correlated with burnout. This suggests that hypothesis H1 is supported on these two axes. Moreover, Emotional and Ethical value incongruence were correlated with accident propensity. Thus, hypothesis H4a was supported on these two axes. All three types of value incongruence were correlated with turnover intention (hypothesis H3a fully confirmed) but none of them was related to health (H2a rejected).

## 3.7.3 Hypotheses testing

Stepwise regression was used to test the mediation hypotheses. We followed the classic method proposed by (Baron & Kenny, 1986). In each regression, the control variables were entered first, followed by the value incongruence on specific axis and then burnout was introduced. The criterion variables were used separately for each regression. A summary of the results is provided in tables 3.2, 3.3 and 3.4.

Table 3.2 illustrates that Emotional value incongruence does not have a relationship with burnout and self-rated health. Hypotheses H1 and H2a and H2b were not confirmed for this axis. By contrast, it significantly increases turnover intention and accident propensity. Thus hypotheses H3a and H4a for this axis were supported. Nevertheless, since Emotional value incongruence was not related to burnout, we cannot claim that burnout played a mediating role. Therefore, hypotheses H2b, H3b and H4b were not supported for this axis.

Table 3.3 displays the findings that Economical value incongruence increases burnout and turnover intention, thus confirming hypotheses H1 and H3a for this axis. After including burnout as mediator, the effect of Economical value incongruence on turnover intention becomes weaker, albeit significant. Thus, we claim that burnout only partially mediates the effect of Economical value incongruence on turnover intention.

The findings presented in Table 3.4 show that Ethical value incongruence also raises burnout, turnover intention and accident propensity, thus supporting hypotheses H1, H3a and H4a for this axis. After including burnout as mediator, the effect of Ethical value incongruence on turnover intention shrank and the effect on accident propensity became insignificant. Hence, we argue that burnout partially mediates the effect of Ethical value incongruence on turnover intention and fully mediates the effect on accident propensity.

## 3.8 Discussion

Economical and Ethical value incongruence raises the level of burnout amongst nurses. Moreover, all types of value incongruence, substantially increase two organizational well-being indicators: turnover intention and accident propensity. Hence, we can conclude that value congruence can be an effective way of boosting the retention of nurses' and reduces their proneness to accidents. In line with the findings of others (Demerouti et al., 2000; Verplanken, 2004), the results suggest that value congruence may thus function as an important buffer for nurses against burnout and general dissatisfaction with their job or with their life in general. Organizations and in particular health care institutions wishing to avoid such outcomes should strive to achieve a better fit between personal and organizational values. For instance, by recruiting people whose personal values fit better with the values of the hospital, promoting desired values in the hospital by creating appropriate reward systems and in general creating a hospital culture, for which a value audit can be conducted and culture re-engineering pursued (Dolan, 2011).

We call attention to the importance of axes of values in this context. One interesting finding is that the different axes of value incongruence related differently to outcomes. Among them, Emotional value incongruence is only related to organizational well-being outcomes, Economical value incongruence is related to burnout and turnover intention, while Ethical value incongruence is related to burnout, turnover intention and accident propensity. These findings suggest that Emotional values are important only in regard to the attitudes towards the organization, while

Economic values are important to personal feeling like burnout and turnover intention, but not to explain actual health or proneness to accidents. Instead of referring to organizational culture in general, we should be specific about the axis of values we are discussing. This echoes the call to treat value dimensionally and to consider context in value congruence research (Johns, 2006; Rousseau & Fried, 2001).

The hypotheses that burnout mediates the relationship between value incongruence and well-being outcomes are only supported on some axes of value incongruence and outcomes as reported. A direct effect of burnout on turnover intention and accident propensity was found in the present study and it is considerably larger than the impact of value incongruence as it explains more variance. This suggests that burnout itself should be given special attention. Burnout only partially mediates the effects of Economical and Ethical value incongruence on turnover intention and fully mediates the effect of Ethical value incongruence on accident propensity. Consequently, alleviation of work-related stress and adjustment of work conditions is recommended for those who manage the hospital.

## 3.8.1 Limitations of the study

Firstly, our data were collected from the same source and we do not claim that the sample was representative. Thus conclusions should be treated with caution hence the external validity can be limited. Moreover there is the possibility of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Yet it is unavoidable because all our study variables should be measured from the same sources. Future

studies can use more objective measures, such as actual accident data, physiological health indicators and real turnover rate. Secondly, we used subjective measurement to operationalize value incongruence because of its subjective relationship with burnout (Edwards & Cable, 2009). Later studies might use more objective measures such as measuring organizational values from hospital manager. Thirdly, although the 3Es-triaxial model of value has been tested and supported in Spain, perhaps the meanings of values vary in other cultures and the underlying structure would yield different configurations of axes. Future studies might use other measures of values in other contexts. Also, other methods rather than absolute difference score (Cheung, 2009; Edwards, 2002) can be used in other contexts to make the results more generalizable. Finally, participants in this study were self-selecting and the response rate was low—a problem that is commonly encountered when doing research in Catalonia.

## 3.8.2 Conclusion

The practical information of this value incongruence approach to well-being with regard to managers is that when individual and organizational values are matched on important axes, individuals will experience low levels of burnout, therefore bolstering the importance of assimilating personal and organizational values in the hospital using culture management and socialization techniques (Verplanken, 2004). Yet, certain axes of values are more important than others.

Our study examined a new set of outcome variables that had hitherto been ignored in relationships to value incongruence. From a perspective of self-concordance theory and conservation model, we introduced self-concept to the research of value incongruence. Future study may develop this self based theory of value incongruence further. We found that value incongruence leads to burnout and burnout can be a mediator that explains value incongruence's psychological mechanism. Further research on the relationships between value incongruence and burnout, especially on different dimensions of values, is needed to generalize our results.

## **References of Chapter 3**

- Adams, G. A., & Beehr, T. A. 1998. Turnover and retirement: A comparison of their similarities and differences. *Personnel Psychology*, 51(3): 643-665.
- Adkins, C. L., Ravlin, E. C., & Meglino, B. M. 1996. Value congruence between co-workers and its relationship to work outcomes. *Group & Organization Management*, 21(4): 439-460.
- Amos, E. A., & Weathington, B. L. 2008. An analysis of the relation between employee-organization value congruence and employee attitudes. *Journal of Psychology: Interdisciplinary and Applied*, 142(6): 615-631.
- Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173-1182.
- Benyamini, Y., & Idler, E. L. 1999. Community studies reporting association between self-rated health and mortality. *Research on Aging*, 21(3): 392.
- Cennamo, L., & Gardner, D. 2008. Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8): 891-906.
- Cheung, G. W. 2009. Introducing the latent congruence model for improving the assessment of similarity, agreement, and fit in organizational research. *Organizational Research Methods*, 12(1): 6-33.

- Corley, M. C. 2002. Nurse moral distress: A proposed theory and research agenda. *Nursing Ethics*, 9(6): 636-650.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. 2000. A model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing*, 32(2): 454-464.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. 2001. The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3): 499-512.
- DeSalvo, K. B., Bloser, N., Reynolds, K., He, J., & Muntner, P. 2006a. Mortality prediction with a single general self-rated health question. *Journal of General Internal Medicine*, 21(3): 267-275.
- DeSalvo, K. B., Fisher, W. P., Ky, T., Bloser, N., Merrill, W., & Peabody, J. 2006b. Assessing measurement properties of two single-item general health measures. *Quality of Life Research*, 15(2): 191-201.
- Dolan, S. L. 2011. Coaching by Values: A guide to success in the life of business and the business of life Bloomington, Indiana: iUniverse Publishing.
- Dolan, S. L., Diez-Pinol, M., Fernandez-Alles, M., Martin-Prius, A., & Martinez-Fierro, S. 2004. Exploratory study of within-country differences in work and life values: The case of Spanish business students. *International Journal of Cross Cultural Management*, 4(2): 157-180.
- Dolan, S. L., Garcia, S., & Richley, B. 2006. *Managing by values: A corporate guide to living, being alive, and making a living in the 21st century*. Basingstoke [England]; New York: Palgrave Macmillan.
- Duquette, A., Kérouac, S., Sandhu, B. K., & Beaudet, L. 1994. Factors relating to nursing burnout: A review of empirical knowledge. *Issues in Mental Health Nursing*, 15(4): 337-358.
- Edwards, J. R. 2002. Alternatives to difference scores: Polynomial regression analysis and response surface methodology. In Fritz Drasgow, & Neal Schmitt (Eds.), *Measuring and analyzing behavior in organizations: Advances in measurement and data analysis.*: 350-400. San Francisco, CA: Jossey-Bass.
- Edwards, J. R. 2008. Person-environment fit in organizations: An assessment of theoretical progress. *The Academy of Management Annals*, 2: 167 230.
- Edwards, J. R., & Cable, D. M. 2009. The value of value congruence. *Journal of Applied Psychology*, 94(3): 654-677.

- Elliot, A. J., & Devine, P. G. 1994. On the motivational nature of cognitive dissonance: Dissonance as psychological discomfort. *Journal of Personality* and *Social Psychology*, 67(3): 382-394.
- Festinger, L. 1957. *A theory of cognitive dissonance*. Stanford, Calif.: Stanford University Press.
- Glazer, S., & Beehr, T. A. 2002. Similarities and differences in human values between nurses in four countries. *International Journal of Cross Cultural Management*, 2(2): 185-202.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. 2008. The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3): 224-241.
- Hoffman, B. J., & Woehr, D. J. 2006. A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68(3): 389-399.
- Holland, C. K. 1993. An ethnographic study of nursing culture as an exploration for determining the existence of a system of ritual. *Journal of Advanced Nursing*, 18(9): 1461-1470.
- Hsu, H.-Y., Chen, S.-H., Yu, H.-Y., & Lou, J.-H. 2010. Job stress, achievement motivation and occupational burnout among male nurses. *Journal of Advanced Nursing*, 66(7): 1592-1601.
- Johns, G. 2006. The essential impact of context on organizational behavior. *Academy of Management Review*, 31(2): 386-408.
- Knoppen, D., Dolan, S. L., Diez-Pinol, M., & Bell, R. 2006. A triangulation analysis of value congruency in corporate Spain: American dream or Spanish reality? *International Journal of Human Resource Management*, 17(3): 539-558.
- Koyuncu, M., Burke, R., J, & Fiksenbaum, L. 2006. Work engagement among women managers and professionals in a Turkish bank: Potential antecedents and consequences. *Equal Opportunities International*, 25(4): 299-310.
- Kristof, A. L. 1996. Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1): 1-49.
- Lee, R. T., & Ashforth, B. E. 1996. A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2): 123-133.

- Leiter, M. P. 2008. A two process model of burnout and work engament: Distinct implications of demands and values. *Supplemento A, Psicologia*, 30(A): 52-58.
- Leiter, M. P., Jackson, N. J., & Shaughnessy, K. 2009. Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between Baby Boomers and Generation X. *Journal of Nursing Management*, 17(1): 100-109.
- Levine, M. E. 1969. The pursuit of wholeness. *American Journal of Nursing*, 69(1): 93-98.
- Levine, M. E. 1996. The conservation principles: A retrospective. *Nursing Science Quarterly*, 9(1): 38-41.
- Lindblom, K. M., Linton, S. J., Fedeli, C., & Bryngelsson, I.-L. 2006. Burnout in the working population: Relations to psychosocial work factors. *International Journal of Behavioral Medicine*, 13(1): 51-59.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. 2001. Job burnout. *Annual Review of Psychology*, 52: 397-422.
- O'Reilly, C. A., & Chatman, J. A. 1996. Culture as social control: Corporations, cults, and commitment. In B. M. Staw, & L. L. Cummings (Eds.), *Research in organizational behavior*, Vol. 18: 157-200. Greenwich, Connecticut: Elsevier Science/JAJ Press.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5): 879-903.
- Prins, J. T., Gazendam-Donofrio, S. M., Tubben, B. J., van der Heijden, F. M. M. A., van de Wiel, H. B. M., & Hoekstra-Weebers, J. E. H. M. 2007. Burnout in medical residents: A review. *Medical Education*, 41(8): 788-800.
- Raiger, J. 2005. Applying a cultural lens to the concept of burnout. *Journal of Transcultural Nursing*, 16(1): 71-76.
- Rokeach, M. 1973. *The nature of human values*. New York: Free Press.
- Rousseau, D. M., & Fried, Y. 2001. Location, location, location: contextualizing organizational research. *Journal of Organizational Behavior*, 22(1): 1-13.
- Ryan, R. M., & Deci, E. L. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1): 68-78.

- Schneider, B. 1983. Interactional psychology and organizational behavior. *Research* in *Organizational Behavior*, 5: 1-31.
- Scroggins, W. A. 2007. An examination of the additive versus convergent effects of employee perceptions of fit. *Journal of Applied Social Psychology*, 37(7): 1649-1665.
- Sheldon, K. M., & Elliot, A. J. 1999. Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76(3): 482-497.
- Shirom, A., & Melamed, S. 2006. A comparison of the construct validity of two burnout measures in two groups of professionals. *International Journal of Stress Management*, 13(2): 176-200.
- Siegall, M., & McDonald, T. 2004. Person-organization value congruence, burnout and diversion of resources. *Personnel Review*, 33(3): 291-301.
- Suominen, T., Kovasin, M., & Ketola, O. 1997. Nursing culture—some view points. *Journal of Advanced Nursing*, 25(1): 186-190.
- Terborg, J. R. 1981. Interactional psychology and research on human behavior in organizations. *Academy of Management Review*, 6(4): 569-576.
- Thorne, L. 2010. The association between ethical conflict and adverse outcomes. *Journal of Business Ethics*, 92(2): 269-276.
- Tzeng, H.-M., Ketefian, S., & Redman, R. W. 2002. Relationship of nurses' assessment of organizational culture, job satisfaction, and patient satisfaction with nursing care. *International Journal of Nursing Studies*, 39(1): 79-84.
- Vandenberghe, C. 1999. Organizational culture, person-culture fit, and turnover: a replication in the health care industry. *Journal of Organizational Behavior*, 20(2): 175-184.
- Verplanken, B. 2004. Value congruence and job satisfaction among nurses: A human relations perspective. *International Journal of Nursing Studies*, 41(6): 599-605.
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. 2003. A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3): 473-489.
- Wright, T. A., & Bonett, D. G. 1997. The contribution of burnout to work performance. *Journal of Organizational Behavior*, 18(5): 491-499.

