Change-Oriented Organizational Citizenship Behaviour:

An Interactive Product of Openness to Change Values, Work Unit Identification and

Sense of Power

**Abstract**

Due to the increased frequency of organizational changes, predicting employees’ voluntary involvement in the development of organizational practices and individual work is of particular importance in organizational psychology. This study focused upon change-oriented organizational citizenship behaviour (OCB) as an expression of openness to change values, and also upon psychological factors which can moderate the value-behaviour relationship. We propose that personal values, group identification and a sense of power interact in predicting change-oriented OCB of employees. One hundred and eighty-four employees rated their values, their identification with the work unit and their sense of power. In line with our predictions, the results showed that openness to change values and work unit identification interacted positively in predicting supervisor-rated change-oriented OCB in workers with a high sense of power, but not in workers with a low sense of power. This finding suggests that workers who have a high sense of power and are highly identified with the work unit tend to pursue their openness to change values in a way that contributes to the organization. The authors further conclude that an interactive approach, rather than one of direct effect, is advantageous when studying values as antecedents to change-oriented OCB.

*Keywords*: change-oriented OCB; personal values; identification, sense of power

Organizations today operate in dynamic and changing environments. As the environment changes around organizations, current practices may lose their efficiency. In order to respond to these challenges, organizations often need to change their work methods, policies and procedures. Employees’ own initiatives and ideas can significantly contribute to these processes because they often know best the current practices and their weaknesses (e.g., Lawler, 1992). This type of employee-motivated idea expression, suggestion-making and implementation of changes, which are intended to improve the functioning of the organization, is often referred to as change-oriented organizational citizenship behaviour (OCB) (Choi, 2007). It is therefore important to find predictors of change-oriented OCB.

Recently, researchers of change-oriented behaviour have underlined the importance of studying dispositional and other person-related antecedents to change-oriented or proactive behaviours (e.g., Grant & Ashford, 2008). This is partly because behaviour that is congruent with internal characteristics (such as values) is experienced as intrinsically rewarding (e.g., Gagné & Deci, 2005; Oishi, Diener, Suh, & Lucas, 1999), whereas extrinsically motivated behaviour may disappear as soon as the external reward is obtained (e.g., Hui, Lam, & Law, 2000). Values motivate behaviour (e.g., Bardi & Schwartz, 2003) including change-oriented behaviour. However, past literature suggests that direct value-behaviour relationships are likely to be only moderate in magnitude partly because contextual factors restrict behaviour (Schwartz, 2005). This suggests that an interactional approach may be more fruitful.

The first purpose of the present study is to identify the most relevant values for change-oriented OCB. The second purpose is to determine whether the relationship between relevant values and change-oriented OCB is enhanced by two psychological factors: work unit identification and a sense of power. We suggest that work unit identification is relevant because it implies that organizational goals are important for employees. We additionally propose that a sense of power is important because it implies that employees feel that their suggestions will be considered seriously. Moreover, both of these psychological factors can be enhanced by organizational practices. From a theoretical perspective, this study is important because it contributes to identifying the conditions under which the value-behaviour relationship is facilitated. In practical terms, this study informs organizations about how to motivate employees’ engagement with organizational development.

**Change-Oriented Organizational Citizenship Behaviour**

Change-oriented OCB has been defined as “constructive efforts by individuals to identify and implement changes with respect to work methods, policies, and procedures to improve the situation and performance” (Choi, 2007, p. 469). Other concepts that are closely related to change-oriented OCB include voice (LePine & Van Dyne, 1998), innovative behaviour (West & Farr, 1990) and taking charge (Morrison & Phelps, 1999). Choi’s (2007) definition of change-oriented OCB combines the definition of voice as “constructive change-oriented communication intended to improve the situation” (LePine & Van Dyne, 2001, p. 326), with the definition of taking charge as “voluntary and constructive efforts to affect organizationally functional change” (Morrison & Phelps, 1999, p. 403). OCB-related studies on innovation emphasise the frequency of idea expression, instead of the novelty or usefulness emphasised in traditional innovation and creativity studies (Moon, Van Dyne, & Wrobel, 2005). Despite these small differences, all of these concepts represent change-oriented behaviour in the organization. In this study we use change-oriented OCB as it covers both idea suggestion and implementation, which are both important for enhancing organizational development.

When employees make suggestions and when ideas are implemented, the aim is to change the status quo in the work environment. Thus, openness to new ideas in the work environment is an essential factor in employees’ willingness to take initiatives for making changes. For example, Choi (2007) found that an innovative climate and a strong vision enhanced employees’ sense of responsibility for change and psychological empowerment, which in turn predicted change-oriented OCB. Also other studies have found that having a sense of responsibility and role-related perceptions, such as a flexible role orientation, predict change-oriented behaviours (e.g., De Dreu & Nauta, 2009; Van Dyne, Kamdar, & Joireman, 2008). Furthermore, the effects of proactive personality on change-oriented behaviour are mediated by employees’ role-related cognitive-motivational states, such as role breadth self-efficacy, flexible role orientation, psychological empowerment and perceived autonomy (e.g., Fuller & Marler, 2009; Parker, Williams, & Turner, 2006).

