

From Personal Values to Creativity: Evidence from Frontline Service Employees

ABSTRACT

Purpose - This article examines how personal values and the way employees respond to the organization and the job impact upon employee creativity. Specifically, we propose a framework that argues that creativity is a function of the employee's personal values, of organizational commitment and customer orientation. Moreover, we also investigate the moderating effects of commitment and customer orientation on the relationship between personal values and employee creativity.

Design/methodology/approach – The conceptual model was tested empirically using data collected by questionnaire in a sample of 266 bank employees. To test the hypothesized model we relied on hierarchical multiple regression analysis.

Findings - The empirical results indicate that personal values, organizational commitment and customer orientation are important drivers of the creativity of frontline employees. In addition, we also detected some moderating and mediating effects.

Originality/value - The contribution of this paper is fourfold. Firstly, we study the influence that personal values might have on an employee's creativity. Secondly, we develop a conceptual model that incorporates variables concerning how employees respond to the context in which they work: organizational commitment and customer orientation. The simultaneous effects of the organizational commitment and customer orientation of frontline employees on creativity are examined, to the best of our knowledge, for the first time in the literature. Thirdly, we investigate

the interaction effect between personal characteristics and commitment and customer orientation on creativity. Finally, our study also contributes to current literature by examining these issues in the context of frontline service jobs.

Keywords: creativity, frontline service employees, personal values, organizational commitment, customer orientation

Article type: Research Paper

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1. INTRODUCTION

To remain competitive, firms need their employees to be creative at work by generating novel and appropriate ideas for products, processes, and approaches (Shalley and Gilson, 2004). It is the use and development of creative ideas that allows firms to respond to opportunities and, thereby, adapt, grow and compete in this changing world (Amabile, 1997; Oldham, 2002). Considering that customer problems are becoming more diverse and require more customized solutions, creative solutions may please customers and increase their satisfaction (Wang and Netemeyer, 2004). In this context, researchers now recognize that employee creativity is a necessary ingredient to achieve competitive advantage (Amabile, 1996; Oldham and Cummings, 1996; Shalley et al., 2004).

Much of the empirical research has defined creativity as the production of novel and useful ideas concerning products, services, processes, and procedures (e.g. Amabile, 1996; Shalley et al., 2004). Following a review of past research on employee creativity, Shalley et al. (2004) conclude that: (a) extant research has considered a limited number of situational factors, thus implying the need to consider additional factors; (b) the study of direct measures of personal values and also their potential interactions with situational factors is likely to add value to this area of research; (c) future research should explore additional personal characteristics not

considered so far; (d) few studies have yet addressed the interaction between personal variables and situational factors, thus implying that further work is required on this topic; and (e) further research should explore interactions between multiple situational factors.

In this context, our study attempts to advance theory and practice by addressing some of the directions for future research highlighted by Shalley et al. (2004). More specifically, the contribution of this paper is fourfold. Firstly, we study the influence that personal values might have on an employee's creativity, which is still under-researched. Secondly, we develop a conceptual model that incorporates variables concerning how employees respond to the context in which they work: Employee organizational commitment and customer orientation. The simultaneous effects of organizational commitment and customer orientation on creativity are examined, to the best of our knowledge, for the first time in the literature. Thirdly, we investigate the interactional effect between personal values and organizational commitment and customer orientation on creativity. Finally, our study also contributes to current literature by examining these issues in the context of frontline service jobs. This is important since research on creativity has been focused on other settings. Many service activities involve a high degree of interpersonal interaction between employees and customers (e.g., Schneider, 1980). Moreover, the needs of customers in services tend to be heterogeneous. Consequently, the jobs of frontline service employees tend to be rather unstructured, and this implies that employees must be flexible in addressing the corresponding challenges (Dubinsky et al., 1986). This suggests that the degree of creativity of frontline service employees is likely to exert a strong effect on customers' satisfaction. Thus, researching the creativity of frontline service employees seems to be of the utmost importance.