## **Appendix of Chapter 3**

Table 3.1: Means (M), Standard deviations (SD) and inter-correlations of the study variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
Personal values														
1. Emotional	3.56	0.43												
2. Economical	3.06	0.45	.371**											
3. Ethical	3.76	0.32	.508**	.368**										
Organizational values														
4. Emotional	2.16	0.93	.169*	.287**	.016									
5. Economical	3.04	0.64	.237**	.174**	.190**	.377**								
6. Ethical	2.79	0.85	.161*	.239**	.071	.787**	.621**							
Value incongruence														
7. Emotional	1.41	0.94	.288**	114	.217**	890**	262**	690**						
8. Economical	0.52	0.49	.002	146*	.003	368**	410**	454**	.359**					
9. Ethical	1.04	0.80	035	114	.155*	764**	521**	926**	.727**	.471**				
Outcomes														
10. Burnout	2.97	1.20	.003	061	137*	110	245**	155*	.107	$.152^{*}$	$.142^{*}$			
11. Accident Propensity	1.46	0.56	.075	.056	024	150*	065	172*	.176**	.103	$.148^{*}$	.370***		
12. Turnover Intention	2.17	1.21	.046	045	004	296**	146*	273**	.304**	.202**	.266**	.394**	.276**	
13. Self-rated Health	3.23	0.85	092	016	006	045	020	027	.008	.046	.013	417**	086	091

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed), \*\*. Correlation is significant at the 0.01 level (2-tailed).

**Table 3.2: Emotional value incongruence and outcomes** 

Independent Variables		Indi	vidual a	itcomes	5	Organizational outcomes						
	Burnout		Sel	Self rated health			Turnover intention			<b>Accident propensity</b>		
	M1	M2	M1	M2	M3	M1	M2	M3	M1	M2	M3	
Step1: Control												
Gender	.014	.011	116	116	113	.027	.019	.014	.037	.033	.029	
Age	078	037	156	155	171	263	156	147	037	.027	.022	
Tenure	.044	.008	.059	.059	.068	.209	.111	.109	261	316*	307*	
Work status	.010	.009	.015	.015	.017	.008	.004	.000	.012	.012	.010	
Step2: Incongruence												
Emotional		.108		.002	.056		.288***	.255***		.146*	.105	
Step 3: Mediation												
Burnout					448***			.361***			.349***	
R square	.002	.013	.027	.027	.225	.015	.095	.225	.084	.105	.225	
Adjust R square	017	010	.008	.004	.202	004	.073	.202	.066	.083	.202	
R square change		.011		.000	.198***		.081***	.129***		.021	.120	
F value	.104	.559	1.450	1.155	9.917***	.776	4.345***	9.911***	4.703***	4.762***	9.791***	

<sup>\*</sup>p < .05, \*\*p < .01, \*\*\* p < .001. Standardized regression coefficients are reported.

M1=model 1, relationship between control variables to outcomes, M2=model 2, relationship between control variables and Emotional value incongruence to outcomes, M3=model 3, relationship between control variables, Emotional value incongruence and burnout to outcomes.

Table 3.3: Economical value incongruence and outcomes

Independent Variables		Indi	ividual o	utcome	S	Organizational outcomes						
	Burnout		Self rated health			Turnover intention			Accident propensity			
	M1	M2	M1	M2	M3	M1	M2	M3	M1	M2	M3	
Step1: Control												
Gender	.014	.032	116	110	097	.027	.050	.038	.037	.049	.037	
Age	076	056	156	150	177	264	238	225	035	026	018	
Tenure	.036	.013	.058	.051	.063	.208	.178	.176	267	279	276	
Work status	.010	.007	.015	.014	.015	.008	.004	.000	.012	.011	.009	
Step2: Incongruence												
Economical		.159*		.053	.128*		.203**	.148*		.110	.054	
Step 3: Mediation												
Burnout					461***			.362***			.353***	
R square	.002	.027	.028	.030	.237	.015	.055	.183	.087	.099	.220	
Adjust R square	017	.004	.009	.007	.215	004	.032	.159	.069	.077	.197	
R square change		.025*		.003	.207***		.040**	.128***		.012	.121***	
F value	.116	1.169	1.474	1.297	10.663***	.780	2.421*	7.696***	4.898***	4.490***	9.563***	

<sup>\*</sup>p < .05, \*\*p < .01, \*\*\* p < .001. Standardized regression coefficients are reported.

M1=model 1, relationship between control variables to outcomes, M2=model 2, relationship between control variables and Economical value incongruence to outcomes, M3=model 3, relationship between control variables, Economical value incongruence and burnout to outcomes.

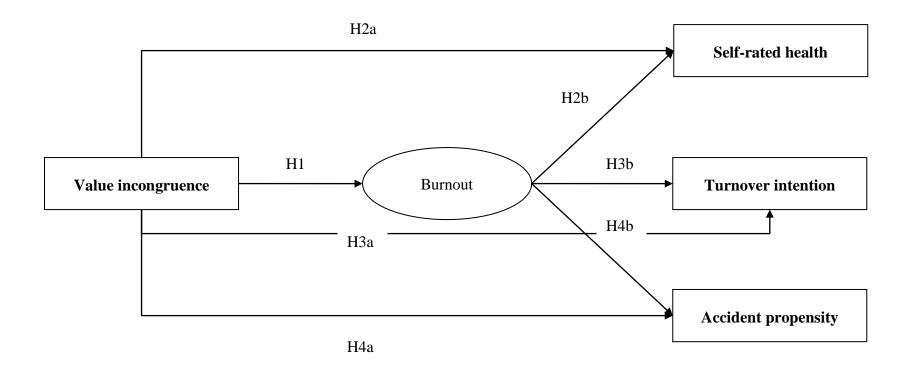
**Table 3.4: Ethical value incongruence and outcomes** 

Independent Variables		Indi	ividual o	utcome	S	Organizational outcomes						
	Burnout		Se	Self rated health			<b>Turnover intention</b>			Accident propensity		
	M1	M2	M1	M2	M3	M1	M2	M3	M1	M2	M3	
Step1: Control												
Gender	.014	.017	116	115	110	.027	.032	.025	.037	.040	.034	
Age	078	063	156	154	183	263	240	223	037	010	008	
Tenure	.044	.021	.059	.057	.074	.209	.171	.165	261	292	286	
Work status	.010	002	.015	.014	.010	.008	014	015	.012	.001	.003	
Step2: Incongruence												
Ethical		.149*		.017	.088		.255***	.208***		.140*	.084	
Step 3: Mediation												
Burnout					455***			.357***			.348***	
R square	.002	.024	.027	.028	.229	.015	.079	.204	.084	.104	.222	
Adjust R square	017	.000	.008	.004	.207	004	.057	.181	.066	.082	.198	
R square change		.022*		.000	.202***		.064***	.125***		.019*	.118***	
F value	.104	1.014	1.450	1.167	10.168***	.776	3.535**	8.750***	4.703***	4.701***	9.585***	

<sup>\*</sup>p < .05, \*\*p < .01, \*\*\* p < .001. Standardized regression coefficients are reported.

M1=model 1, relationship between control variables to outcomes, M2=model 2, relationship between control variables and Ethical value incongruence to outcomes, M3=model 3, relationship between control variables, Ethical value incongruence and burnout to outcomes.

Figure 3.1: Summary of proposed hypotheses



## **4: Paper 3**

# The motivational mechanism of value congruence: A conceptual and empirical exploration using the self-concept based theory

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## The motivational mechanism of value congruence: A conceptual and empirical exploration using the self-concept based theory

#### 4.1 Abstract

Recognizing the "fragmented", "speculative", and "social" nature of the current theoretical explanations on the effect process of value congruence, we argue that a self-concept based theory can aid in understanding the motivational mechanism of value congruence; it can land a more coherent theoretical perspective. We hypothesize that organizational based self esteem and organizational identity can mediate the relationships between value congruence and individual attitudinal outcomes. This proposed relationship goes beyond the mediating effect of social mechanism such as trust in organization. The empirical results show that trust in organization is a consistent mediator, while for organizational based self esteem and organizational identity, the mediating effect depending on the outcomes studied. The findings are discussed within the broader context of explaining the motivational mechanisms of values congruence and why the latter must be considered by managers

#### 4.2 Introduction

Value congruence in work setting means the match of work values between employees and their organization (Kristof-Brown et al., 2005; Kristof, 1996; Meglino et al., 1989). Value congruence was reported to be related to various employee attitudes and behaviors that are beneficial to the organization such as job satisfaction (Chatman, 1989; Kristof, 1996; O'Reilly et al., 1991), organizational commitment

(Adkins & Caldwell, 2004), organizational identification (Finegan, 2000), team cohesion (Meyer et al., 2010), and extra role performance (Jehn, 1994). Because of these purported positive effects, different researchers studied value congruence from various theoretical backgrounds in the past three decades.

Despite the growing interests, research on the "effect process" of value congruence is still very limited (Edwards & Cable, 2009; Goodman & Svyantek, 1999). We do not know "why" value congruence leads to the various outcomes as stated. The theories used to explain the effect process of value congruence stem from different angles and various backgrounds and most of the claims derived from these theories are seldom empirically validated (Edwards & Cable, 2009; Kristof, 1996). In other words, the current theoretical explanations of value congruence's effect are fragmented and speculative. Furthermore, most of the theoretical explanations are applying a "social" approach. That is to say, they explain why value congruence works by clarifying how value congruence can integrate social relationships and coordinate social activity. It is posited that value congruence leads to a better social environment, such as trust, that produces positive attitudes and behaviors. The concept of culture is treated as "social glue" in this respect.

The study reported herein is an attempt to understand the effect process of value congruence. By recognizing the "fragmented", "speculative", and "social" nature of the current theoretical explanations, we will attempt to show that the use self-concept based theory to explain the effect process is reasonable. We propose that values can

be treated not only as "predisposition" of human behavior, but also as "self-definition". We further argue that value congruence affect individual not only by providing them with a preferable social environment, but also by helping them to define and understand themselves as individuals. We see this self-definition function as an "individual" mechanism that explains the effect process of value congruence paralleling the "social" mechanism such as trust. By adding and examining two mediator variables derived from the self-concept based theory, namely organizational based self esteem (OBSE) and organizational identification, we hope to contribute to the understanding of the effect process of value congruence in a more comprehensive manner. By examining the mediating effects of trust and variables of self-concepts simultaneously, we argue that we can better understand the joint effects "individual" and "social" sides of organizational culture.

## 4.3 Value congruence

## 4.3.1 Values as predisposition and as self-definition

Values are defined as "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). Values are considered as a fundamental system guiding human cognition, communication, and conduct (Meglino & Ravlin, 1998) and who they are as a person (Shamir, 1991). Values are learned during the socialization process and tend to be stable over time. We study work values in the context of organization and how those work values affect the individual's work

attitudes and behaviors. We define organizational culture as the shared values within the organization (Dolan et al., 2006; O'Reilly & Chatman, 1996; Schein, 1985).

Work values have two basic functions to the individual in the organization. Firstly, values can be the predisposition of human behavior. That is, values are the fundamental references of individuals when they perceive, process, communicate, and act on information in the organization. People will compare between different "conducts" and "situations" to decide which ones are good, right, and ought to choose (Dolan, 2011). That is, values decide human behavior in a "social" perspective. In this regard, values are "a person's internalized belief about how he or she should or ought to behave." (Meglino & Ravlin, 1998, P 354) Socially, people who share values will be acting based on those values, thus, their actions are coordinated, and their interpersonal relationships are tuned. Shared values become organizational culture and act as "social glue" in this perspective.

Secondly, values also function as self-definition references. Individuals form a self-concept partially based on the values they possess (Leonard et al., 1999; Shamir, 1991). Individuals define who they are based on several elements such as gender, ethnic group, personality, skill, knowledge, and value is an important element among them. The self-concept formed by individual is important because individual act consistent with this self-concept and also has the tendency to strengthen this self-concept.

#### 4.3.2 Value congruence and its measurement

We conceptualize value congruence as the similarity of individual values and organizational values (Chatman, 1989; Edwards & Cable, 2009; O'Reilly et al., 1991). We do not include other levels of value congruence in this study such as value congruence between individual and group, or individual and other individuals such as supervisor or job interviewer. Although the level of research in our study is individual, it is the fit to organization values that is of interest. Thus, the focus of our study is about individual mindset that is related to attitudes that are toward organization, such as organizational commitment.

Researchers used direct or indirect methods to measure value congruence. Direct measurement is asking directly the focal individual their perceived value congruence. That is, to ask focal individual the extent to which they think their personal values and the organizational values are similar. Direct measurement makes three assumptions. First, it is assumed that respondents understand what they mean by values, although this personal understanding does not have to be identical across individuals. Second, the individual knows the organizational values. And third, the individual is capable to assess value congruence, whether on a logical or irrational basis. Differently, indirect measures use commensurate value dimensions to rate values of the individual and the organization; and then, the researcher uses an algorithm to assess value congruence. Indirect measurement includes subjective value congruence and objective value congruence. In subjective value congruence, focal individual answers twice the importance of values on commensurate dimensions, one on the values of themselves,

the other on the organizational values as perceived by them. Thus, subjective value congruence also has the assumption that the individual knows the organizational values. In objective value congruence, the organizational values are measured by entities other than the focal individual such as manager of the organization. Thus, objective measurement does not require the individual to know the organizational values. Discussions on how to choose and use different types of value congruence are not settled in the literature (O'Reilly et al., 1991). Theories and studies suggest that perceived congruence is more close to individual mental process and thus more closely related to attitudes and behaviors. It may also mediate the effects of objective and subjective congruence (Dineen et al., 2002; van Vuuren et al., 2007). Meta-analytic research shows perceived measurement explains more variance (Cable & Judge, 1996; Cooper-Thomas, van Vianen, & Anderson, 2004a; Judge & Cable, 1997) than the other two methods. Because the foci in this paper is on the effect process of value congruence, and this effect process is studied as self-concept variables, we see perceived congruence as more proximal to the examined mental process and thus suitable for us to operationalize value congruence in this study.