However, employees act not only because they feel obligated to engage with a certain action. Their actions toward change may also be more personally motivated (see e.g., McAllister, Kamdar, Morrison, & Turban, 2007; Moon, Kamdar, Mayer, & Takeuchi, 2008). Change itself can also be an important personal goal and this goal motivates change-oriented behaviour. Values are important motivational bases for behaviour, as they convey what people consider worth striving for (e.g., Bardi & Schwartz, 2003; Rokeach, 1973). Based on their recent review on proactive organizational behaviours, Grant and Ashford (2008) argue that values have received insufficient attention and that proactive behaviour, such as being intentional and goal-oriented, may reflect employees’ core values. Nevertheless, previous studies on person-related factors have been largely limited to personality traits (e.g., Grant & Ashford, 2008; Sung & Choi, 2009). Person-related factors have also been treated merely as moderators rather than as independent predictors (e.g., Bettencourt, 2004; De Dreu & Nauta, 2009; Fuller, Marler, & Hester, 2006; Zhou, Shin, Brass, Choi, & Zhang, 2009).

In this study we draw on Schwartz’s (1992) theory of the universal content and structure of values and suggest that openness to change values in this model are the most relevant with respect to change-oriented OCB. Change-oriented OCB usually takes place in the context of a work group and creates challenge to the status quo in the group. The relationship between group member’s values and behaviour may also depend on the psychological importance of that particular group and member’s position in the group. Therefore, in this study we focus on the moderating role of work unit identification and sense of power on the relationship between values and change-oriented OCB. In doing so, we can contribute not only to research on value-behaviour relationship but also on the growing literature on internal and contextual predictors of change-oriented OCB.

**Change-Oriented OCB as Motivated by Values**

Schwartz’s (1992) theory of the universal content and structure of values is one of the most widely applied contemporary value frameworks. It offers a solid and comprehensive theoretical basis for deriving hypotheses based on individuals’ value system. Schwartz defines values as broad goals that serve as guiding principles in people’s lives. As a guiding principle, an important value is likely to guide behaviour across time and in different contexts, such as at work and at home. Thus, basic values can predict behaviour across contexts. People differ in their value hierarchies, so that any value can be important to one person and not important to another. The theory defines ten distinct value types that are based on different motivational goals. Over 65,000 people from 65 nations around the world have completed the value questionnaire, and the multidimensional structure and the distinctiveness of the ten value types have gained consistent support (see Schwartz, 2005).

The overall structure of relations among values forms a circle, which is presented in Figure 1. Compatible, neighbouring values in the circle share a motivation and can be easily pursued with the same behaviour. For example, values of self-direction and stimulation are compatible because they share the motivation for novelty and change. When one pursues self-direction values by expressing a new idea, she or he may also be fulfilling stimulation values of excitement. In contrast, openness to change values have a motivationally conflicting relationship with conservation values. As a result, it is often impossible to pursue openness to change values and conservation values at the same time. To illustrate, when a worker pursues openness to change values by expressing to the supervisor an idea for improvement, he or she may risk the safety and harmony of their relationship, as it is not clear if the supervisor would react positively. Thus, this act entails a necessary violation of conservation values. Overall, the value circle is ordered by two bi-polar dimensions. The dimension relevant to this paper is openness to change versus conservation. It contrasts the motivation to be open to new ideas and actions (expressed in the value types of self-direction and stimulation), with a preference for the status quo and certainty in relationships with close others, institutions and traditions (expressed in the value types of security, conformity, and tradition).

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Insert Figure 1

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As personality traits have been used to explain change-oriented behaviours in several previous studies (e.g., Nikolaou, Vakola, & Bourantas, 2008; Sung & Choi, 2009), it is important keep in mind here that, even though values and personality traits share similarities (e.g., relative stability) and are often linked, they are conceptually and empirically distinct (Roccas, Sagiv, Schwartz, & Knafo, 2002). Specifically, traits describe what people are like, whereas values refer to what people consider important (e.g., values are goals whereas traits are dispositions). For example, even if a person is innovative (trait) he or she may not view innovativeness as a worthy life goal (value). On the other hand, a person who values innovativeness may not be an innovative person. Previous studies (e.g., Roccas et al., 2002) found that openness to change values are correlated with openness to experience, and these findings also support the idea that values, in comparison with personality traits, have a stronger influence on behaviours which are under relatively more voluntary control, such as OCB. Thus, values offer a different kind of motivational base for change-oriented behaviour than personality. For these reasons, in this study we utilize a theory of individual values.