2. CONCEPTUAL FRAMEWORK AND HYPOTHESES

Creativity refers to the development of ideas about products, practices, services or procedures that are novel and potentially useful to the organization (Amabile, 1996; Baer et al., 2003). Ideas are considered novel if they are unique; and useful if they have the potential for direct or indirect value to the organization (Shalley et al., 2004). Thus, when employees perform creatively, they suggest new products, ideas or procedures that provide an organization with important raw material for subsequent development and possible implementation (Oldham and Cummings, 1996). For instance, when Walt Disney created Disneyland, he demonstrated creativity in new service development by creating a new form of entertainment (Amabile, 1997). Further, creative ideas may be generated by employees in any job and at any level of the organization, and not just those confined to jobs traditionally viewed as necessitating creativity (Madjar et al., 2002).

While this article focuses on creativity, it is important to clearly differentiate creativity from other similar constructs in the employee behavior literature, such as adaptability and spontaneity. Adaptation has been defined as the process by which an individual achieves some degree of fit between his or her behaviors and the new work demands created by novel and often ill-defined problems resulting from changing and uncertain work situations (Chan, 2000). Creative thinking, however, does not necessarily occur as a function of environmental change – it may occur in response to a range of existing and stable situations. Similarly, adaptive responses do not necessarily have to be novel or original ones. They can involve the adoption of other well-known

strategies that are rather ‘ordinary’ but represent a functional response to what has changed in the operating environment (Ely et al., 2009). In terms of spontaneous behaviors, these refer to extra-role behaviors that are performed voluntarily and that contribute to organizational effectiveness (George and Brief, 1992). However, while creativity may depend on spontaneity, it differs from this construct in that it is also by definition, novel (Runco and Sakamoto, 1999). Hence, although these constructs may be related, they are different from creativity.

The purpose of this paper is to explore the effects of personal values and the way employees respond to the organization and job, on employee creativity. Past studies have addressed the role of values in explaining creativity but they have been exploratory and atheoretical, based on small and biased samples, failed to ensure the anonymity of respondents, used rudimentary statistical analysis, did not consider interactions between variables, and lacked robust theories to investigate the role of personal values (Kasof et al., 2007). More recent work on personal values and creativity is more sophisticated, having relied, for example, on Schwartz’s value theory (see Kasof et al., 2007; Dollinger et al., 2007). However, Kasof et al. (2007) and Dollinger et al. (2007) relied on student samples to operationalize their study.

Our paper differentiates itself by taking a holistic approach to personal values, by explicitly modeling interaction effects between personal values and the way employees respond to the organization and job, and by concentrating on frontline service employees instead, a setting where creativity should be of more importance, given the non-routine nature of these jobs. Figure 1 presents our research framework.

Insert Figure 1 here

2.1. Personal Values

Schwartz and Bilsky (1990) define values as desirable goals, varying in importance, that serve as guiding principles in people's lives. Values are characterized as relatively stable criteria that people use to evaluate their own and others' behavior across situations. Schwartz has developed a theory of values that offers great potential for marketing research (Steenkamp, 2001). His theory has been tested in more than 200 samples from over 70 countries (Schwartz, 2006), thereby increasing the confidence and validity of his individual values theory.

Schwartz's (1992) theory identifies ten value types, namely universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, stimulation, and self-direction. In order to understand the conceptual organization of the value system, Schwartz develops a theory of the dynamic relations among these value types. The ten types of values form a continuum of related motivation, which gives rise to a circular structure (see Figure 2). Schwartz postulates that actions taken in pursuit of each type of value have psychological, practical, and social consequences that may conflict or be compatible with, the pursuit of other types.