#### 4.3.3 Effect process and explanation theories

According to the two functions of values, predisposition and self-definition, we briefly summarize the principle theories that explain the effect process of value congruence.

Firstly, the predisposition function will lead to a process explanation of value congruence that is mostly about integrated social relationship and coordinated social activity. It is assumed that individuals prefer an environment where the values are similar because people who share similar values will have similar ways of perceiving, processing, and communicating information, thus, their actions will be coordinated and easily predicted. Also, because of smooth interaction and predictability, individuals tend to trust each other, and conflicts will be reduced. In sum, people are attracted to this kind of situation. Theories adopted this predisposition function approach include interactional psychology (Diener, Larsen, & Emmons, 1984; Endler & Magnusson, 1976), person-environment fit theory (Caplan, 1987), strong culture theory (Cameron & Freeman, 1991), attraction-selection-attrition theory (Schneider, 2001; Schneider et al., 1995), similarity attraction theory (Byrne, 1997; Byrne, Griffitt, & Stefaniak, 1967), socialization tactics theory (Cable & Parsons, 2001), and conflict theory (Jehn, 1994).

One recent study systematically examined the effect process of value congruence (Edwards & Cable, 2009). Rather than focusing on a single underlying theory, this study derived four mediators from several existing theoretical explanations of the extant value congruence literature. They call this process of putting the theories "assembled, distilled, and integrated into a coherent theoretical model" (Edwards & Cable, 2009, P 654). They selected four mediators in their study: trust, communication, attraction, and predictability and found trust to be an important mediator of value congruence's effects on job attitudes. These mediators are all social

mechanisms in nature. The authors argue that value congruence can yield a preferable working environment for the individual and it was this smooth and friendly environment that led to positive attitudes. Values were treated as a predisposition of human behavior. Also, in concluding the research, the authors recommend examining other mediators because there were effects unexplained by their chosen mediators.

Secondly, besides the mechanisms stated above, there are also theories using the self-definition function of values. For example, cognitive dissonance theory suggests that when values are not matched, individuals experience more dissonance (Elliot & Devine, 1994; Festinger, 1957). Also, there are several empirical studies who have adopted this approach to study the effect of value congruence on self-esteem (James et al., 1994; Naus et al., 2007) or optimism about the organization's future (Harris & Mossholder, 1996).

As can be seen, theories using the self-dentition function of values to explain the effect process of value congruence is limited compared to theories using the predisposition function of values. It is not often referred to because value congruence is deemed as an interpersonal phenomenon and has its effects only in an interpersonal context (Pervin, 1968). Yet we claim that the individual mechanism of value congruence is also to be recognized in the context of explaining the effect process. We see self-concept as an important motivational factor influencing attitudes and behaviors. We deem values as both predisposition of behavior and self-definition reference.

There are two studies that consider "need" satisfaction in the process of value congruence's effect (Cable & Edwards, 2004; Greguras & Diefendorff, 2009). This approach incorporated individual's self in the theoretical discussion, but it is different the approach we are proposing herein. Using a need fulfillment of value (Cable & Edwards, 2004) or treat need satisfaction as the outcome of value congruence (Greguras & Diefendorff, 2009), this approach assumes that employees' needs are partially satisfied by value congruence. In other words, they assume that employees "want" value congruence. Defining values in a hybrid from with anchor in predispositions as well as self-definition, we see values as social force that "requires" something out of the employees. We see that employees do not "want" the value congruence or a certain "amount" of values, but they "find" value congruence or incongruence and that is what affects their attitudes and behaviors. We believe that "the consequence of acting in line with one's internalized values is not a sense of pleasure or need fulfillment, but rather a sense of affirmation attained when the person abides by his or her moral commitments or espoused values" (Leonard et al., 1999, P 971), and "this is done by positing values and identities as a major components of the self-concept that the individual seeks to validate in his or her work behavior" (Shamir, 1991, P 419).

#### 4.3.4 Value congruence research

With its purported positive effects on employee attitudes and behaviors (Hoffman & Woehr, 2006; Verquer et al., 2003), value congruence is a prolific field of research. It has been studied in different contexts such as staffing and socialization (e.g. Cable

& Judge, 1997), job attitudes and performance (e.g. O'Reilly et al., 1991), and leadership (e.g. Brown & Trevino, 2006), to name a few. The general observation is that value congruence is positively related to positive job attitudes such as job satisfaction and commitment (Verguer et al., 2003). On the other hand, the study on the relationship between value congruence and behavioral outcomes, whether task performance or organizational citizenship behavior (OCB), are limited in number of studies, and also complicated in nature. Some researchers reported null impact on behavioral outcomes (Knoppen et al., 2006; Nyambegera et al., 2001). Some reported small albeit significant impact (Vogel & Feldman, 2009), some reported systematic moderators on the relationship such as job interdependence and time (Adkins et al., 1996), while others claim value congruence is more related to OCB than task performance (de Lara, 2008). Due to the fact that the goal of our study is to investigate the mediating effects of self-concept variables on the relationship between value congruence and outcomes, and because job attitudes are the mainly studied outcomes in the value congruence research, we choose to study three kinds of employee attitudes namely job satisfaction, organizational commitment, and burnout as the outcome variables for this study.

## 4.4 Self-concept based theory

#### 4.4.1 Self-concept based theory

Self-concept based theory was originally developed to tackle work motivations that cannot be explained by the "exchange" or "calculative" theories of motivation

(Leonard et al., 1999; Shamir, 1991). It is proposed that certain behaviors such as sacrifice cannot be explained by the "exchange" or "calculative" motivations. On the other hand, a self-concept theory can explain those behaviors that can transcend across situations and can reflect intrinsic motivations. "values and moral obligations" (Shamir, 1991, P 409) are added into motivation by self-concept theory as "energizing and directing work behavior" (Shamir, 1991, P 410). It is posited that values, as well as competence and self-efficacy, are important factors to be considered into the work motivation, and self-concept is an important motivational process.

It is assumed that individuals forms a "self-image" or "self-perception" based on previous interactions with the environment. More than the needs to "exchange" and being "instrumental", individuals also have the needs to know who they are and feel and act based on this idea. Individuals are not only goal-oriented but also self-expressive of the self-concept. This self-concept is an important reference point for motivation. Trait, competency, and values are important elements of this self-concept (Leonard et al., 1999). Once this self-concept is formed, individuals have the tendency to act according to on this self-concept, defined as "self-consistency", and also the tendency to reinforce this self-concept, defined as "self-strengthen".

According to this self-concept theory of motivation (Shamir, 1991; Shamir et al., 1993), a self-concept can have different elements. Firstly, individuals form a self-esteem and self-worth feeling. They form the **self-esteem** based on their competence and the **self-worth** based on their values and moral standards. They have

the tendency to maintain and enhance those feelings. A part of who they are comes from the traits, competence, and values. "I am a Karate black belt." or "I am a fair person" is this kind of self-concept. And when they form those kinds of self-images, their attitudes and behaviors will be defined by the self-images. Secondly, part of the self-concept is based on where and what people belong to. Individuals have the tendency to **identify** with certain groups of people. Self-concept is formed partially based on the identity and this identify will influence the attitudes and behaviors. "I am one of the IBM", or "I am a Google", is this kind of self-concept.

It is argued that individuals form their self-concept through a learning process (Bandura, 1977; Bono & Judge, 2003), and the interaction between the person and the environment is fundamental for the individual to form this self-concept. Individual is constantly interacting with the environment and getting feedback from the environment. Environmental feedback is an important clue for the individuals to form this self-concept. Environmental clues on whether the individual is competent and whether the individual is welcomed as a part of the group provide the individual information to form his/her self-concept. When this self-concept is formed, it becomes an important motivational mechanism to explain the attitudes and behaviors. Self-concept formed in organization has a lot to do with the interaction between individual and the organization and especially the organizational feedbacks individual will have. We see organization as an influential force for the individual to form self-concept within the organization and then the individual has specific job attitudes and behaviors according to this self-concept.

#### 4.4.2 Linking value congruence and self-concept based theory

Why use self-concept based theory in explaining the effect process of value congruence? Firstly, self-concept based theory is useful in the context of organizational culture and value congruence. Values and morals are natural elements of the self-concept (Shamir, 1991). It is proposed that self-concept based theory can be useful in the context of organizational culture where "self-concept based theory provides a potential link between management as symbolic action, organizational culture, and employee motivation." (Shamir, 1991, P 420). Secondly, we propose that value congruence is important factor for individuals to form self-concepts within the organization. Individuals will deem the organizational values as fundamental environmental clues and form their self-concept within the organization based on those values. When organizational values and personal values are congruent, individuals see themselves as competent and promising within the organization, and they identify with the organization, which lead to a positive self-concept; on the other hand, when they find their values and the organizational values are different, they see their existence within the organization incompetent and hopeless, which lead to a negative self-concept. Thirdly, self-concept is used to explain those motivations beyond duty and exchange relationships, which is suitable in the context of value congruence which also deals with attitudes and behavior that involves values and morals that are beyond exchange and calculation. Also, there is already study that empirically highlighted the importance of self-concept in value congruence context (Naus et al., 2007) as mediator.

## 4.5 Hypothesis development

From the discussion above, a set of specific hypothesis can be ducted. To test the different elements of the self-concept based theory of motivation in the effect process of value congruence, we chose two variables of OBSE, organizational identity because they are the major elements of the theory, especially in the value congruence context. We did not choose self-concept variables that are based on competence recognition such as self-efficacy.

#### 4.5.1 Value congruence and self-concept variables

Organizational based self-esteem is chosen because it can represent the self-worth element of self-concept based theory. Organizational based self-esteem is defined "as the degree to which an individual believes himself/herself to be capable, significant, and worthy as an organizational member." (Pierce & Gardner, 2004, P 593) It is suggested that OBSE is formed mainly around one's organizational and work experience and is an important factor influencing individual motivation, attitudes, and behavior. It is a personal feeling of how important and competent they are based on employees' interaction with the organization and the organizational feedback clues they have observed. It is posited that when individuals perceived signals from the organization that they are valued, important, capable, and competent within the organization, individuals will have higher degrees of OBSE. In the context of value congruence, when individuals found their values are congruent with organizational values, they will feel that they are valued within the organization and they are significant within the organization.

One empirical study directly tested the relationship between subjective value incongruence and OBSE and found they are negatively related (Naus et al., 2007), and OBSE acted as the mediator of value incongruence's effect on social cynicism.

Based on the above discussion, the following hypothesis is proposed:

**H1a:** Perceived value congruence is positively related to OBSE;

According to the self-concept based theory, identify is an important factor of the self-concept which then decide individual motivation. As discussed, if individuals found their values are similar to organizational values, they may see themselves as part of the organization and thus build their identity based on the organization. It is thus not surprising that organizational identity is actually one of the most examined outcomes of value congruence research. Empirical studies suggest that value congruence is positively related to organizational identification (Cable & DeRue, 2002; Cable & Edwards, 2004; Edwards & Cable, 2009).

**H1b:** Perceived value congruence is positively related to organizational identification;

## 4.5.2 Mediating of self-concept variables

As stated, paralleling the social functions of culture, individual function of culture is to be the self-definition references. Individuals who find value congruence with their environment will manifest positive job attitudes. And when employees feel they are competent and valued within the organization, they will be having positive job

attitudes and work related behaviors. OBSE has been found relate positively with satisfaction, organizational commitment (Pierce & Gardner, 2004), while organizational identification also positively relates to job satisfaction and organizational commitment (Riketta, 2005). Thus, we make following hypotheses:

**H2a:** Perceived value congruence is positively related to job satisfaction and OBSE partially mediates this relationship;

**H2b:** Perceived value congruence is positively related to job satisfaction and organizational identification partially mediates this relationship;

**H3a:** Perceived value congruence is positively related to organizational commitment and OBSE partially mediates this relationship;

**H3b:** Perceived value congruence is positively related to organizational commitment and organizational identification partially mediates this relationship;

Burnout is defined as a prolonged negative state of experience responding to various stressors in the job (Maslach et al., 2001). We approached burnout using the classical definition of emotional exhaustion, cynicism, and diminished personal accomplishment. Value congruence has been found to negatively relate to burnout (Leiter et al., 2009; Lindblom et al., 2006; Siegall & McDonald, 2004). Although the relationship between OBSE and organizational identification to burnout is not clear, according to the self-concept based theory, when individuals have a negative self-concept, they will tend to act consistent to this concept. They will experience

more emotional exhaustion, become more cynicism, and feel accomplishing less.

Thus, we hypothesize:

**H4a:** Perceived value congruence is negatively related to burnout and OBSE partially mediates this relationship;

**H4b:** Perceived value congruence is negatively related to burnout and organizational identification partially mediates this relationship.

## 4.6 Method

#### 4.6.1 Procedure

In the spring of 2012, the head manager of a county hospital in northeast China was contacted. After understanding the research objectives and reviewing the research instrument (i.e. questionnaire), the head manager agreed to participate in the survey. In the meanwhile, the county bureau of health also agreed to sponsor the survey. The questionnaire was distributed to all 243 first line employees of the hospital. Questionnaire started with brief introduction explaining the pure academic nature of the study and ensuring anonymity. Respondents were asked to answer the questionnaire in their free time and return it to the first author directly. 205 of them responded to the survey (85% response rate). After deleting unusable questionnaires characterized by overwhelming missing values, too vague to read, and other problematic questionnaires, 164 usable questionnaires were retained for subsequent analysis.