To summarize, people are motivated to behave according to their values (Bardi & Schwartz, 2003). Indeed, values have been found to be empirically related to a large array of behaviours (see review and empirical findings in Bardi & Schwartz, 2003), including organizational behaviours (see review and empirical findings in Bardi & Schwartz, 2003 and Bardi, Calogero, & Mullen, 2008). Change-oriented OCB aims at making changes at work (Choi, 2007). Hence, employees who value openness to change are likely to be motivated to perform any change-oriented behaviour, including at work. In contrast, people who value conservation are motivated to maintain the status quo, so they are the least likely to perform change-oriented behaviours. Therefore our first hypothesis is:

H1: Openness to change values will be positively related to change-oriented OCB.

**Change-Oriented OCB as Motivated by Work Unit Identification**

Although values guide behaviour across time and in various contexts, the same value can be expressed by different behaviours (Bardi & Schwartz, 2003). Employees who value openness to change may pursue these values by expressing and implementing new ideas for advancement of the work group. Alternatively, they may pursue these values by changing a work place, leading to negative consequences to the work group, or by pursuing their hobbies. Hence, employees need to be motivated to pursue their values of change in a positive way within the organization. We propose that employees will pursue their openness to change values by performing change-oriented OCB, particularly when they perceive group goals as their own. According to social identity approach (e.g., Tajfel & Turner, 1979), this happens when they strongly identify with their work unit.

The social identity approach offers a perspective for understanding why individuals behave according to group goals rather than their individual goals. This approach includes the theories of social identity (Tajfel & Turner, 1979) and self-categorization (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). According to this approach, people define themselves to a large extent in terms of their social-group memberships. This group-based definition of the self forms an individual’s social identity (Tajfel & Turner, 1979). The importance of social identity is reflected in the degree of identification with the group in question. Specifically, identification refers to “a relatively enduring state that reflects an individual’s readiness to define him- or herself as a member of a particular social group” (Haslam, 2001, p. 383). Identification creates a sense of oneness with the object of identification and consequently the aims and goals of the object are seen as one’s own (Mael & Ashforth, 1992; Van Knippenberg, 2000). Research has shown that organizations, or a smaller part of them (e.g., work group), constitute an important source of an individual’s identity (Hogg & Terry, 2000; Riketta & Van Dick, 2005).

The premises of social identity theory suggest that when the work group or the organization is an essential part of employees’ sense of self (high level of identification), their behaviour should be motivated by the group’s needs, norms, and goals instead of personal ones (Haslam, 2001). In terms of values, this would mean that as identification increases, the effect of personal values in general should diminish. However, if personal values can be pursued by promoting group goals, identification may enhance value driven behaviour. Pursuing change for improvement in the situation and in performance is intended to advance the group, and therefore change-oriented behaviour can be considered to be in line with the group’s goals. Several empirical studies have found positive association between identification and constructive change-oriented behaviour (e.g., Fuller, Hester, Barnett, Frey, Relyea, & Beu, 2006; Hirst, Van Dick, & Van Knippenberg, 2009). Hence, identification may not necessarily weaken the meaning of personal values but instead direct the expression of values, such that individual values would be pursued in a way that benefits the group. Employees who identify with their work group should be motivated to express their own values in a group-promoting way by engaging in OCB, including change-oriented OCB. In contrast, employees for whom the work group is a less important part of self may pursue their openness to change values in another way (e.g., outside work), leading to a weak association between these values and change-oriented OCB. Indeed, Lipponen, Bardi and Haapamäki (2008) have found that openness to change values predict suggestion-making at work only for employees who are highly identified with the organization. We therefore expect a similar pattern of findings in the current study.

H2: The positive relationship between openness to change values and change-oriented OCB will be moderated by work unit identification, such that the relationship will be stronger when identification is high as opposed to low.

**Change-Oriented OCB as Facilitated by Sense of Power**

The literature suggests that identification affects behavior only when the behaviour is perceived as feasible and the individual or the group is perceived to be able to reach the intended ends (Van Knippenberg & Ellemers, 2003). In addition to this self-efficacy belief (Bandura 1997), the influence of identification on behaviour may also be dependent on relational beliefs. Employees who feel that their position in the group is peripheral or who believe they do not have power in their group may hesitate to present their ideas and implement changes. This is because group membership is an integral part of highly identified employees’ self-concept and their self-esteem is dependent on respect from other group members (Turner et al., 1987). Thus, the expression of one’s own ideas and the implementation of changes may pose a threat for that person’s social identity if they feel their ideas are often ignored and their wishes do not carry much weight in their group.