The circular structure in Figure 2 portrays the total pattern of relations of conflict and congruity among values. These ten value types are organized in four higher order value domains that form two basic bi-polar dimensions: (1) openness to change (stimulation and self-direction) versus conservation (security, conformity, and tradition), and (2) self-enhancement (power and achievement) versus self-transcendence (universalism and benevolence). The hedonism value type is enclosed by broken lines in Figure 2 because it includes elements of both the openness to change and self-enhancement dimensions. These two bi-polar dimensions constitute the most fundamental aspect of the Schwartz value system and are the focus of this study.

Insert Figure 2 here

Resultant conservation and creativity. Resultant conservation refers to the importance attached to conservation relative to openness to change values. The two values underlying ‘openness to change’ are self-direction and stimulation. Self-direction derives from the need for control, autonomy, and independence. The motivational goal is independent thought and action-choosing, creating and exploring. Stimulation derives from the need for variety and stimulation in order to maintain an optimal level of activation. Underlying the ‘conservation’ pole are the values security, conformity, and tradition. The defining goal of security is safety, harmony, and stability of society, of relationships, and of self. The motivational goal of conformity is the restraint of actions that might disrupt and undermine smooth interaction and group functioning and violate

social expectations and norms. Finally, the motivational goal of tradition is respect, commitment, and acceptance of the customs and ideas that one's culture or religion provides (Schwartz, 1992).

In sum, the 'openness to change' versus 'conservation' dimension arrays "values in terms of the extent to which they motivate people to follow their own intellectual and emotional interests in unpredictable and uncertain directions versus to preserve the status quo and the certainty it provides in relationships with close others, institutions, and traditions" (Schwartz, 1992, p. 43). Conservation goals are incongruent with a disposition to be creative, because the production of novel or original ideas is in conflict with the acceptance of established customs and ideas. Conformity is also considered to hinder creativity (Amabile, 1996). Schwarz and Bardi (2001) proposed that security and conformity values promote harmony by maintaining the status quo and weakening the motivation to innovate. Tradition also promotes acceptance of, and respect for, customary ways of doing things. Hence, these values would be incompatible with creativity (Dollinger et al., 2007; Kasof et al., 2007). Creative people tend to be independent and follow their own ideas without being overly-concerned about socially-imposed expectations for certain kinds of behavior or how others will view them (Gruber, 1996). In contrast, we believe openness to change values to be congruent with creativity. The motivational goal is independent thought and action-choosing, creating and exploring, which would seem to be the core values for the creative person (Helson, 1990). Therefore, we hypothesize that the more a person attaches importance to conservation values relative to openness to change values (called 'resultant conservation'; Feather, 1995), the lower will be this person's creativity.

H1: Resultant conservation is negatively related to the creativity of frontline employees

Resultant self-enhancement and creativity. As indicated above, the second bi-polar dimension is self-enhancement versus self-transcendence. Self-transcendence is comprised of universalism and benevolence. These value types emphasize preservation and enhancement of the welfare of those with whom there is frequent contact (benevolence), and appreciation and protection of the welfare of all people (universalism). Constituting the self-enhancement pole are the value types power and achievement. These value types emphasize personal success through demonstrating competence (achievement), social status, prestige, and control or dominance over people and resources (power). Thus, this second bi-polar dimension, self-enhancement versus self-transcendence, arrays “values in terms of the extent to which they motivate people to enhance their own personal interests (even at the expense of others) versus the extent to which they motivate people to transcend selfish concerns and promote the welfare of others, close and distant, and of nature” (Schwartz, 1992, pp. 43-44).