#### 4.6.2 Participants

The 164 participants ranged in age from 21 to 71 with mean age of 33.7. 40.2% of them are single while 57.3% are married, and 4 of them did not indicate their marital status. Most of the participants have a college (37.8%) or junior college degree (43.3%), while 14.6% of them are high school graduates and 0.6% has master and above degree. 6 of them did not indicate their education level. They are from all the first line departments and the four most representative departments are medicine, surgical, office, and emergency room.

#### 4.6.3 Measures

Perceived value congruence is measured with 3 items from (Cable & DeRue, 2002) using 7-point Likert scale ranging from strongly disagree to strongly agree. The Chinese translation of the items of Jiang Yan was used after comparing with the one used by Liu and his colleagues (Liu, Liu, & Hu, 2010). Cranbach's alpha is 0.875.

OBSE is measured with 10 items (Chen et al., 2005) using 7-point Likert scale ranging from strongly disagree to strongly agree, the Cranbach's alpha is 0.9.

Organizational identification is measured with 6 items (Mael & Ashforth, 1992) using 7-point Likert scale ranging from strongly disagree to strongly agree, the Cranbach's alpha is 0.797.

Trust in organization controlled to see whether the self-concept variables are really mediators beyond the mediation effect of trust. It is measured by using 5 chosen items (Chen et al., 2005) using 5-point Likert scale. The Cranbach's alpha is 0.85.

Job satisfaction is measured with 6 items (Tsui, Egan, & Oreilly, 1992) using 5-point Likert scale. The Cranbach's alpha is 0.774.

Organizational commitment is measured with 6 items (Allen & Meyer, 1996) using 5-point Likert scale. The Cranbach's alpha is 0.71.

Burnout is measured with 15 items (Li & Shi, 2003) using 7-point Likert scale. The Cranbach's alpha is 0.83.

#### 4.6.4 Data analysis

Some demographic information based on relevance in previous research such as gender, age, education level, marital status, work status (part time or full time), tenure (in month), and unit of the respondents were retained; this helped to control for potential influences.

For the hypothesized relationships, we use multiple regression to test for mediation (Baron & Kenny, 1986). We used job satisfaction, organizational commitment, and burnout as the dependent variables respectively. In every analysis, we entered demographic variables that are significantly related to outcome variables to control for their effects. In the second step, we entered perceived value congruence. In the third step, we entered trust in organization to control for the social mechanisms. And then in the fourth step, we entered OBSE and organizational identification to see whether they mediated the relationships of perceived value congruence to outcome variables beyond the mediating effect of trust in organization.

#### 4.7 Results

## **4.7.1 Descriptive statistics**

#### Insert table 4.1 about here

Table 4.1 summarizes the mean, standard deviations, and correlations among the studied variables. As shown, the direction and size of the correlations are in the hypothesized manner. Age and tenure are highly correlated and both significantly correlated with value congruence. This condition is logical given that if organizational tenure is long, it means that the employee has gone through a long period of socialization to have congruent values with the organization, or that those employees whose values are not congruent with the organization has left. This result supports the claims of the attraction-selection-attrition model which propose the organization will become homogenous in values over time (Schneider et al., 1995).

Value congruence is significantly correlated with OBSE (0.595) and organizational identification (0.326), supporting H1a and H1b. The correlation between value congruence and trust in organization is also significant (0.486) and similar to the size reported in Edwards and Cable's study (2009). Perceived value congruence is also significantly correlated with job satisfaction (0.363) and organizational commitment (0.391) and those sizes are similar to the ones reported in previous Meta analysis (Verquer et al., 2003). Value congruence is also significantly correlated with burnout negatively, in our hypothesized direction. Other correlations among the mediator variables and outcome variables are significant and moderate, as hypothesized.

#### 4.7.2 Hypothesis testing

Because age, marital status, and tenure are significantly correlated with our study variables, we chose to enter them as control variables in the multiple regression analysis.

### Insert table 4.2 about here

As shown in table 4.2, when value congruence was introduced to predict job satisfaction, the standardized beta of value congruence was significant, and when trust was introduced as the mediator, the relationship between value congruence and job satisfaction was not significant anymore. When OBSE and organizational identification was introduced in the fourth step as mediators, none of their effects on job satisfaction were significant. Thus, this analysis suggested that value congruence is positively related to job satisfaction and trust in organization fully mediated this relationship. Adding the individual mechanism of OBSE and organizational identification did not explanation any additional effect process beyond the process of social mechanism of trust. Thus, hypothesis H2a and H2b were not supported.

Table 4.2 shows that for organizational commitment, when trust was introduced, the relationship between value congruence and commitment reduced to only significant on a 0.1 level. And after introducing OBSE and organizational identification, it became insignificant while the relationship between organizational identification to organizational commitment was significant. This tells us that trust did not fully mediate the relationship between value congruence and organizational

commitment, and organizational identification was an individual mechanism beyond the social mechanism of trust. Thus, hypothesis H3a was not supported while H3b was supported.

In table 4.2, when trust was introduced in step 3, the relationship between value congruence and burnout was still significant. After introducing OBSE and organizational identification in the fourth step, it became insignificant while the relationship between OBSE and organizational identification to burnout was significant. Thus, in the case of burnout, the social and individual mechanisms are functioning simultaneously. Hypotheses H4a and H4b were supported.

#### 4.8 Discussion

While recognizing the pre-disposition function of values, we claimed that values can also be the self-definition references of individuals. Applying this approach in the context of value congruence research, we used self-concept based theory to understand the "individual" mechanism of culture paralleling the "social" mechanism as studied before (Edwards & Cable, 2009). We hypothesized that OBSE and organizational identification can medicated the relationship between value congruence and attitudinal outcomes such as job satisfaction, organizational commitment, and burnout beyond the mediating effects of trust in organization. The results partially supported our hypothesis while confirming again the mediating effect of trust.

The findings pointing the positive relationships between value congruence and OBSE and organizational identification support our hypothesis. Namely, it supports

the argument that individuals build their self concepts partially on the match of personal and organizational values. When work values are congruent, individuals see organizational values as important feedback from the organization and they form positive self-concepts about themselves within the organization. We deem the process of finding value congruence or incongruence as individuals "learning" organizational culture and cope with it. Our results reclaimed values as an important element of the self-concept theory. And to make the concept more comprehensive we have incorporated the social learning perspectives of work values (Meglino & Ravlin, 1998) and the learning of self-concept (Leonard et al., 1999; Shamir, 1991) and the results are most meaningful.

All in all, results show that value congruence is positively related to job satisfaction, organizational commitment, and negatively related to burnout in a Chinese hospital context. It reaffirms the profound effects of value congruence on attitudinal outcomes. Although there are some disagreements on the effect of value congruence in the context of a developing country (Nyambegera et al., 2001), at least in our study, the results echoes the findings reported elsewhere using Western, more developed societies samples.

We also hypothesized that self-concept variables mediates the relationships between value congruence and attitudinal outcomes beyond the mediating effects of trust in organization. That is, the "social" and "individual" mechanism of culture should function at the same time. Our empirical results suggest that for social

mechanism, trust in organization was a significant mediator across the three different attitudes. But, as for the individual mechanisms, the various outcomes studied were mediated by individual mechanism differently. For example, job satisfaction was only mediated by trust; organizational commitment was mediated by both trust and organizational identification, and burnout was mediated by trust, OBSE, and organizational identification. It is interesting to note this differential impact on the outcomes of the combined mediators used in this study. We suggest that this happens because different outcomes are indeed related to different psychological mechanisms and contexts. As for job satisfaction, perhaps value congruence's effect was introduced mainly through trust because job satisfaction was a construct that is more socially oriented. Organizational commitment is affected through both trust and organizational identification. It is thus clear that individual's identify recognition plays an important part in the process of forming commitment. As for the burnout, it is affected by all of the three mediators. Both of the social and individual mechanism is functioning in the process of forming burnout. Compared to job satisfaction and organizational commitment, burnout is more related to the individual experience while the other two are more related to the organizational experience. If we separate job attitudes into more individual and more social attitudes, it is clear that burnout is more individual while the other two are more social. Our study parallels the conclusion of other scholar who have reported similar results whereby different outcomes were affected through different processes (Greguras & Diefendorff, 2009). In a broader context, one can talk about different types of fit which are related to

outcomes in various configurations. We propose that maybe self-concept variables can explain the attitudes that are either more job related, more individual related, and connected with behavioral outcomes. Future research can employee this self-concept based theory to other types of fit such as person-job fit. Future research can also employ self-concept based theory to study behavioral outcomes.

Our study is not without limitations. Firstly, our cross sectional survey that stemmed from the employee's perspective, may yield the possibility of common method variances (Podsakoff et al., 2003). It is partially unavoidable because we used perceived value congruence measurement and also our self-concept variables are also individuals' recognitions and our outcome variables are primarily job attitudes. Future research should apply objective value congruence measurement, and use real performance outcomes, and collect data in multiple times stages to avoid this potential problem. Secondly, the Chinese translation of the perceived value congruence measurement still needs further validation, although in our study it showed good results. Thirdly, the sample size of our study is relatively small and is located only in one hospital. Future studies can use larger samples in other organizational context and national macro culture to see whether self-concept theory applies to those conditions. We propose that in more individual oriented cultures such as the United States, self-concept theory will be more substantial.

#### 4.9 Conclusion

Applying self-concept based theory in the context of value congruence's effect process, was found very instrumental to explain relationships with and also test the differential mediating effects of key variables anchored in the social and individual mechanisms. The principal conclusion is that while social mechanism is important, we cannot neglect the mediation of individual mechanisms. Self-concept theory aids us in understanding the motivational mechanism of value congruence's effect.

## **References of Chapter 4**

- Adkins, B., & Caldwell, D. 2004. Firm or subgroup culture: Where does fitting in matter most? *Journal of Organizational Behavior*, 25(8): 969-978.
- Adkins, C. L., Ravlin, E. C., & Meglino, B. M. 1996. Value congruence between co-workers and its relationship to work outcomes. *Group & Organization Management*, 21(4): 439-460.
- Allen, N. J., & Meyer, J. P. 1996. Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, 49(3): 252-276.
- Bandura, A. 1977. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2): 191-215.
- Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173-1182.
- Bono, J. E., & Judge, T. A. 2003. Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46(5): 554-571.

- Brown, M. E., & Trevino, L. K. 2006. Socialized charismatic leadership, values congruence, and deviance in work groups. *Journal of Applied Psychology*, 91(4): 954-962.
- Byrne, D. 1997. An overview (and underview) of research and theory within the attraction paradigm. *Journal of Social and Personal Relationships*, 14(3): 417-431.
- Byrne, D., Griffitt, W., & Stefaniak, D. 1967. Attraction and similarity of personality characteristics. *Journal of Personality and Social Psychology*, 5(1): 82-90.
- Cable, D. M., & DeRue, D. S. 2002. The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87(5): 875-884.
- Cable, D. M., & Edwards, J. R. 2004. Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology*, 89(5): 822-834.
- Cable, D. M., & Judge, T. A. 1996. Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67(3): 294-311.
- Cable, D. M., & Judge, T. A. 1997. Interviewers' perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(4): 546-561.
- Cable, D. M., & Parsons, C. K. 2001. Socialization tactics and person-organization fit. *Personnel Psychology*, 54(1): 1-23.
- Cameron, K. S., & Freeman, S. J. 1991. Cultural congruence, strength, and type: Relationships to effectiveness. *Research in organizational change and development*, 5(1): 23-58.
- Caplan, R. D. 1987. Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior*, 31(3): 248-267.
- Chatman, J. A. 1989. Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review*, 14(3): 333-349.
- Chen, Z. X., Aryee, S., & Lee, C. 2005. Test of a mediation model of perceived organizational support. *Journal of Vocational Behavior*, 66(3): 457-470.
- Cooper-Thomas, H. D., van Vianen, A., & Anderson, N. 2004a. Changes in person-organization fit: The impact of socialization tactics on perceived and

- actual P-O fit. *European Journal of Work and Organizational Psychology*, 13(1): 52-78.
- de Lara, P. Z.-M. 2008. Should faith and hope be included in the employees' agenda? Linking P-O fit and citizenship behavior. *Journal of Managerial Psychology*, 23(1): 73-88.
- Diener, E., Larsen, R. J., & Emmons, R. A. 1984. Person × situation interactions: Choice of situations and congruence response models. *Journal of Personality and Social Psychology*, 47(3): 580-592.
- Dineen, B. R., Ash, S. R., & Noe, R. A. 2002. A web of applicant attraction: Person-organization fit in the context of Web-based recruitment. *Journal of Applied Psychology*, 87(4): 723-734.
- Dolan, S. L. 2011. Coaching by Values: A guide to success in the life of business and the business of life Bloomington, Indiana: iUniverse Publishing.
- Dolan, S. L., Garcia, S., & Richley, B. 2006. *Managing by values: A corporate guide to living, being alive, and making a living in the 21st century*. Basingstoke [England]; New York: Palgrave Macmillan.
- Edwards, J. R., & Cable, D. M. 2009. The value of value congruence. *Journal of Applied Psychology*, 94(3): 654-677.
- Elliot, A. J., & Devine, P. G. 1994. On the motivational nature of cognitive dissonance: Dissonance as psychological discomfort. *Journal of Personality and Social Psychology*, 67(3): 382-394.
- Endler, N. S., & Magnusson, D. 1976. *Interactional psychology and personality*. Washington; New York: Hemisphere Pub. Corp.; Distributed by Halsted Press.
- Festinger, L. 1957. *A theory of cognitive dissonance*. Stanford, Calif.: Stanford University Press.
- Finegan, J. E. 2000. The impact of person and organizational values on organizational commitment. *Journal of Occupational & Organizational Psychology*, 73(2): 149-169.
- Goodman, S. A., & Svyantek, D. J. 1999. Person-organization fit and contextual performance: Do shared values matter. *Journal of Vocational Behavior*, 55(2): 254-275.
- Greguras, G. J., & Diefendorff, J. M. 2009. Different fits satisfy different needs: Linking person-environment fit to employee commitment and performance

- using self-determination theory. *Journal of Applied Psychology*, 94(2): 465-477.
- Harris, S. G., & Mossholder, K. W. 1996. The affective implications of perceived congruence with culture dimensions during organizational transformation. *Journal of Management*, 22(4): 527-547.
- Hoffman, B. J., & Woehr, D. J. 2006. A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68(3): 389-399.
- James, K., Lovato, C., & Khoo, G. 1994. Social identity correlates of minority workers' health. *Academy of Management Journal*, 37(2): 383-396.
- Jehn, K. A. 1994. Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management*, 5(3): 223-238.
- Judge, T. A., & Cable, D. M. 1997. Applicant personality, organizational culture, and organization attraction. *Personnel Psychology*, 50(2): 359-394.
- Knoppen, D., Dolan, S. L., Diez-Pinol, M., & Bell, R. 2006. A triangulation analysis of value congruency in corporate Spain: American dream or Spanish reality? *International Journal of Human Resource Management*, 17(3): 539-558.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. 2005. Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2): 281-342.
- Kristof, A. L. 1996. Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1): 1-49.
- Leiter, M. P., Jackson, N. J., & Shaughnessy, K. 2009. Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between Baby Boomers and Generation X. *Journal of Nursing Management*, 17(1): 100-109.
- Leonard, N. H., Beauvais, L. L., & Scholl, R. W. 1999. Work motivation: The incorporation of self-concept-based processes. *Human Relations*, 52(8): 969-998.
- Li, C. P., & Shi, K. 2003. The influence of distributive justice and procedural justice on job burnout. *Acta Psychologica Sinica*, 35(5): 677-684.