A belief in one’s ability to have an influence on others in a specific context or relationship is referred to as having a sense of power (e.g., Galinsky, Gruenfeld, & Magee, 2003). Sense of power is a psychological property of a person and it is based on relational experiences (Galinsky et al., 2003). Sense of power has the same psychological effects as objective power (Anderson & Galinsky, 2006). High levels of power are manifested in the possession of resources, freedom and an awareness of the ability to behave according to one’s own will without harmful social consequences; whereas low levels of power are manifested in few resources, more constraints, uncertainty and the threat of punishment (e.g., Keltner, Gruenfeld, & Anderson, 2003). According to the approach/inhibition theory of power (Keltner et al., 2003), a high level of power activates the behavioural approach system. This system is associated with disinhibition of behaviour and a strong drive to attain goals. Conversely, low levels of power activate the behavioural inhibition system, which is associated with sensitivity to threats and punishment and also with behavioural inactivity. These suggested associations have received support in both experimental (e.g., Anderson & Berdahl, 2002; Berdahl & Martorana, 2006; Langner & Keltner, 2008) and natural contexts (Lammers, Stoker, & Stapel, 2010).

The approach/inhibition theory of power suggests that employees with a high sense of power are behaviourally active because they feel that they have resources (e.g., information, trust, or respect), which in turn make them able and motivated to pursue additional resources (Keltner et al., 2003). Previous studies have demonstrated that powerful people are more likely than those who are less powerful to behave in line with their personal values (Chen, Lee-Chai, & Bargh, 2001), and that a behavioural approach tendency enhances the likelihood of non-normative behaviours (e.g., Diefendorff & Mehta, 2007). Powerful people are also found to be optimistic in their risk perceptions and consequently more willing to divulge information (Anderson & Galinsky, 2006). We suggest that a high sense of power should make identified employees more prone to perceiving the possible benefits related to enhancing the success of their group, instead of perceiving the possible social risks related to upsetting the status quo by non-conformist behaviour. Suggestion-making and idea implementation do not pose a threat to their group-based identity because their ideas in that context are respected and matter.

We further suggest that employees with a high sense of power but low identification would pursue their personal values in a self-serving way, since success of a personally unimportant group offers fewer resources for enhancing their self-esteem. Openness to change, a high sense of power and low identification push them away from the group, towards new experiences and towards opportunities outside the group. Therefore, when a high sense of power is present, the positive relationship between openness to change values and change-oriented OCB should be stronger when employees’ identification with the work group is high as compared to low.

In contrast, employees with a low sense of power are likely to feel socially and materially threatened because of the lack of resources and dependence they experience, and consequently they are prone to stay behaviourally passive (Keltner et al., 2003) or active only in terms of avoidance behaviours (e.g., escape) (Smith & Bargh, 2008). We suggest that when there is a low sense of power, the relationship between openness to change values and change-oriented OCB should be just about the same irrespective of the employee’s level of work unit identification. We expect that both high and low identified employees with a low sense of power stay passive in terms of change-oriented OCB but perhaps for different reasons. Employees with a low sense of power and high identification may hesitate to behave according to their own values because they anticipate negative reactions from the group, which is an important part of their self-concept. Instead of innovativeness and in order to pursue acceptance by the group and to maintain positive self-esteem, the better strategy for these employees could be compliance with current methods, policies and procedures. Employees with both low identification and a low sense of power are the most marginal members of the group, and they may remain passive because they neither care nor dare to make efforts on behalf of the group. Thus, when there is a low sense of power, identification will not interact with values in predicting change-oriented OCB.

H3: The positive relationship between openness to change values and change-oriented OCB will be moderated by both work unit identification and a sense of power, such that the interaction between openness to change values and identification will be stronger when there is a high, as opposed to a low, sense of power.

**Method**

**Participants and Procedures**

A total of 285 employees and their immediate supervisors in 40 units from two Finnish organizations were asked to participate in a survey. One of the organizations was a restaurant chain and the other was a social-service provider. The units consisted of the supervisor and his or her immediate subordinates. The units were rather small, varying from 2 to 24 (median 8) members, and the supervisors had daily contact with their subordinates. Surveys were delivered to participants by human resources managers. The respondents were provided with pre-paid envelope to return the survey.

After one reminder had been sent, 189 (66%) of the employees had returned the surveys. Forms with missing data and missing supervisor-ratings were excluded, and the final sample consisted of 184 responses (the final response rate was 64% for subordinates and 93% for supervisors). Non-respondents did not differ from respondents with respect to gender, age or tenure. Almost half of the subordinates (82 in 22 units) represented the restaurant organization, while the other half (102 in 15 units) was from the social-service organization. The number of respondents per unit varied from 1 to 16 (M = 7.8, SD = 4.3). On average, the employees were 38.1 years old (SD = 10.8), had worked for 3.4 years (SD = 4.6) under their present supervisor and 76% of them were female. The average age of the supervisors was 41.5 years (SD = 10.2), they had worked in the organization 12.9 years on average (SD = 8.7) and 74% of them were female.

**Measures**

Employees rated their personal values, level of identification with their unit, and sense of power in the unit. Supervisors rated each of their subordinates separately on change-oriented OCB. English-language measures were translated into Finnish using a method of translation and back-translation (Brislin, 1970).