We hypothesize that resultant self-enhancement (i.e., the importance attached to self-enhancement minus the importance attached to self-transcendence; Feather, 1995) has a negative effect on creativity. Values that emphasize status, prestige, and dominance over people would seem incompatible with creativity. Creative activity is pursued as an intrinsic good that potentially enhances everyone’s life, whereas motives to enhance the resources or status of self are incompatible with the creative act (Dollinger et al., 2007). This is consistent with earlier studies that have shown creativity to be positively related to individuals who are broadminded and concerned with the welfare of others (Kasof et al., 2007) and negatively affected by

individuals who emphasize social status and prestige (Dollinger et al., 2007). Hence, we predict the following:

H2: Resultant self-enhancement is negatively related to the creativity of frontline employees

2.2. Organizational Commitment and Customer Orientation: Main and Moderating Effects

We have considered in this work two other explanatory variables, organizational commitment and customer orientation. These two variables reflect the way employees respond to the context in which they work, specifically their employer and their job. Commitment concerns the involvement of employees with their employer. Commitment, as a broad motivational variable (Carr et al., 2003), may constitute a powerful force to focus employees' attention on job tasks, which is a pre-requisite for creativity to take place. Employee customer orientation has been considered key for a services organization to be market oriented (Brown et al., 2002). Due to their boundary spanning role, frontline employees are most heavily involved with customers. Given their large responsibilities for customer satisfaction, the extent to which employees are customer-oriented should affect their concentration on the tasks that ensure customer satisfaction, and this is also likely to affect creativity.

Apart from the main effects of organizational commitment and customer orientation on creativity, this study also considers the moderating role exercised by these variables on the relationship between personal values and employee creativity. Support for the interactionist perspective is provided by the creativity literature, which has investigated the role of personal as

well as contextual variables on creativity, along with the interactions between personal factors, between contextual factors, and between personal and contextual factors (Shalley et al., 2004).

Organizational commitment and creativity. Organizational commitment has been defined as “the relative strength of an individual’s identification with and involvement in a particular organization” (Steers, 1977, p. 46). Similarly, Allen and Meyer (1990) defined affective commitment as an employee’s degree of emotional attachment to an organization. Although Meyer et al. (1993) identify other facets of organizational commitment, namely continuance and normative commitment, we focus on affective commitment. A major reason is that the affective (attitudinal) facet is prevalent in the definition of organizational commitment (Spector, 2002). Not surprisingly, it is probably the most widely studied.

In a creativity context, attachment to an organization is important because a committed employee strongly believes in the values of the organization, is willing to exert an extra effort for the fulfillment of the organization’s goals, and exhibits a desire to maintain organizational membership (Mowday et al., 1979). Commitment has been investigated as an antecedent of a number of relevant employee behaviors and attitudes such as performance (e.g., Carr et al., 2003), and organizational citizenship behaviors (e.g., Ackfeldt and Coote, 2005). As employees who are committed to their employers tend to reciprocate (Ackfeldt and Coote, 2005), namely by adopting behaviors that contribute to organizational well-being, they are likely to engage in creativity, as these contribute to employee performance (Wang and Netemeyer, 2004) and, thus, to organizational performance.

Moreover, to be creative, employees need to devote enough time and interest to addressing certain issues or problems (Oldham and Cummings, 1996). In this context, a committed employee develops a “sense of positive self-worth from his relationship with the organization” (Joshi and Randall, 2001, p. 7), and his/her mind should be free of extraneous concerns. As a consequence, the employee is more likely to concentrate on the nature of the tasks and to explore for longer, solutions to problems encountered. We thus predict the following:

H3: Organizational commitment is positively related to the creativity of frontline employees

Customer orientation and creativity. Customer orientation at the individual level can be understood as “the degree to which salespeople practice the marketing concept by trying to help their customers make purchase decisions that will satisfy customer needs” (Saxe and Weitz, 1982, p. 344). Thus, customer-oriented frontline employees devote their attention to discovering the expressed and latent needs of customers before developing solutions that satisfy customers in the long-term.