- Lindblom, K. M., Linton, S. J., Fedeli, C., & Bryngelsson, I.-L. 2006. Burnout in the working population: Relations to psychosocial work factors. *International Journal of Behavioral Medicine*, 13(1): 51-59.
- Liu, B., Liu, J., & Hu, J. 2010. Person-organization fit, job satisfaction, and turnover intention: An empirical study in the Chinese public sector. *Social Behavior and Personality: an international journal*, 38(5): 615-625.
- Mael, F., & Ashforth, B. E. 1992. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2): 103-123.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. 2001. Job burnout. *Annual Review of Psychology*, 52: 397-422.
- Meglino, B. M., & Ravlin, E. C. 1998. Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24(3): 351-389.
- Meglino, B. M., Ravlin, E. C., & Adkins, C. L. 1989. A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology*, 74(3): 424-432.
- Meyer, J. P., Hecht, T. D., Gill, H., & Toplonytsky, L. 2010. Person-organization (culture) fit and employee commitment under conditions of organizational change: A longitudinal study. *Journal of Vocational Behavior*, 76(3): 458-473.
- Naus, F., van Iterson, A., & Roe, R. A. 2007. Value incongruence, job autonomy, and organization-based self-etseem: A self-based perspective on organization cynicism. *European Journal of Work and Organizational Psychology*, 16(2): 195-219.
- Nyambegera, S. M., Daniels, K., & Sparrow, P. 2001. Why fit doesn't always matter: The impact of HRM and cultural fit on job involvement of Kenyan employees. *Applied Psychology: An International Review*, 50(1): 109-140.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. 1991. People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3): 487-516.
- O'Reilly, C. A., & Chatman, J. A. 1996. Culture as social control: Corporations, cults, and commitment. In B. M. Staw, & L. L. Cummings (Eds.), *Research in organizational behavior*, Vol. 18: 157-200. Greenwich, Connecticut: Elsevier Science/JAI Press.

- Pervin, L. A. 1968. Performance and satisfaction as a function of individual-environment fit. *Psychological Bulletin*, 69(1): 56-68.
- Pierce, J. L., & Gardner, D. G. 2004. Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, 30(5): 591.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5): 879-903.
- Riketta, M. 2005. Organizational identification: A meta-analysis. *Journal of Vocational Behavior*, 66(2): 358-384.
- Rokeach, M. 1973. The nature of human values. New York: Free Press.
- Schein, E. H. 1985. *Organizational culture and leadership*. San Francisco: Jossey-Bass Publishers.
- Schneider, B. 2001. Fits about fit. *Applied Psychology: An International Review*, 50(1): 141-152.
- Schneider, B., Goldstein, H. W., & Smith, D. B. 1995. The ASA framework: An update. *Personnel Psychology*, 48(4): 747-773.
- Shamir, B. 1991. Meaning, self and motivation in organizations. *Organization Studies*, 12(3): 405-424.
- Shamir, B., House, R. J., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4(4): 577-594.
- Siegall, M., & McDonald, T. 2004. Person-organization value congruence, burnout and diversion of resources. *Personnel Review*, 33(3): 291-301.
- Tsui, A. S., Egan, T. D., & Oreilly, C. A. 1992. Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37(4): 549-579.
- van Vuuren, M., Veldkamp, B. P., de Jong, M. D. T., & Seydel, E. R. 2007. The congruence of actual and perceived person-organization fit. *International Journal of Human Resource Management*, 18(10): 1736-1747.
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. 2003. A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3): 473-489.

Vogel, R. M., & Feldman, D. C. 2009. Integrating the levels of person-environment fit: The roles of vocational fit and group fit. *Journal of Vocational Behavior*, 75(1): 68-81.

# **Appendix of Chapter 4**

Table 4.1: Means (M), Standard deviations (SD) and inter-correlations of the study variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender																
2. Age	33.70	11.75	.118													
3. Education			013	073												
4. Marital status			.133	.548**	010											
5. Work status			016	037	.045	017										
6. Tenure	125.57	145.38	.108	.917**	163*	.519**	070									
7. Work unit			.217**	012	299**	.053	.049	004								
8. Value congruence	5.13	1.23	099	.218**	074	.124	.042	.234**	.057	(0.875)						
9. OBSE	5.12	1.02	077	.250**	140	.174*	.017	.292**	.153	.595**	(0.9)					
10. Identification	5.95	0.98	004	.130	.045	.081	.065	.090	085	.326**	.396**	(0.797)				
11.Trust	4.06	0.74	.051	.158	092	.160*	.050	.161*	.117	.486**	.419**	.200*	(0.85)			
12. Satisfaction	4.11	0.67	067	.159*	033	.073	051	.161*	034	.363**	.322**	.206**	.609**	(0.774)		
13. Commitment	4.13	0.65	.003	.099	114	.086	.022	.096	033	.391**	.278**	.329**	.597**	.588**	(0.71)	
14. Burnout	1.39	0.83	.036	179*	.090	056	074	130	121	371**	423**	329**	382**	349**	486**	(0.83)

<sup>\*</sup>. Correlation is significant at the 0.05 level (2-tailed); \*\*. Correlation is significant at the 0.01 level (2-tailed);

OBSE=organizational based self esteem; Cronbach's alpha is reported in parentheses

**Table 4.2: Multiple regression** 

	Outcome Variables												
Independent	Job Satisfaction					rganization	al Commit	ment	Burnout				
Variables	M1	M2	М3	M4	M1	M2	М3	M4	M1	M2	M3	M4	
Step 1:													
Age	.109	.076	.075	.084	.040	.001	.000	011	460*	427*	427*	473*	
Marital status	019	017	086	093	.046	.048	013	028	.049	.047	.082	.105	
Tenure	.065	.027	.032	.022	.037	009	004	.029	.275	.314	.311+	.386*	
Step 2:													
Congruence		.315***	.041	.005		.377***	$.130^{+}$	.124		315***	177*	007	
Step 3:													
Trust			.572***	.564***			.517***	.524***			289***	244**	
Step 4:													
OBSE				.032				137				253**	
Identification				.065				.225**				144 <sup>+</sup>	
$R^2$	.026	.121	.365	.370	.012	.147	.346	.388	.047	.141	.204	.275	
Adjusted R <sup>2</sup>	.006	.096	.343	.339	009	.123	.323	.357	.027	.117	.176	.239	
R <sup>2</sup> change		.095***	.244***	.005		.135***	.199***	.042**		.095***	.063***	.072***	
F value	1.286	15.369***	54.620***	.575	.566	22.658***	43.279***	4.779**	$2.345^{+}$	15.764***	11.150***	6.297***	

 $<sup>^+</sup>p < .1; *p < .05; **p < .01; ***p < .001$ . Standardized regression coefficients are reported.

M1=model 1, relationship between controlled demographic variables to outcomes; M2=model 2, relationship between controlled demographic variables and perceived value congruence to outcomes; M3=model 3, relationship between controlled demographic variables, perceived value congruence, and trust in organization to outcomes; M4= model 4, relationship between controlled demographic variables, perceived value congruence, trust in organization, organizational based self esteem, and organizational identification to outcomes.

## **5: Conclusions**

#### **5.1 Results**

It is clear from reading the review of paper 1 that albeit the development of extent literature on value congruence, the latter is not easy to comprehend or digest. The unclearness of the effect process is a major theoretical gap and it has rendered value congruence research muddled partially due to this reason. Recognizing the current theoretical explanations and their characteristics, this thesis approached the effect process with a self-concept based theory perspective. It is proposed that culture functions not only as a social glue to integrate social relationships and coordinate social actions, it also act as a self-definition reference point for individuals to from self-concepts within the organization. We propose that these social and individual mechanisms are functioning at the same time to explain the effect process of value congruence.

In paper 2, we used self-concordance theory as the underlying theory and also supplemented our argument with the conservation model. It was found that Economical and Ethical value incongruence was related to burnout and Emotional value incongruence was not. This result partially supports our argument that self-concept helps us to understand the effect process of value congruence.

In paper 3, the mediating mechanism of self-concepts was directly tested by using OBSE and organizational identification as the mediators, controlling for the social

mechanism of trust in organization. It was found out that for different attitudinal outcomes, the mediating mechanisms of social and individual mediators worked differently. Trust was a consistent mediator across all the attitudinal outcomes, while self-concepts were not mediator for job satisfaction. For organizational commitment, organizational identification was mediator, and for burnout, OBSE and organizational identification were all mediators.

It is clear from the above results that although the theoretical approaches applied in the paper 2 and paper 3 are different, the general usability of a self-concept theory approach in explaining the effect process of value congruence is legitimate. It is found out that the theoretical logic is supported in both papers. Thus, I claim that a self-concept theory is useful a perspective in the value congruence effect process context.

It is interesting that in paper 2, Emotional value incongruence was not related to burnout and in paper 3, self-concepts only were mediators for organizational commitment and burnout. Although the reason of those findings could be different, they both call for caution when discussing and using self-concepts. A general finding integrating the two papers is that we have to be careful when discussing the effect process of value congruence. It could be that different content dimensions of work values congruence are related to different outcomes through different mediating mechanism (Greguras & Diefendorff, 2009). The perceived value congruence measurement of Paper 3 prevented us to know further about different effect process

on different content dimensions of work values, further studies can examine whether this condition holds.

Another observation is that self-concept involves different elements as well. We used OBSE and organizational identity as the ones that could be influenced by perceived value congruence in paper 3. Self-efficacy was not included because we believed that it is more related to recognition of the Person-Job fit. Future research should investigate the different elements of self-concept and especially their interrelationships as well. Their effect could be different across different value dimensions, or different across different outcomes. And different elements could be supplementing each other in the effect process of explain different types of fit. Future studies should address the mediating effect of self-concepts in a bigger context of Person-Environment fit, and especially how this individual mechanism is functioning at the same time with a social mechanism, such as trust.

#### **5.2 Contributions and limitations**

#### **5.2.1 Contributions**

Self theory was used as the major and coherent theory to tackle the effect process of value congruence's effect. It is proven that self theory is a useful perspective in the context of explaining value congruence's effect. The social learning of a self-concept is integrated to the employee's understanding and responding to the organizational culture.

We proposed that culture can work as social and individual mechanism, which are from the predisposition and self-definition function of work values. We proposed and found out that these two mechanisms of culture work simultaneously. This adds more to our understanding of culture's influence, echoing the claims of the self-concept based theory (Leonard et al., 1999; Shamir, 1991).

The fact that paper 2 and 3 are both using sample from a hospital setting and the fact they are from Spain and China give us confidence on the generalizing of the findings to a broader perspective.

Also, burnout was examined in the health care industry often. Our results showed a relationship between value congruence (incongruence) to burnout, which is another job attitude that can be examined with value congruence.

#### 5.2.2 Limitations

As pointed out, paper 1 was a theoretical review based on the extant literature. We did not claim through coverage, and we did not have a systematic approach in the review. The arguments and claims are all speculative in nature. We did not conduct a quantitative review on the literature.

The limitations are similar in paper 2 and 3. Cross sectional survey was applied to a small sample of health workers on their perceptions and attitudinal feelings. Common method variance is possible. The use of test on mediation was simple in both studies. Further studies can apply other methods such as structural equation modeling. The sample size in Paper 3 was small and may harm the generalization.

#### **5.3 Conclusions**

Culture can act as social glue that integrates social relationships and coordinates social actions, at the same time, it can also act as self-definition references. Those social and individual mechanism both helps us to understand the effect process of value congruence, that is, social mediators such as trust and individual mediators such as OBSE and organizational identification are mediating the effect of value congruence simultaneously. A perspective that integrates the two functions of culture is needed to explain the effect process of value congruence.

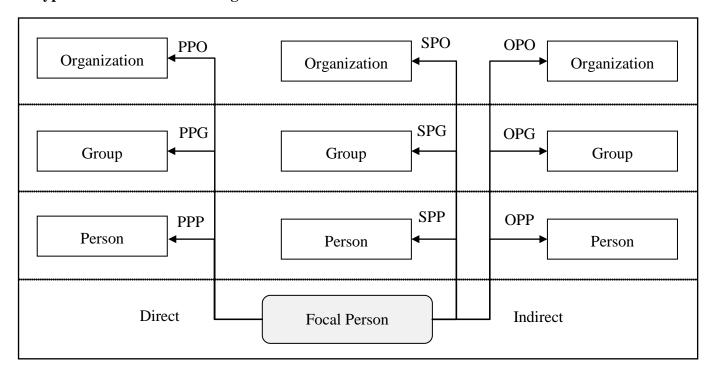
## **References of Chapter 5**

- Greguras, G. J., & Diefendorff, J. M. 2009. Different fits satisfy different needs: Linking person-environment fit to employee commitment and performance using self-determination theory. *Journal of Applied Psychology*, 94(2): 465-477.
- Leonard, N. H., Beauvais, L. L., & Scholl, R. W. 1999. Work motivation: The incorporation of self-concept-based processes. *Human Relations*, 52(8): 969-998.
- Shamir, B. 1991. Meaning, self and motivation in organizations. *Organization Studies*, 12(3): 405-424.