**Values***.* Employees assessed their personal values using Koivula and Verkasalo’s (2006) shortened version of the Finnish translation of Schwartz, Lehman, and Roccas’ (1999) Portrait Value Questionnaire. Employees were asked to rate how similar each of the items describing different people was to themselves (the scale varied from 1= not at all like me to 6= very much like me). Openness to change values were measured with four items (α = .70, e.g.”Thinking up new ideas and being creative is important to her/him. She/he likes to do things in her/his own original way”; “She/he likes surprises and is always looking for new things to do. She/he thinks it is important to do lots of different things in life”). Following Schwartz’s (1992) guidelines, scale use bias was controlled by centring item ratings around the personal mean of value ratings (see Bardi & Schwartz, 2003 for details). Furthermore, the bipolar value dimension was computed by subtracting the conservation values (measured with six items, α=.65) from openness to change values. Theoretically, these values form a bipolar dimension in which the motivations underlying one pole of the dimension should mirror the motivations underlying the other pole. In other words, the theory suggests that the more a person values one pole, the less she or he will value the opposite pole. The poles correlated negatively (r=-.62, *p*< .001) with each other suggesting that the computation was also empirically justified. This bipolar value dimension is used in all further analyses.

**Identification.** Work unit identification was measured with the Finnish version (Lipponen, Helkama, Olkkonen, & Juslin, 2005) of Mael and Ashforth’s (1992) Organizational Identification Questionnaire. The scale consists of six items which tap on a person’s perceived sense of oneness with, or belongingness to, the work unit (e.g., “When I talk about this unit, I usually say ‘we’ rather than ‘they’”; “When someone criticizes this unit, it feels like a personal insult”). Statements were rated on a five-point scale (1= disagree strongly, 5= agree strongly), which showed acceptable internal consistency (α=.70).

**Sense of Power.** Sense of power was measured using Anderson and Galinsky’s (2006) scale, which consists of eight items representing beliefs about the power employees have in their relationship with other work unit members (e.g., “My ideas and opinions are often ignored” (reversed); “I can get people to listen to what I say”). Employees rated the items on a 7-point scale (1= disagree strongly, 7= agree strongly). The scale had acceptable internal consistency (α=.73).

**Change-Oriented Organizational Citizenship Behaviour.** Supervisors rated the frequency of their subordinates’ change-oriented OCB with three items taken from Choi (2007). The items were rated on a 7-point scale (1= never, 2= sometimes, 3= once in a month, 4= sometimes in a month, 5= once in a week, 6= sometimes in a week, 7= daily) and were as follows: “How often during the past year has (name of the subordinate) suggested work improvement ideas regarding your work unit to you”: “....suggested changes to unproductive working methods in your work unit to co-workers”: and “....changed the way she/he works to improve her/his efficiency”. The scale had high internal consistency (α=.92).

**Covariates.** We controlled for the organization, the size of the work unit and tenure in the present work unit by including these variables as covariates in the analysis. The size of the unit has previously shown a negative relationship with identification (Lipponen et al., 2005). Tenure in the present work unit was included in the analyses because it has been found to be negatively related to voice behaviour (Van Dyne & LePine, 1998).

**Results**

The means, standard deviations, inter-correlations and alphas of the measures are presented in Table 1. Of the three main independent variables of interest, only sense of power correlated significantly with change-oriented OCB (r=.17, *p*<.05).

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Table 1 about here

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Because subordinates were nested in the units and supervisors rated multiple subordinates, there was a reason to assume some degree of non-independence in the data (Kenny & Judd, 1986). Therefore, we first examined the data for higher level (i.e. unit) effects by calculating intra-class correlations (ICC). Because unit sizes varied in the data, the calculation was conducted by using a formula that took into account group size (see Bliese & Halverson, 1998 for the formula). The results indicated that the amount of total variance explained by group membership was: openness to change value 1.8%; work unit identification 4.2%; sense of power 2.1%, and change-oriented OCB 47.0%. The independent variables had low systematic variation among groups. In contrast, the dependent variable had great variation among groups. Bliese and Hanges (2004) have demonstrated that ignorance of non-independence may result in too many Type II errors, especially under conditions of large ICC values for dependent variables and small group sizes. Thus, we analysed the data using random coefficient modelling (RCM) (Snijders & Bosker, 1999).

All predictors were standardized prior to hypothesis testing. To specify the model, we followed a data-driven approach to select the variables for the random part. We first calculated a null model, including only random intercepts (i.e. unit) and no explanatory variables. Then we gradually built our models by adding blocks of the predictors. Each variable in the block was first estimated as a fixed coefficient. After that, each variable was also estimated as a random coefficient. The random error terms were retained in the model if the chi-square-difference test showed that the model was significantly improved when the random term was included.