Frontline service employees, due to their boundary spanning position and the distinguishing features of services, have jobs that are rather unstructured and this requires that they must be flexible and innovative in performing their jobs (Dubinsky et al., 1986). In particular, service frontline employees face customers with quite heterogeneous needs, and this implies that delivering scripted and normative behaviors will not lead to satisfied customers (Chebat and Kollias, 2000). Consequently, an employee focus on the satisfaction of customers’ needs should drive the search for creative solutions. This can be further appreciated by considering that

customer orientation focuses an employee's attention on the heuristic parts of the job. To be creative, employees need to be sufficiently concentrated on job tasks in order to find solutions to problems (Oldham and Cummings, 1996), namely solving the idiosyncratic needs of each customer. We thus propose the following:

H4: Customer orientation is positively related to the creativity of frontline employees

Organizational commitment and customer orientation. Organizational commitment, consisting of the identification of an employee with an organization, is an attitudinal variable, whereas customer orientation contains a higher behavioral content. The latter results from the Saxe and Weitz (1982, p. 343) definition of customer-oriented selling “as the practice of the marketing concept at the level of the individual salesperson and customer”. Accordingly, organizational commitment should precede customer orientation. This is in accordance with the Theory of Planned Behavior (Ajzen, 1985), derived from the Theory of Reasoned Action (Fishbein and Ajzen, 1975). Succinctly, the basic tenet from this perspective is that individuals are more likely to adopt certain behaviors when they have a positive attitude or view about the consequences of such behaviors. In a labor context, when employees are emotionally attached to the organization, they are likely to view more positively, the consequences of adopting customer-oriented behaviors, as these will end up benefiting their employer. We thus predict the following:

H5: The effect of organizational commitment on creativity is mediated (at least partially) by customer orientation.

Moderating effects: Organizational commitment x personal values. Commitment involves identification with the organization, and appreciation of its values (Mowday et al., 1979), and this helps in relating with others inside the organization. In addition, commitment builds from good relationships with supervisors and peers (see, for example, Hunt et al., 1985). People scoring high on resultant conservation should exhibit lower creativity because creativity tends to conflict with established practices and ideas, and may lead to the violation of socially-imposed behaviors, which these individuals value (Dollinger et al., 2007; Kasof et al., 2007). Consequently, as resultant conservation increases, creativity should decrease, but this decrease should be lower for committed employees, because they are less likely to develop fears concerning negative reactions to creativity. The good relationships that committed employees have with peers and supervisors should reduce the likelihood of employees predicting adverse reactions to new ideas. In addition, organizational commitment is likely to direct the intellectual and emotional interests of people ranking high on openness to change in a way that contributes to organizational effectiveness, namely by serving customers creatively.

Commitment generates pro-organizational behaviors, implying that employees adopt behaviors that sustain and enhance the organization (Joshi and Randall, 2001). Therefore, commitment implies that employees are willing to exert an extra effort for the successful accomplishment of work activities and this includes resolving work-related problems in the best way possible. This should drive employees to be creative in solving issues at work. Consequently, as resultant self-enhancement increases, creativity should decrease, but this decrease should be smaller for higher levels of organizational commitment. Similarly, these extra

efforts that committed employees are willing to make should also contribute to attenuate the negative effects of resultant conservation. Thus, we predict the following:

H6a: Organizational commitment attenuates the negative relationship between resultant conservation and creativity

H6b: Organizational commitment attenuates the negative relationship between resultant self-enhancement and creativity

Moderating effects: Customer orientation x personal values. A customer-oriented employee has a strong desire to satisfy customer needs, carefully listening to these before communicating and proposing services that achieve this (Saxe and Weitz, 1982). Customer orientation relates to the extent to which employees interact with customers, determining the intensity and depth of the information flow with customers, and guiding employee efforts towards the satisfaction of customers' needs. Personal values consist of general goals that guide people's attitudes and behaviors across situations. Considering the role of information on creative processes, the impact of values on creativity should be affected by the type and depth of information employees obtain from customers, as well as by the direction of employees' efforts in performing their job. Accordingly, we expect that the negative effects of resultant conservation and resultant self-enhancement should be attenuated for employees with higher levels of customer orientation, because these employees will exert an extra effort to satisfy customer needs, and this implies finding novel ways of responding to their novel or unique demands. In addition, customer-oriented employees will possess extra customer information, and this, for example, may reduce

the uncertainty and risks perceived by resultant conservation employees regarding the proposition of original ways of serving each customers' unique needs. Finally, it is likely that, for customer-oriented employees, the information they obtain from customers may temper resultant self-enhancement employees' focus on selves, which detrimentally affects creativity. We thus propose the following:

H7a: Customer orientation attenuates the negative relationship between resultant conservation and creativity

H7b: Customer orientation attenuates the negative relationship between resultant self-enhancement and creativity

2.3. Control Variables

Previous research suggests that the age and sex of the individual might also affect creativity (Burroughs and Mick, 2004). As a result, we decided to include these two variables in our framework as control variables.

3. RESEARCH METHOD

3.1. Sample Selection

To test our research hypotheses we conducted a study in retail banking, which is a context that has been used frequently in studies of the behavior of frontline employees in services (e.g., Brown et al., 2002). To ascertain the appropriateness of bank employees to collect the creativity information, we talked with four individuals with bank experience from three different banks. The overwhelming evidence we collected was that employee creativity was of the utmost importance for frontline service employees in banking.

Currently, there are no routine jobs in banks. Even those who still have the more traditional Teller role also have to perform other tasks. The Teller has sales objectives like anyone else inside the branch, and even participates in sales contests. Nowadays, employees are incentivized to more completely understand the situation of the customer, so they can craft an original pack of benefits that meet that particular customer's needs. For instance, not all of a mortgage's characteristics are of interest to all customers. So the employee may formulate a unique proposition by pinpointing the benefits of the mortgage that are relevant for that customer, and by combining it with the customer-relevant benefits of other products (e.g., home insurance, credit card, and others). Accordingly, creativity may be useful in identifying customers' needs and in crafting the bundle of benefits that best meets them.

3.2. Data Collection

To collect the data we obtained the collaboration of a major Portuguese bank, which distributed 1,265 packs through the frontline employees working at branches in the central region of Portugal. Each pack contained a cover letter indicating the academic nature of the study, the bank's approval of the study,

and assurance of the confidentiality and anonymity of the responses. These employees occupied different positions and all had selling responsibilities, though in different degrees. We received 319 questionnaires. After eliminating non-usable questionnaires, including those containing excessive missing data or not responding to age and sex, we retained 266 questionnaires for this study, a 21% net response rate. Among the respondents, 51.5% were male, 48.5% were older than 41 years, and 29.9% had been working in banking for up to 10 years (with only 6.4% having been working for 30 or more years). We explored the issue of non-response bias, and found no significant differences between early and late respondents. Moreover, since anonymity was guaranteed, bias associated with those who did not wish to respond for confidentiality reasons was also reduced.

3.3. Measurement

To operationalize the variables we relied on previously-validated scales. However, prior to distributing the questionnaire on a large scale, the instrument was pre-tested with a convenience sample of 17 employees, and this led to minor rewording of the statements associated with the measures other than those of the SVS. We measured *individual values* with the Schwartz Value Survey (SVS), which comprises 57 items of which 46 items have shown a high degree of consistency in meaning across cultures (Schwartz, 2006). The SVS was developed and extensively tested by Schwartz and colleagues (e.g., Schwartz, 1992; Schwarz and Bardi, 2001). In this study we adopted the Portuguese version of the SVS validated by Schwartz and colleagues. The instructions and scoring procedure developed by Schwartz were employed. Accordingly, respondents were asked to rate the importance of each single value as a guiding

principle in their own life using a 9-point scale from –1 (opposed to my values) to 7 (of supreme importance).