# 6: Appendix

# **6.1 Figures**

Figure 2.1: Different types and levels of value congruence



Note: PPO stands for the perceived person-organizational value congruence; SPG refers to subjective person-group value congruence; and OPP represents objective person-person value congruence, etc.

Figure 2.2: Integrative framework for value congruence research according to different themes (dotted lines indicate research gaps)

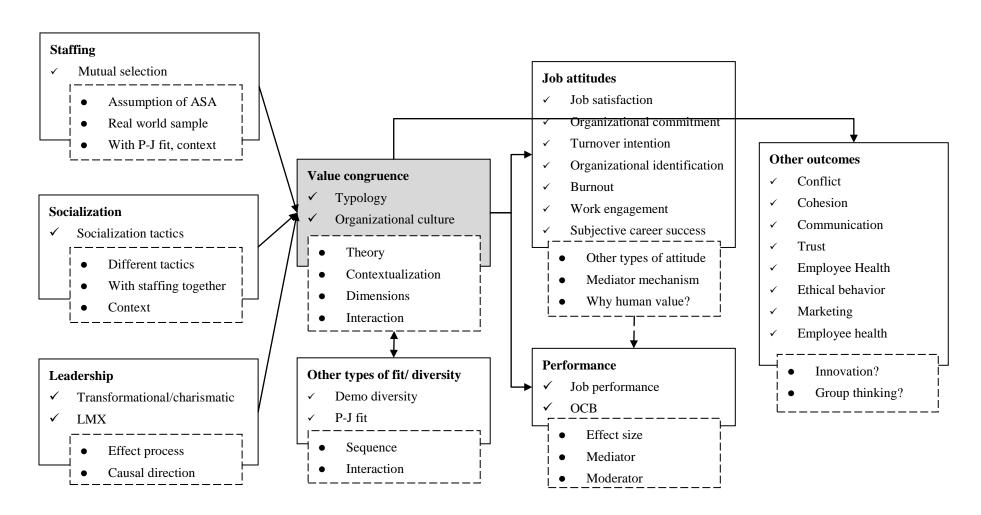
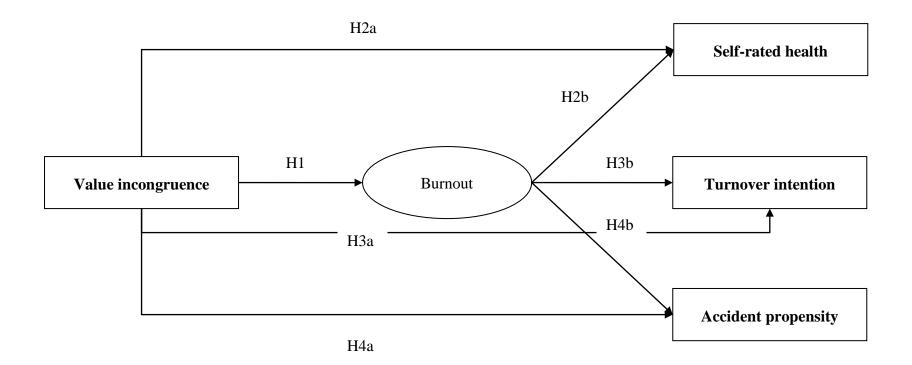


Figure 3.1: Summary of proposed hypotheses



## **6.2 Tables**

Table 3.1: Means (M), Standard deviations (SD) and inter-correlations of the study variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
Personal values														
1. Emotional	3.56	0.43												
2. Economical	3.06	0.45	.371**											
3. Ethical	3.76	0.32	.508**	.368**										
Organizational values														
4. Emotional	2.16	0.93	.169*	.287**	.016									
5. Economical	3.04	0.64	.237**	.174**	.190**	.377**								
6. Ethical	2.79	0.85	.161*	.239**	.071	.787**	.621**							
Value incongruence														
7. Emotional	1.41	0.94	.288**	114	.217**	890**	262**	690**						
8. Economical	0.52	0.49	.002	146*	.003	368**	410**	454**	.359**					
9. Ethical	1.04	0.80	035	114	$.155^{*}$	764**	521**	926**	.727**	.471**				
Outcomes														
10. Burnout	2.97	1.20	.003	061	137*	110	245**	155*	.107	$.152^{*}$	$.142^{*}$			
11. Accident Propensity	1.46	0.56	.075	.056	024	150*	065	172*	.176**	.103	$.148^{*}$	.370**		
12. Turnover Intention	2.17	1.21	.046	045	004	296**	146*	273**	.304**	.202**	.266**	.394**	.276**	
13. Self-rated Health	3.23	0.85	092	016	006	045	020	027	.008	.046	.013	417**	086	091

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed), \*\*. Correlation is significant at the 0.01 level (2-tailed).

**Table 3.2: Emotional value incongruence and outcomes** 

		Indi	vidual o	utcomes	3	Organizational outcomes							
	Burnout		Sel	Self rated health			urnover int	ention	Accident propensity				
<b>Independent Variables</b>	M1	M2	M1	M2	M3	M1	M2	M3	M1	M2	M3		
Step1: Control													
Gender	.014	.011	116	116	113	.027	.019	.014	.037	.033	.029		
Age	078	037	156	155	171	263	156	147	037	.027	.022		
Tenure	.044	.008	.059	.059	.068	.209	.111	.109	261	316*	307*		
Work status	.010	.009	.015	.015	.017	.008	.004	.000	.012	.012	.010		
Step2: Incongruence													
Emotional		.108		.002	.056		.288***	.255***		.146*	.105		
Step 3: Mediation													
Burnout					448***			.361***			.349***		
R square	.002	.013	.027	.027	.225	.015	.095	.225	.084	.105	.225		
Adjust R square	017	010	.008	.004	.202	004	.073	.202	.066	.083	.202		
R square change		.011		.000	.198***		.081***	.129***		.021	.120		
F value	.104	.559	1.450	1.155	9.917***	.776	4.345***	9.911***	4.703***	4.762***	9.791***		

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .001. Standardized regression coefficients are reported.

M1=model 1, relationship between control variables to outcomes, M2=model 2, relationship between control variables and Emotional value incongruence to outcomes, M3=model 3, relationship between control variables, Emotional value incongruence and burnout to outcomes.

Table 3.3: Economical value incongruence and outcomes

		Indi	ividual o	utcome	S	Organizational outcomes							
	Bur	nout	Se	lf rated	health	Tu	rnover in	tention	Accident propensity				
<b>Independent Variables</b>	M1	M2	M1	M2	M3	M1	M2	M3	M1	M2	M3		
Step1: Control													
Gender	.014	.032	116	110	097	.027	.050	.038	.037	.049	.037		
Age	076	056	156	150	177	264	238	225	035	026	018		
Tenure	.036	.013	.058	.051	.063	.208	.178	.176	267	279	276		
Work status	.010	.007	.015	.014	.015	.008	.004	.000	.012	.011	.009		
Step2: Incongruence													
Economical		.159*		.053	.128*		.203**	.148*		.110	.054		
Step 3: Mediation													
Burnout					461***			.362***			.353***		
R square	.002	.027	.028	.030	.237	.015	.055	.183	.087	.099	.220		
Adjust R square	017	.004	.009	.007	.215	004	.032	.159	.069	.077	.197		
R square change		.025*		.003	.207***		.040**	.128***		.012	.121***		
F value	.116	1.169	1.474	1.297	10.663***	.780	2.421*	7.696***	4.898***	4.490***	9.563***		

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .001. Standardized regression coefficients are reported.

M1=model 1, relationship between control variables to outcomes, M2=model 2, relationship between control variables and Economical value incongruence to outcomes, M3=model 3, relationship between control variables, Economical value incongruence and burnout to outcomes.

**Table 3.4: Ethical value incongruence and outcomes** 

		Indi	ividual o	utcome	S	Organizational outcomes							
	Burnout		Se	lf rated	health	Tu	rnover in	tention	Accident propensity				
<b>Independent Variables</b>	M1	M2	M1	M2	M3	M1	M2	M3	M1	M2	M3		
Step1: Control													
Gender	.014	.017	116	115	110	.027	.032	.025	.037	.040	.034		
Age	078	063	156	154	183	263	240	223	037	010	008		
Tenure	.044	.021	.059	.057	.074	.209	.171	.165	261	292	286		
Work status	.010	002	.015	.014	.010	.008	014	015	.012	.001	.003		
Step2: Incongruence													
Ethical		.149*		.017	.088		.255***	.208***		.140*	.084		
Step 3: Mediation													
Burnout					455***			.357***			.348***		
R square	.002	.024	.027	.028	.229	.015	.079	.204	.084	.104	.222		
Adjust R square	017	.000	.008	.004	.207	004	.057	.181	.066	.082	.198		
R square change		.022*		.000	.202***		.064***	.125***		.019*	.118***		
F value	.104	1.014	1.450	1.167	10.168***	.776	3.535**	8.750***	4.703***	4.701***	9.585***		

<sup>\*</sup>p < .05, \*\*p < .01, \*\*\* p < .001. Standardized regression coefficients are reported.

M1=model 1, relationship between control variables to outcomes, M2=model 2, relationship between control variables and Ethical value incongruence to outcomes, M3=model 3, relationship between control variables, Ethical value incongruence and burnout to outcomes.

Table 4.1: Means (M), Standard deviations (SD) and inter-correlations of the study variables

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender																
2. Age	33.70	11.75	.118													
3. Education			013	073												
4. Marital status			.133	.548**	010											
5. Work status			016	037	.045	017										
6. Tenure	125.57	145.38	.108	.917**	163*	.519**	070									
7. Work unit			.217**	012	299**	.053	.049	004								
8. Value congruence	5.13	1.23	099	.218**	074	.124	.042	.234**	.057	(0.875)						
9. OBSE	5.12	1.02	077	.250**	140	.174*	.017	.292**	.153	.595**	(0.9)					
10. Identification	5.95	0.98	004	.130	.045	.081	.065	.090	085	.326**	.396**	(0.797)				
11.Trust	4.06	0.74	.051	.158	092	.160*	.050	.161*	.117	.486**	.419**	.200*	(0.85)			
12. Satisfaction	4.11	0.67	067	$.159^{*}$	033	.073	051	.161*	034	.363**	.322**	.206**	.609**	(0.774)		
13. Commitment	4.13	0.65	.003	.099	114	.086	.022	.096	033	.391**	.278**	.329**	.597**	.588**	(0.71)	
14. Burnout	1.39	0.83	.036	179*	.090	056	074	130	121	371**	423**	329**	382**	349**	486**	(0.83)

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed); \*\*. Correlation is significant at the 0.01 level (2-tailed);

OBSE=organizational based self esteem; Cronbach's alpha is reported in parentheses

**Table 4.2: Multiple regression** 

	Outcome Variables												
Independent		Job Sa	tisfaction		O	rganization	al Commit	ment	Burnout				
Variables	M1	M2	М3	M4	M1	M2	М3	M4	M1	M2	М3	M4	
Step 1:													
Age	.109	.076	.075	.084	.040	.001	.000	011	460*	427*	427*	473*	
Marital status	019	017	086	093	.046	.048	013	028	.049	.047	.082	.105	
Tenure	.065	.027	.032	.022	.037	009	004	.029	.275	.314	.311+	.386*	
Step 2:													
Congruence		.315***	.041	.005		.377***	$.130^{+}$	.124		315***	177*	007	
Step 3:													
Trust			.572***	.564***			.517***	.524***			289***	244**	
Step 4:													
OBSE				.032				137				253**	
Identification				.065				.225**				144+	
$R^2$	.026	.121	.365	.370	.012	.147	.346	.388	.047	.141	.204	.275	
Adjusted R <sup>2</sup>	.006	.096	.343	.339	009	.123	.323	.357	.027	.117	.176	.239	
R <sup>2</sup> change		.095***	.244***	.005		.135***	.199***	.042**		.095***	.063***	.072***	
F value	1.286	15.369***	54.620***	.575	.566	22.658***	43.279***	4.779**	2.345+	15.764***	11.150***	6.297***	

 $<sup>^+</sup>p$ <.1; \*p<.05; \*\*p<.01; \*\*\*p<.001. Standardized regression coefficients are reported.

M1=model 1, relationship between controlled demographic variables to outcomes; M2=model 2, relationship between controlled demographic variables and perceived value congruence to outcomes; M3=model 3, relationship between controlled demographic variables, perceived value congruence, and trust in organization to outcomes; M4= model 4, relationship between controlled demographic variables, perceived value congruence, trust in organization, organizational based self esteem, and organizational identification to outcomes.