Hypothesis 1 was that the openness to change value dimension would be positively related to change-oriented OCB. To test Hypothesis 1, the control variables (organization, size of the work unit and tenure) were entered as fixed coefficients into Model 1. The openness to change value dimension was entered into Model 2 as a fixed coefficient. As depicted in Table 2, the analysis showed that the control variables accounted for 10.3% of the individual level variance of change-oriented OCB. Openness to change values did not explain any additional variance and as a consequence, Hypothesis 1 was not supported. However, this may be because the relationship between these values and the studied behaviour is true only for some of the participants, to be revealed when testing interactions.

Hypothesis 2 was that the relationship between the openness to change value dimension and change-oriented OCB would be stronger when work unit identification is high. To test Hypothesis 2, the openness to change value dimension and identification were entered as fixed coefficients into Model 3, and the interaction term of these two variables was entered as a fixed coefficient into Model 4. As presented in Table 2, the estimate of the two-way interaction term was statistically non-significant, thus Hypothesis 2 was not supported. Yet, this may be because the proposed effect is only true in some of the participants, as examined next.

Hypothesis 3 was that the interaction between the openness to change value dimension and work unit identification will be stronger for participants with a high sense of power. To test the third hypothesis, the openness to change value dimension, identification and sense of power were entered as fixed coefficients into Model 5. All the two-way interaction terms were entered as fixed coefficients into Model 6. Finally, the three-way interaction term was entered as a fixed coefficient into Model 7. As hypothesised, the estimate of three-way interaction term was positive and statistically significant explaining 3.3% additional variance at the individual level. Results are presented in Table 2.

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Table 2 about here

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This significant three-way interaction was probed by testing whether individual slopes differed from each other in the ways we hypothesized (Dawson & Richter, 2006). The significant three-way interaction of the openness to change value dimension, identification and sense of power is shown in Figure 2. The slope difference test revealed that the interaction between the openness to change value dimension and work unit identification in predicting supervisor-rated change-oriented OCB was significant when sense of power was high (Slopes 1 and 3, *t*=2.60, *p*=.01), but non-significant when sense of power was low (Slopes 2 and 4, *t*=0.15, *p* >.10). These findings support Hypothesis 3.

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Figure 2 about here

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**Discussion**

The results of this study show that openness to change values, work unit identification and sense of power interact in predicting change-oriented OCB. The interaction between openness to change values and work unit identification was significant for employees with a high sense of power, but not for employees with a low sense of power. Hence, employees who highly identify with their work unit express their personal values of openness to change by expressing ideas for improvements, and implementing these ideas, only when they feel that they have power in their work unit.

Findings of this study specify and complement some previous findings. Lipponen et al. (2008) found an interaction between openness to change values and identification in predicting both self-rated and supervisor-rated suggestion-making at work. In the present study, this two-way interaction effect appeared only in the high power context. The difference between these studies is that Lipponen et al. (2008) measured only suggestion-making, whereas our measure of change-oriented OCB included also idea implementation. Indeed, Axtell, Holman, and Wall (2006) have reported that suggestion-making and idea implementation are related to different antecedents. In their study, suggestion-making was related to job control and idea implementation was related to team support for innovation. Thus, it may be that highly identified employees make suggestions and see how other group members react to their ideas. If they feel that their ideas are not supported or are ignored, highly identified employees may not take the next step to implement these ideas. Instead, when employees believe that they are able to have an influence in their group, they are less concerned about other’s opinions and more daring in presenting their ideas and implementing changes irrespective of team support. On the other hand, it is also possible that team support for innovation enhances employees’ sense of power. Namely, when the normative climate for innovations (i.e. team support for innovation) is positive, the group is open to new ideas and new ways of thinking (Scott & Bruce, 1994) and members may feel that their ideas and opinions are listened to and taken into account.

Choi (2007) found that a strong vision and an innovative climate predicted change-oriented OCB both at the individual and group level. The effect of these work environment factors was mediated by a sense of responsibility for change and psychological empowerment, and the latter bears some similarities to sense of power. Hence, the findings of the present study complement previously suggested predictors by suggesting that sense of power is also important for change-oriented OCB.

Our results can also be linked to previous research on the relationships between personality and change-oriented behaviours. In this study, we focused on openness to change values because of their conceptual relations to change-oriented goals. Openness to change values are found to be most closely associated with the personality trait of openness to experience (Roccas et al., 2002). Roccas et al. (2002) found that openness to experience correlated most positively with openness to change and universalism values, and most negatively with conservation values. Thus, we may compare our result with studies on the openness to experience trait. For example, Sung and Choi (2009) have found a positive association between openness to experience and creative performance. In another study, George and Zhou (2001) adopted an interactional approach to study the influence of the openness to experience trait on creativity in an organizational context. They found no direct effect of openness to experience on creative behaviour, but they found that positive feedback supported the influence of personality, especially in heuristic tasks. Our results are in line with this finding. Namely, George and Zhou (2001) suggested that positive feedback may contribute to employees’ beliefs that their ideas are recognised and accepted, which consequently supports having a creative disposition. Thus, our finding confirms their suggestion that belief in one’s ability to have an influence enhances the positive relationship between change-orientation and change-oriented behaviour.