Due to individual differences in the use of the response scale, Schwartz et al. (1997) advise correcting the raw data. This involves computing each individual's mean score on all 57 value items¹. The next step involves centering the scores of each of the items for an individual around that individual's mean score. We subsequently used 46 of the 57 items to index the 10 values. Studies based on multi-country samples indicate that these indexes have adequate internal reliability, temporal stability, and external validity (Schwarz and Bardi, 2001). An index of the importance of a value domain was obtained by computing the mean importance for each value separately, and subsequently averaging the scores attributed to the values within each domain. Following Feather (1995) hedonism was included in the self-enhancement domain. The reliabilities (Cronbach alphas) of the four higher order values are: conservation, 0.77; openness to change, 0.67; self-enhancement, 0.74; self-transcendence, 0.78. These reliabilities are in line with the usual range of value indexes, reflecting the relatively small number of items that are used to measure relatively broad constructs (Sagiv and Schwartz, 2004). Subsequently, resultant conservation was computed by subtracting openness to change from conservation. Similarly, resultant self-enhancement was computed by subtracting self-transcendence from self-enhancement. This method has also been used by Feather (1995).

Consistent with previous research (e.g., Hartline et al., 2000), we measured organizational commitment with the eight items that tap attitudinal (affective) commitment from the scale developed by Mowday et al. (1979). The measure for *customer orientation* is from Thakor and

Joshi (2005), and for *creativity* we relied on the scale used by Ganesan and Weitz (1996) (see Appendix I). We subsequently evaluated the psychometric properties of organizational commitment, customer orientation and creativity with confirmatory factor analysis (CFA). The results from the estimation of the CFA model indicate that the chi-square is significant (chi-square=266.698, df=116, $p<0.001$). Since the chi-square statistic is sensitive to sample size, we also assess additional fit indices: comparative fit index (CFI=0.946), Tucker-Lewis fit index (TLI=0.937), incremental fit index (IFI=0.946), goodness-of-fit index (GFI=0.900), and root mean square error of approximation (RMSEA=0.070). These fit indexes are inside conventional cut-off values, and thus the model is deemed acceptable.

The CFA results also indicate that all items load on their specified constructs, and that each loading is large and significant, indicating convergent validity. The shared variance between any two constructs (i.e., the square of their inter-correlation) is less than the average variance explained in the items by each construct and this is indicative of discriminant validity (Fornell and Larcker, 1981). The Cronbach's coefficient alpha and composite reliability is above the recommended level of 0.7 (see Appendix II). We, therefore, conclude that for all constructs, the indicators are sufficient and adequate in terms of how the measurement model is specified.

We used a questionnaire to collect information regarding the predictors and the criterion variable from the same source. Thus, the study may suffer from common method variance, which inflates construct inter-relationships. This is most threatening when the respondents are aware of the conceptual framework of interest. However, respondents were not told the specific purpose of the study, and all construct items were separated and mixed so that no respondent

should have been able to detect which items were associated with which factors. Additionally, research indicates that value scores are not contaminated by social desirability (Schwartz et al., 1997). For customer orientation, organizational commitment, and creativity, we also ran a single first order factor with all measures as indicators (see Podsakoff et al., 2003), and the resulting model fit was unacceptable.

4. RESULTS

Following Aiken and West (1991), the variables were previously mean-centered, a procedure which successfully reduced the multicollinearity resulting from the interaction terms. To test the main and moderating effects we relied on hierarchical multiple regression analysis (see Table 1). The first model contains as explanatory variables, age and sex, explaining 7.2% of employee creativity. The second model adds the personal values resultant conservation and resultant self-enhancement, both significant, increasing the R^2 by 81.9%. The third model adds organizational commitment, which is also significant, and with a very large contribution to the R^2 (an increase of 119.8%). The fourth model adds customer orientation, which has a highly significant coefficient, increasing the R^2 by 68.4%. The fifth model considers the incremental contribution of the commitment interactions, which increases the R^2 by 7.4%. The final model contains the customer orientation interactions, whose contribution is not statistically significant ($p>0.05$). The Breusch-Pagan/Cook-Weisberg test for heteroskedasticity was not significant in any model ($p>0.05$), and the largest VIF was 1.4, thus indicating no multicollinearity problems. Following the parsimony principle, according to which higher order terms should only be included if they

improve the explanation provided by the corresponding lower order terms, we retained model 5 (which excludes the customer orientation interactions). It is noteworthy that inclusion of the customer orientation interactions does not introduce substantive changes in the model. The retained model explains a significant amount of variance ($R^2=52.1\%$ /adjusted $R^2=50.7\%$).