## 7: References

- Adams, G. A., & Beehr, T. A. 1998. Turnover and retirement: A comparison of their similarities and differences. *Personnel Psychology*, 51(3): 643-665.
- Adkins, B., & Caldwell, D. 2004. Firm or subgroup culture: Where does fitting in matter most? *Journal of Organizational Behavior*, 25(8): 969-978.
- Adkins, C. L., Ravlin, E. C., & Meglino, B. M. 1996. Value congruence between co-workers and its relationship to work outcomes. *Group & Organization Management*, 21(4): 439-460.
- Adkins, C. L., Russell, C. J., & Werbel, J. D. 1994. Judgments of fit in the selection process: The role of work value congruence. *Personnel Psychology*, 47(3): 605.
- Allen, N. J., & Meyer, J. P. 1996. Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior*, 49(3): 252-276.
- Amos, E. A., & Weathington, B. L. 2008. An analysis of the relation between employee-organization value congruence and employee attitudes. *Journal of Psychology: Interdisciplinary and Applied*, 142(6): 615-631.
- Apasu, Y. 1987. The importance of value structures in the perception of rewards by industrial salespersons. *Journal of the Academy of Marketing Science*, 15(1): 1-10.
- Arthur, W., Jr., Bell, S. T., Villado, A. J., & Doverspike, D. 2006. The use of person-organization fit in employment decision making: An assessment of its criterion-related validity. *Journal of Applied Psychology*, 91(4): 786-801.
- Aryee, S., Chay, Y. W., & Tan, H. H. 1994. An examination of the antecedents of subjective career success among a managerial sample in Singapore. *Human Relations*, 47(5): 487-509.
- Ashforth, B. E., & Saks, A. M. 1996. Socialization tactics: Longitudinal effects on newcomer adjustment. *Academy of Management Journal*, 39(1): 149-178.
- Ashkanasy, N. M., & O'Connor, C. 1997. Value congruence in leader-member exchange. *Journal of Social Psychology*, 137(5): 647-662.
- Badovick, G., & Beatty, S. 1987. Shared organizational values: Measurement and impact upon strategic marketing implementation. *Journal of the Academy of Marketing Science*, 15(1): 19-26.

- Balazs, A. L. 1990. Value congruency: The case of the 'socially responsible' firm. *Journal of Business Research*, 20(2): 171-181.
- Ballout, H. I. 2007. Career success: The effects of human capital, person-environment fit and organizational support. *Journal of Managerial Psychology*, 22(8): 741-765.
- Bandura, A. 1977. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2): 191-215.
- Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173-1182.
- Bass, B. M., & Avolio, B. J. 1993. Transformational leadership and organizational culture. *Public administration quarterly*, 17(1): 112-121.
- Becker, T. E. 1992. Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal*, 35(1): 232-244.
- Benyamini, Y., & Idler, E. L. 1999. Community studies reporting association between self-rated health and mortality. *Research on Aging*, 21(3): 392.
- Billsberry, J. 2007. Attracting for values: An empirical study of ASA's attraction proposition. *Journal of Managerial Psychology*, 22(2): 132-149.
- Bono, J. E., & Judge, T. A. 2003. Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46(5): 554-571.
- Boxx, W. R., Odom, R. Y., & Dunn, M. G. 1991. Organizational values and value congruency and their impact on satisfaction, commitment, and cohesion: An empirical examination within the public sector. *Public Personnel Management*, 20(2): 195-205.
- Bretz, R. D., Rynes, S. L., & Gerhart, B. 1993. Recruiter perceptions of applicant fit: Implications for individual career preparation and job search behavior. *Journal of Vocational Behavior*, 43(3): 310-327.
- Brown, M. E., & Trevino, L. K. 2006. Socialized charismatic leadership, values congruence, and deviance in work groups. *Journal of Applied Psychology*, 91(4): 954-962.

- Brown, M. E., & Trevino, L. K. 2009. Leader-follower values congruence: Are socialized charismatic leaders better able to achieve it? *Journal of Applied Psychology*, 94(2): 478-490.
- Byrne, D. 1997. An overview (and underview) of research and theory within the attraction paradigm. *Journal of Social and Personal Relationships*, 14(3): 417-431.
- Byrne, D., Griffitt, W., & Stefaniak, D. 1967. Attraction and similarity of personality characteristics. *Journal of Personality and Social Psychology*, 5(1): 82-90.
- Byrne, D. E. 1971. *The attraction paradigm*. New York: Academic Press.
- Cable, D. M., & DeRue, D. S. 2002. The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87(5): 875-884.
- Cable, D. M., & Edwards, J. R. 2004. Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology*, 89(5): 822-834.
- Cable, D. M., & Judge, T. A. 1996. Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67(3): 294-311.
- Cable, D. M., & Judge, T. A. 1997. Interviewers' perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82(4): 546-561.
- Cable, D. M., & Parsons, C. K. 2001. Socialization tactics and person-organization fit. *Personnel Psychology*, 54(1): 1-23.
- Caldwell, D. F., Chatman, J. A., & O'Reilly, C. A. 1990. Building organizational commitment: A multifirm study. *Journal of Occupational Psychology*, 63(3): 245-261.
- Cameron, K. S., & Freeman, S. J. 1991. Cultural congruence, strength, and type: Relationships to effectiveness. *Research in organizational change and development*, 5(1): 23-58.
- Caplan, R. D. 1987. Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior*, 31(3): 248-267.
- Carless, S. A. 2005. Person-job fit versus person-organization fit as predictors of organizational attraction and job acceptance intentions: A longitudinal study. *Journal of Occupational and Organizational Psychology*, 78(3): 411-429.

- Cennamo, L., & Gardner, D. 2008. Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8): 891-906.
- Chatman, J. A. 1989. Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review*, 14(3): 333-349.
- Chen, Z. X., Aryee, S., & Lee, C. 2005. Test of a mediation model of perceived organizational support. *Journal of Vocational Behavior*, 66(3): 457-470.
- Cheung, G. W. 2009. Introducing the latent congruence model for improving the assessment of similarity, agreement, and fit in organizational research. *Organizational Research Methods*, 12(1): 6-33.
- Choi, J. N., & Price, R. H. 2005. The effects of person-innovation fit on individual responses to innovation. *Journal of Occupational & Organizational Psychology*, 78(1): 83-96.
- Coldwell, D. A., Billsberry, J., van Meurs, N., & Marsh, P. J. G. 2008. The effects of person-organization ethical fit on employee attraction and retention: Towards a testable explanatory model. *Journal of Business Ethics*, 78(4): 611-622.
- Conger, J. A. 1999. Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *Leadership Quarterly*, 10(2): 145-179.
- Cooper-Thomas, H. D., van Vianen, A., & Anderson, N. 2004a. Changes in person-organization fit: The impact of socialization tactics on perceived and actual P-O fit. *European Journal of Work and Organizational Psychology*, 13(1): 52-78.
- Cooper-Thomas, H. D., van Vianen, A., & Anderson, N. 2004b. Changes in person-organization fit: The impact of socialization tactics on perceived and actual P-O fit. *European Journal of Work and Organizational Psychology*, 13(1): 52 78.
- Corley, M. C. 2002. Nurse moral distress: A proposed theory and research agenda. *Nursing Ethics*, 9(6): 636-650.
- Cunningham, G. B., & Sagas, M. 2004. Examining the main and interactive effects of deep- and surface-level diversity on job satisfaction and organizational turnover intentions. *Organizational Analysis*, 12(3): 319-332.
- De Cooman, R., De Gieter, S., Pepermans, R., Hermans, S., Du Bois, C., Caers, R., & Jegers, M. 2009. Person-organization fit: Testing socialization and

- attraction-selection-attrition hypotheses. *Journal of Vocational Behavior*, 74(1): 102-107.
- de Lara, P. Z.-M. 2008. Should faith and hope be included in the employees' agenda? Linking P-O fit and citizenship behavior. *Journal of Managerial Psychology*, 23(1): 73-88.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. 2000. A model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing*, 32(2): 454-464.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. 2001. The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3): 499-512.
- DeRue, D. S., & Morgeson, F. P. 2007. Stability and change in person-team and person-role fit over time: The effects of growth satisfaction, performance, and general self-efficacy. *Journal of Applied Psychology*, 92(5): 1242-1253.
- DeSalvo, K. B., Bloser, N., Reynolds, K., He, J., & Muntner, P. 2006a. Mortality prediction with a single general self-rated health question. *Journal of General Internal Medicine*, 21(3): 267-275.
- DeSalvo, K. B., Fisher, W. P., Ky, T., Bloser, N., Merrill, W., & Peabody, J. 2006b. Assessing measurement properties of two single-item general health measures. *Quality of Life Research*, 15(2): 191-201.
- Diener, E., Larsen, R. J., & Emmons, R. A. 1984. Person × situation interactions: Choice of situations and congruence response models. *Journal of Personality and Social Psychology*, 47(3): 580-592.
- Dineen, B. R., Ash, S. R., & Noe, R. A. 2002. A web of applicant attraction: Person-organization fit in the context of Web-based recruitment. *Journal of Applied Psychology*, 87(4): 723-734.
- Dolan, S. L. 2011. Coaching by Values: A guide to success in the life of business and the business of life Bloomington, Indiana: iUniverse Publishing.
- Dolan, S. L., Diez-Pinol, M., Fernandez-Alles, M., Martin-Prius, A., & Martinez-Fierro, S. 2004. Exploratory study of within-country differences in work and life values: The case of Spanish business students. *International Journal of Cross Cultural Management*, 4(2): 157-180.
- Dolan, S. L., Garcia, S., & Richley, B. 2006. *Managing by values: A corporate guide to living, being alive, and making a living in the 21st century*. Basingstoke [England]; New York: Palgrave Macmillan.

- Duquette, A., Kérouac, S., Sandhu, B. K., & Beaudet, L. 1994. Factors relating to nursing burnout: A review of empirical knowledge. *Issues in Mental Health Nursing*, 15(4): 337-358.
- Edwards, J. R. 1993. Problems with the use of profile similarity indices in the study of congruence in organizational research. *Personnel Psychology*, 46(3): 641-665.
- Edwards, J. R. 2002. Alternatives to difference scores: Polynomial regression analysis and response surface methodology. In Fritz Drasgow, & Neal Schmitt (Eds.), *Measuring and analyzing behavior in organizations: Advances in measurement and data analysis.*: 350-400. San Francisco, CA: Jossey-Bass.
- Edwards, J. R. 2008. Person-environment fit in organizations: An assessment of theoretical progress. *The Academy of Management Annals*, 2: 167 230.
- Edwards, J. R., & Cable, D. M. 2009. The value of value congruence. *Journal of Applied Psychology*, 94(3): 654-677.
- Edwards, J. R., Cooper, C. L., & Robertson, I. T. 1991. Person-job fit: A conceptual integration, literature review, and methodological critique, *International review of industrial and organizational psychology*, Vol. 6: 283-357. Oxford England: John Wiley & Sons.
- Edwards, J. R., & Shipp, A. J. 2007. The relationship between person-environment fit and outcomes: An integrative theoretical framework. In C. Ostroff, & T. A. Judge (Eds.), *Perspectives on organizational fit.*: 209-258. Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Elfenbein, H. A., & O'Reilly, C. A., III. 2007. Fitting in: The effects of relational demography and person-culture fit on group process and performance. *Group & Organization Management*, 32(1): 109-142.
- Elliot, A. J., & Devine, P. G. 1994. On the motivational nature of cognitive dissonance: Dissonance as psychological discomfort. *Journal of Personality and Social Psychology*, 67(3): 382-394.
- Endler, N. S., & Magnusson, D. 1976. *Interactional psychology and personality*. Washington; New York: Hemisphere Pub. Corp.; Distributed by Halsted Press.
- Erdogan, B., & Bauer, T. N. 2005. Enhancing career benefits of employee proactive personality: The role of fit with jobs and organizations. *Personnel Psychology*, 58(4): 859-891.
- Festinger, L. 1957. *A theory of cognitive dissonance*. Stanford, Calif.: Stanford University Press.

- Finegan, J. E. 2000. The impact of person and organizational values on organizational commitment. *Journal of Occupational & Organizational Psychology*, 73(2): 149-169.
- Glaman, J. M., Jones, A. P., & Rozelle, R. M. 1996. The effects of co-worker similarity on the emergence of affect in work teams. *Group & Organization Management*, 21(2): 192-215.
- Glazer, S., & Beehr, T. A. 2002. Similarities and differences in human values between nurses in four countries. *International Journal of Cross Cultural Management*, 2(2): 185-202.
- Goodman, S. A., & Svyantek, D. J. 1999. Person-organization fit and contextual performance: Do shared values matter. *Journal of Vocational Behavior*, 55(2): 254-275.
- Grant, E. S., & Bush, A. J. 1996. Salesforce socialization tactics: Building organizational value congruence. *Journal of Personal Selling & Sales Management*, 16(3): 17-32.
- Gregory, K. L. 1983. Native-view paradigms: Multiple cultures and culture conflicts in organizations. *Administrative Science Quarterly*, 28(3): 359-376.
- Greguras, G. J., & Diefendorff, J. M. 2009. Different fits satisfy different needs: Linking person-environment fit to employee commitment and performance using self-determination theory. *Journal of Applied Psychology*, 94(2): 465-477.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. 2008. The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3): 224-241.
- Harris, S. G., & Mossholder, K. W. 1996. The affective implications of perceived congruence with culture dimensions during organizational transformation. *Journal of Management*, 22(4): 527-547.
- Harrison, D. A., Price, K. H., Gavin, J. H., & Florey, A. T. 2002. Time, teams, and task performance: Changing effects of surface- and deep-level diversity on group functioning. *Academy of Management Journal*, 45(5): 1029-1045.
- Hoffman, B. J., & Woehr, D. J. 2006. A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68(3): 389-399.

- Holland, C. K. 1993. An ethnographic study of nursing culture as an exploration for determining the existence of a system of ritual. *Journal of Advanced Nursing*, 18(9): 1461-1470.
- Howell, J. M., & Avolio, B. J. 1993. Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78(6): 891-902.
- Hsu, H.-Y., Chen, S.-H., Yu, H.-Y., & Lou, J.-H. 2010. Job stress, achievement motivation and occupational burnout among male nurses. *Journal of Advanced Nursing*, 66(7): 1592-1601.
- James, K., Lovato, C., & Khoo, G. 1994. Social identity correlates of minority workers' health. *Academy of Management Journal*, 37(2): 383-396.
- Jehn, K. A. 1994. Enhancing effectiveness: An investigation of advantages and disadvantages of value-based intragroup conflict. *International Journal of Conflict Management*, 5(3): 223-238.
- Jehn, K. A., Chadwick, C., & Thatcher, S. M. B. 1997. To agree or not to agree: The effects of value congruence, individual demographic dissimilarity, and conflict on workgroup outcomes. *International Journal of Conflict Management*, 8(4): 287-305.
- Jehn, K. A., & Mannix, E. A. 2001. The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, 44(2): 238-251.
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. 1999. Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, 44(4): 741-763.
- Johns, G. 2006. The essential impact of context on organizational behavior. *Academy of Management Review*, 31(2): 386-408.
- Judge, T. A., & Cable, D. M. 1997. Applicant personality, organizational culture, and organization attraction. *Personnel Psychology*, 50(2): 359-394.
- Jung, D. I., & Avolio, B. J. 2000. Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, 21(8): 949-964.
- Kalliath, T. J., Bluedorn, A. C., & Strube, M. J. 1999. A test of value congruence effects. *Journal of Organizational Behavior*, 20(7): 1175-1198.