Our finding has important theoretical implications. According to self-categorization theory, when social identity is salient (i.e. high level of identification) individuals should be motivated to behave in accordance with norms and goals related to that social identity (e.g., Turner, 1987; Terry & Hogg, 1996). This is because identified members experience the group’s interests and goals as their own (e.g., De Cremer & Van Vugt, 1999). Moreover, identification is suggested to promote group-oriented behaviours which are in line with the content of group norms and goals (e.g., Van Knippenberg & Ellemers, 2003). In contrast, when personal identity is salient (i.e., low level of identification) individuals are motivated to follow their personal values and to promote their personal identity. Based on this line of reasoning, it could be argued that the importance of personal values and goals in directing behaviour should diminish as identification with the social entity increases. The results of our study suggest that when group members have a high sense of power, identification may not weaken the role of personal values in directing behavior. Instead, identification may direct the expression of personal values toward the efforts on behalf of the group. However, when sense of power is low, highly identified members do not pursue openness to change values by engaging in change-oriented OCB.

**Practical implications**

The findings of this study imply that in times that call for change in the workplace, organizations can benefit from people who value openness to change, identify with their work unit and have a high sense of power. With regard to values, it does not necessarily make sense to try to influence them because the opposite values of conservation are beneficial to the organization in quiet times as well as for certain roles (e.g., Gandal, Roccas, Sagiv, & Wrzesniewski, 2005). Moreover, employees’ engagement in other forms of organizationally beneficial behaviour may be motivated by other values. Instead, organizations should make their employees feel motivated and comfortable to express their values in organization-enhancing ways. Our study suggests that this may happen through the simultaneous enhancement of social identification and employees’ sense of power, as the results show that identification matters only when employees feel that they have power.

**Strengths, limitations and future directions**

Our findings are probably an underestimation of the true effects, as three-way interaction effects, particularly among continuous variables, are difficult to find due to low statistical power in moderated models, and also because a type II error is more likely than a type I error (e.g., Aguinis, Beaty, Boik, & Pierce, 2005; Dawson & Richter, 2006). Consequently, in future studies, use of larger data sets may more effectively reveal the relevance of the studied factors. As mentioned above, the role of values and other dispositional variables in explaining change-oriented behaviours may be only moderate. As our study showed, ratings of change-oriented OCB were more strongly related to organization, work unit size and tenure than to values. This may imply the importance of organizational culture, group processes and behavioural routines in directing organizational behaviour (see e.g., Janssen, 2005; Ohly & Fritz, 2007), whereas the role of values is more essential in circumstances that are unclear and ambiguous (see e.g., De Kwaadsteniet, Van Dijk, Wit, & De Cremer, 2006). However, although the influences of the aforementioned factors were taken into account, there was still sufficient variance explained by values. Moreover, the moderating role of work unit identification might have been stronger if the change-oriented behaviours considered were only those that focused explicitly on the work unit and its goals. With respect to the third item in the OCB scale, it is possible that supervisor-rated behaviour might have included behaviour which was not focused on the work unit since the focus was not specified in that item.

We conducted several procedures to prevent common method variance (see e.g., Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Most importantly, the predictor and criterion variables were obtained from different sources. With respect to employee-rated constructs, we used well established measures with varying scale formats in order to ensure item clarity and to prevent the scale’s format from systematically influencing the responses. Furthermore, special attention was paid to anonymity, as responses were returned directly to the researcher in order to prevent social desirability.

Although obtaining the independent and dependent variables from different sources increased the validity of this research, the validity of supervisor-ratings may be limited. It is possible that retrospective memories are not precise and that not all acts were recognized. This relates especially to ratings of co-worker directed suggestion-making (second item), since the supervisor may not always be aware of ideas presented to peers. Moreover, supervisors may have rated more positively those whom they like or know well. In future studies, it may be beneficial to collect ratings from several sources in order to prevent these kinds of biases (see also Organ, Podsakoff, & Mackenzie, 2006).

In this study, we focused on openness to change vs. conservation values because the other values are not related to change-oriented motivation. However, it is possible that engagement in change-oriented OCB is based on instrumental goals as well (see e.g., McAllister et al., 2007). Future studies could explore whether employees who value self-enhancement (power and achievement values) engage in change-oriented OCB in order to, for example, receive more salary or get a promotion. By definition, OCB’s are not directly rewarded. Still, they have been found to positively predict performance evaluations (e.g., Organ et al., 2006).

Finally, there is reason to believe that the moderating roles of sense of power and identification may be dependent on whether group members’ personal values and group norms - relating to specific target behaviour - are compatible or conflicting. If group norms are supportive of innovation and these norms are in line with the individual’s personal values, identification alone would be a particularly powerful driver of change-oriented OCB. If personal values and group norms are conflicting, for example if the group member holds openness to change values but group norms are against innovation, identification may lead to conformity without a high sense of power. We did not measure group norms relating to change oriented OCB, but this could be taken into consideration in future studies.

In conclusion, our study shows that understanding value-behaviour associations may benefit from the interactional approach that takes into account the psychological factors arising from the social-context. Our study showed that the influence of values on behaviour may be dependent on both the psychological importance of the group and the individual’s position in the group. This deservers more research in the future. In practical terms, this study suggests that organizations may be able to utilize employees’ change-oriented tendencies by simultaneously showing that the organization is worth identifying with and that employees’ opinions and ideas really matter.

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**Figure 1.** Schwartz’s model of motivational type of values (adapted from Schwartz, 1992).

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# **Self-transcendence**

Universalism Benevolence

Self-direction Tradition

# **Openness** Conformity **Conser-**

**to change**  **vation**

Stimulation

Security

Hedonism Power

Achievement

**Self-enhancement**

Table 1

*The means, standard deviations and inter-correlations*

Variables M SD 1 2 3 4 5 6 7 8

1. Change-oriented OCB 3.41 1.38 (.92)

2. Openness to change value dimension¹ 0.52 1.05 .03 (-)

3. Openness to change values 4.14 0.87 .03 .92\*\*\* (.70)

4. Conservation values 3.61 0.79 -.02 -.88\*\*\* -.62\*\*\* (.65)

5. Work unit identification 3.79 0.56 -.04 -.08 -.11 .01 (.70)

6. Sense of power 4.08 0.76 .17\* .11 .05 -.16\* .28\*\* (.73)

7. Organization 1.55 0.50 -.38\*\* .14 .07 -.20\*\* .08 .01 (-)

8. Size of the work unit 12.00 6.08 .31\*\* -.02 -.02 .02 -.09 -.10 -.34\*\* (-)

9. Tenure in the work unit 55.91 68.77 -.22\*\* -.06 -.03 .09 .08 .04 .33\*\* .03 (-)

*Note.* n = 184, Cronbach’s alphas shown in parentheses, \**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001. The restaurant organization was coded as one and

the social service provider as two. Tenure in the present work unit is in months.¹ This bipolar value dimension was computed by subtracting the conservation values from openness to change values, and analyses were conducted using this bipolar value dimension.

Table 2

*Random coefficient models predicting change-oriented OCB*

Variables Null model Model 1 Model 2 Model 3 Model 4 Model 5 Model 6 Model 7

Intercept 3.27\*\*\* (0.18) 3.33\*\*\* (0.17) 3.34\*\*\* (0.17) 3.36\*\*\* (0.17) 3.36\*\*\* (0.17) 3.35\*\*\* (0.17) 3.31\*\*\* (0.17) 3.29\*\*\* (0.17)

Organization -0.24 (0.17) -0.26 (0.17) -0.27 (0.17) -0.27 (0.17) -0.24 (0.17) -0.21 (0.17) -0.19 (0.17)

Size of the work unit 0.41\* (0.18) 0.40\* (0.18) 0.42\* (0.18) 0.43\* (0.18) 0.43\* (0.18) 0.44\* (0.18) 0.46\* (0.18)

Tenure -0.27\*\* (0.09) -0.26\*\* (0.09) -0.27\*\* (0.08) -0.26\*\* (0.08) -0.27\*\* (0.09) -0.27\*\* (0.09) -0.27\*\* (0.08)

Change values 0.08 (0.08) 0.08 (0.08) 0.08 (0.08) 0.06 (0.09) 0.04 (0.09) -0.03 (0.09)

Work unit identification 0.09 (0.08) 0.07 (0.08) 0.04 (0.08) 0.05 (0.08) 0.01 (0.08)

Sense of power 0.16 (0.09) 0.18 (0.09) 0.20\* (0.09)

Change values X Work unit identification 0.12 (0.07) 0.10 (0.08) 0.17\* (0.08)

Change values X Sense of power -0.01 (0.09) 0.02 (0.09)

Work unit identification X Sense of power 0.13 (0.08) 0.07 (0.08)

Change values X Work unit identification X Sense of power 0.16\* (0.07)

Individual-level variance 1.0262 0.9209 0.9174 0.8784 0.8639 0.8659 0.8386 0.8052

Change in variance 0.1053 0.0035 0.0424 0.0146 0.0550 0.0273 0.0334

Proportion of explained variance 10.3% 0% 4.1% 1.4% 5.4% 2.7% 3.3%

Group-level variance 0.7825 0.5442 0.5490 0.5693 0.5651 0.5524 0.5451 0.5618

-2 log likelihood (df) 543.957 (3) 492.114 (6) 483.039 (7) 474.995 (8) 472.511 (9) 469.565 (9) 464.884 (12) 459.987 (13)

*Note.* Standard errors shown in parentheses, \* *p* < 0.05; \*\* *p* < 0.01; \*\*\* *p* < 0.001

**Figure 2.** The interaction of openness to change value dimension, work unit identification and sense of power on change-oriented OCB