- Kim, T.-Y., Cable, D. M., & Kim, S.-P. 2005. Socialization tactics, employee proactivity, and person-organization fit. *Journal of Applied Psychology*, 90(2): 232-241.
- Knoppen, D., Dolan, S. L., Diez-Pinol, M., & Bell, R. 2006. A triangulation analysis of value congruency in corporate Spain: American dream or Spanish reality? *International Journal of Human Resource Management*, 17(3): 539-558.
- Koyuncu, M., Burke, R., J, & Fiksenbaum, L. 2006. Work engagement among women managers and professionals in a Turkish bank: Potential antecedents and consequences. *Equal Opportunities International*, 25(4): 299-310.
- Kraimer, M. L. 1997. Organizational goals and values: A socialization model. *Human Resource Management Review*, 7(4): 425-447.
- Kristof-Brown, A. L. 2000. Perceived applicant fit: Distinguishing between recruiters' perceptions of person–job and person–organization fit. *Personnel Psychology*, 53(3): 643-671.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. 2005. Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2): 281-342.
- Kristof, A. L. 1996. Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1): 1-49.
- Kuhnert, K. W., & Lewis, P. 1987. Transactional and transformational leadership: A constructive/developmental analysis. *Academy of Management Review*, 12(4): 648-657.
- Lau, D., C., Liu, J., & Fu, P. P. 2007. Feeling trusted by business leaders in China: Antecedents and the mediating role of value congruence. *Asia Pacific Journal of Management*, 24(3): 321.
- Lauver, K. J., & Kristof-Brown, A. 2001. Distinguishing between employees' perceptions of person-job and person-organization fit. *Journal of Vocational Behavior*, 59(3): 454-470.
- Lee, R. T., & Ashforth, B. E. 1996. A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2): 123-133.

- Leiter, M. P. 2008. A two process model of burnout and work engament: Distinct implications of demands and values. *Supplemento A, Psicologia*, 30(A): 52-58.
- Leiter, M. P., Jackson, N. J., & Shaughnessy, K. 2009. Contrasting burnout, turnover intention, control, value congruence and knowledge sharing between Baby Boomers and Generation X. *Journal of Nursing Management*, 17(1): 100-109.
- Leonard, N. H., Beauvais, L. L., & Scholl, R. W. 1999. Work motivation: The incorporation of self-concept-based processes. *Human Relations*, 52(8): 969-998.
- Levine, M. E. 1969. The pursuit of wholeness. *American Journal of Nursing*, 69(1): 93-98.
- Levine, M. E. 1996. The conservation principles: A retrospective. *Nursing Science Quarterly*, 9(1): 38-41.
- Li, C. P., & Shi, K. 2003. The influence of distributive justice and procedural justice on job burnout. *Acta Psychologica Sinica*, 35(5): 677-684.
- Liden, R. C., Wayne, S. J., & Stilwell, D. 1993. A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology*, 78(4): 662-674.
- Lindblom, K. M., Linton, S. J., Fedeli, C., & Bryngelsson, I.-L. 2006. Burnout in the working population: Relations to psychosocial work factors. *International Journal of Behavioral Medicine*, 13(1): 51-59.
- Liu, B., Liu, J., & Hu, J. 2010. Person-organization fit, job satisfaction, and turnover intention: An empirical study in the Chinese public sector. *Social Behavior and Personality: an international journal*, 38(5): 615-625.
- Mael, F., & Ashforth, B. E. 1992. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2): 103-123.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. 2001. Job burnout. *Annual Review of Psychology*, 52: 397-422.
- McDonald, P., & Gandz, J. 1992. Getting value from shared values. *Organizational Dynamics*, 20(3): 64-77.
- Meglino, B. M., & Ravlin, E. C. 1998. Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24(3): 351-389.

- Meglino, B. M., Ravlin, E. C., & Adkins, C. L. 1989. A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology*, 74(3): 424-432.
- Meyer, J. P., Hecht, T. D., Gill, H., & Toplonytsky, L. 2010. Person-organization (culture) fit and employee commitment under conditions of organizational change: A longitudinal study. *Journal of Vocational Behavior*, 76(3): 458-473.
- Miceli, M. P., & Near, J. P. 1994. Relationships among value congruence, perceived victimization, and retaliation against whistle-blowers. *Journal of Management*, 20(4): 773-794.
- Morris, T., & Empson, L. 1998. Organisation and expertise: An exploration of knowledge bases and the management of accounting and consulting firms. *Accounting Organizations and Society*, 23(5-6): 609-624.
- Muchinsky, P. M., & Monahan, C. J. 1987. What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior*, 31(3): 268-277.
- Naus, F., van Iterson, A., & Roe, R. A. 2007. Value incongruence, job autonomy, and organization-based self-etseem: A self-based perspective on organization cynicism. *European Journal of Work and Organizational Psychology*, 16(2): 195-219.
- Nyambegera, S. M., Daniels, K., & Sparrow, P. 2001. Why fit doesn't always matter: The impact of HRM and cultural fit on job involvement of Kenyan employees. *Applied Psychology: An International Review*, 50(1): 109-140.
- O'Reilly, C. A., & Chatman, J. 1986. Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3): 492-499.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. 1991. People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3): 487-516.
- O'Reilly, C. A., & Chatman, J. A. 1996. Culture as social control: Corporations, cults, and commitment. In B. M. Staw, & L. L. Cummings (Eds.), *Research in organizational behavior*, Vol. 18: 157-200. Greenwich, Connecticut: Elsevier Science/JAI Press.

- Ostroff, C., Shin, Y., & Kinicki, A. J. 2005. Multiple perspectives of congruence: Relationships between value congruence and employee attitudes. *Journal of Organizational Behavior*, 26(6): 591-623.
- Paarlberg, L. E., & Perry, J. L. 2007. Values management: Aligning employee values and organization goals. *The American Review of Public Administration*, 37(4): 387-408.
- Pervin, L. A. 1968. Performance and satisfaction as a function of individual-environment fit. *Psychological Bulletin*, 69(1): 56-68.
- Piasentin, K. A., & Chapman, D. S. 2006. Subjective person-organization fit: Bridging the gap between conceptualization and measurement. *Journal of Vocational Behavior*, 69(2): 202-221.
- Pierce, J. L., & Gardner, D. G. 2004. Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, 30(5): 591.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5): 879-903.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. 1974. Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5): 603-609.
- Powell, G. N. 1998. Reinforcing and extending today's organizations: The simultaneous pursuit of person–organization fit and diversity. *Organizational Dynamics*, 26(3): 50-61.
- Prins, J. T., Gazendam-Donofrio, S. M., Tubben, B. J., van der Heijden, F. M. M. A., van de Wiel, H. B. M., & Hoekstra-Weebers, J. E. H. M. 2007. Burnout in medical residents: A review. *Medical Education*, 41(8): 788-800.
- Raiger, J. 2005. Applying a cultural lens to the concept of burnout. *Journal of Transcultural Nursing*, 16(1): 71-76.
- Ravlin, E. C., & Ritchie, C. M. 2006. Perceived and actual organizational fit: Multiple influences on attitudes. *Journal of Managerial Issues*, 18(2): 175-192.
- Resick, C. J., Baltes, B. B., & Shantz, C. W. 2007. Person-organization fit and work-related attitudes and decisions: Examining interactive effects with job fit and conscientiousness. *Journal of Applied Psychology*, 92(5): 1446-1455.

- Riketta, M. 2005. Organizational identification: A meta-analysis. *Journal of Vocational Behavior*, 66(2): 358-384.
- Rokeach, M. 1973. *The nature of human values*. New York: Free Press.
- Rousseau, D. M., & Fried, Y. 2001. Location, location, location: contextualizing organizational research. *Journal of Organizational Behavior*, 22(1): 1-13.
- Ryan, R. M., & Deci, E. L. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1): 68-78.
- Schein, E. H. 1985. *Organizational culture and leadership*. San Francisco: Jossey-Bass Publishers.
- Schein, E. H. 1990. Organizational culture. *American Psychologist*, 45(2): 109-119.
- Schleicher, D. J., Watt, J. D., & Greguras, G. J. 2004. Reexamining the job satisfaction-performance relationship: The complexity of attitudes. *Journal of Applied Psychology*, 89(1): 165-177.
- Schneider, B. 1983. Interactional psychology and organizational behavior. *Research* in *Organizational Behavior*, 5: 1-31.
- Schneider, B. 1987. The people make the place. *Personnel Psychology*, 40(3): 437-453.
- Schneider, B. 2001. Fits about fit. *Applied Psychology: An International Review*, 50(1): 141-152.
- Schneider, B., Goldstein, H. W., & Smith, D. B. 1995. The ASA framework: An update. *Personnel Psychology*, 48(4): 747-773.
- Scroggins, W. A. 2007. An examination of the additive versus convergent effects of employee perceptions of fit. *Journal of Applied Social Psychology*, 37(7): 1649-1665.
- Sekiguchi, T. 2007. A contingency perspective of the importance of PJ fit and PO fit in employee selection. *Journal of Managerial Psychology*, 22(2): 118-131.
- Shamir, B. 1991. Meaning, self and motivation in organizations. *Organization Studies*, 12(3): 405-424.
- Shamir, B., House, R. J., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4(4): 577-594.

- Sheldon, K. M., & Elliot, A. J. 1999. Goal striving, need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76(3): 482-497.
- Shirom, A., & Melamed, S. 2006. A comparison of the construct validity of two burnout measures in two groups of professionals. *International Journal of Stress Management*, 13(2): 176-200.
- Siegall, M., & McDonald, T. 2004. Person-organization value congruence, burnout and diversion of resources. *Personnel Review*, 33(3): 291-301.
- Steiner, D. D. 1988. Value perceptions in leader-member exchange. *The Journal of Social Psychology*, 128(5): 611-618.
- Suominen, T., Kovasin, M., & Ketola, O. 1997. Nursing culture—some view points. *Journal of Advanced Nursing*, 25(1): 186-190.
- Taris, R., & Feij, J. A. 2001. Longitudinal examination of the relationship between supplies-values fit and work outcomes. *Applied Psychology: An International Review*, 50(1): 52-80.
- Taris, R., Feij, J. A., & van Vianen, A. E. M. 2005. Met expectations and supplies-values fit of Dutch young adults as determinants of work outcomes. The International Journal of Human Resource Management, 16(3): 366-382.
- Terborg, J. R. 1981. Interactional psychology and research on human behavior in organizations. *Academy of Management Review*, 6(4): 569-576.
- Thompson, B. M., Brough, P. A., & Schmidt, H. 2006. Supervisor and subordinate work-family values: Does similarity make a difference? *International Journal of Stress Management*, 13(1): 45-63.
- Thorne, L. 2010. The association between ethical conflict and adverse outcomes. *Journal of Business Ethics*, 92(2): 269-276.
- Tsui, A. S., Egan, T. D., & Oreilly, C. A. 1992. Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37(4): 549-579.
- Tzeng, H.-M., Ketefian, S., & Redman, R. W. 2002. Relationship of nurses' assessment of organizational culture, job satisfaction, and patient satisfaction with nursing care. *International Journal of Nursing Studies*, 39(1): 79-84.

- van Vianen, A. E. M. 2000. Person-organization fit: The match between newcomers' and recruiters' preferences for organizational cultures. *Personnel Psychology*, 53(1): 113-149.
- van Vianen, A. E. M., De Pater, I. E., & Van Dijk, F. 2007. Work value fit and turnover intention: Same-source or different-source fit. *Journal of Managerial Psychology*, 22(2): 188-202.
- van Vuuren, M., Veldkamp, B. P., de Jong, M. D. T., & Seydel, E. R. 2007. The congruence of actual and perceived person-organization fit. *International Journal of Human Resource Management*, 18(10): 1736-1747.
- Vandenberghe, C. 1999. Organizational culture, person-culture fit, and turnover: a replication in the health care industry. *Journal of Organizational Behavior*, 20(2): 175-184.
- Verplanken, B. 2004. Value congruence and job satisfaction among nurses: A human relations perspective. *International Journal of Nursing Studies*, 41(6): 599-605.
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. 2003. A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3): 473-489.
- Vogel, R. M., & Feldman, D. C. 2009. Integrating the levels of person-environment fit: The roles of vocational fit and group fit. *Journal of Vocational Behavior*, 75(1): 68-81.
- Weeks, W., Chonko, L., & Kahle, L. 1989. Performance congruence and value congruence impact on sales force annual sales. *Journal of the Academy of Marketing Science*, 17(4): 345-351.
- Werbel, J. D., & DeMarie, S. M. 2005. Aligning strategic human resource management and person-environment fit. *Human Resource Management Review*, 15(4): 247-262.
- Westerman, J. W., & Cyr, L. A. 2004. An integrative analysis of person-organization fit theories. *International Journal of Selection and Assessment*, 12(3): 252-261.
- Wheeler, A. R., Gallagher, V. C., Brouer, R. L., & Sablynski, C. J. 2007. When person-organization (mis)fit and (dis)satisfaction lead to turnover: The moderating role of perceived job mobility. *Journal of Managerial Psychology*, 22(2): 203-219.

- Wright, T. A., & Bonett, D. G. 1997. The contribution of burnout to work performance. *Journal of Organizational Behavior*, 18(5): 491-499.
- Yaniv, E., & Farkas, F. 2005. The impact of person-organization fit on the corporate brand perception of employees and of customers. *Journal of Change Management*, 5(4): 447-461.