Insert Table 1 here

We now describe the results of hypotheses testing. The coefficient for resultant conservation is negative and significant ($b=-0.152$, $p<0.01$). The study thus lends support to H_1 , which predicted a negative relationship between resultant conservation and employee creativity. H_2 predicted a negative relationship between resultant self-enhancement and creativity. This is not supported as the coefficient is positive and significant ($b=0.115$, $p\leq 0.01$). H_3 is supported, organizational commitment having a positive impact on employee creativity ($b=0.223$, $p\leq 0.01$). Furthermore, customer orientation has a positive and significant effect on creativity ($b=0.626$, $p<0.01$), thus supporting H_4 .

In accordance with H_5 , the effect of organizational commitment on employee creativity reduces substantially with the introduction of customer orientation, thus indicating that the latter partially mediates the effect of the former. Following Baron and Kenny (1986), to better ascertain the mediating effect played by customer orientation, we estimated three regressions,

namely customer orientation on creativity, commitment on creativity and, finally, commitment and customer orientation on creativity, and observed the conditions for partial mediation. Moreover, we calculated the Sobel test to formally evaluate the significance of the mediating effect, and the results indicated that it is highly significant ($t = 6.15$, $p < 0.01$).

H_{6a} predicted that organizational commitment would attenuate the negative relationship between resultant conservation and creativity. The results support this prediction, as the coefficient for this interaction is positive and significant ($b=0.170$, $p \leq 0.01$). Organizational commitment strengthens the positive relationship between resultant self-enhancement and creativity ($b=0.059$, $p \leq 0.05$), providing support to H_{6b}. However, since resultant self-enhancement is positively related to creativity, commitment ends up not attenuating, but reinforcing that positive relationship. None of the interactions between customer orientation and personal values was significant ($p > 0.05$). Thus, no support is obtained for H_{7a} and H_{7b}.

To facilitate interpretation of the moderating effects, these are depicted graphically using the procedure suggested by Aiken and West (1991) (see Figure 3). In addition, we have tested whether the two slopes in each graphed interaction were statistically different from zero. Finally, the results concerning the control variables indicate that sex is not significantly related with creativity ($b=-0.079$, $p > 0.05$), whereas age has a significant negative effect ($b=-0.088$, $p \leq 0.01$). We subsequently discuss the findings.

Insert Figure 3 here

5. DISCUSSION

The inseparability, heterogeneity, and simultaneous production and consumption of services create a number of difficulties for service delivery, limiting the chances of standardization. These specificities imply that frontline employees need to be flexible and creative to ensure satisfied customers. However, extant research has failed to explicitly consider the factors contributing to the creativity of frontline employees. In this work we have tried to deal with this limitation by testing the effects that organizational commitment and customer orientation have on the creativity of frontline employees, thereby responding to the call from Shalley et al. (2004) for new variables to be investigated. Additionally, we have also directly measured personal values, and examined their interaction with commitment and customer orientation.

Conducting the study in services, namely with bank employees, is of particular relevance, given the specificities of services. Although bank employees have a limited room to customize the core product, financial products (that are standard products), they still have a personal interaction with customers, which can require a significant degree of creativity. For instance, bank employees might benefit from using creativity in presenting services in a way that meet

customers' needs, in building customer relationships, in crafting the service mix that fits customers' needs, and in addressing customer complaints.

The results indicate that people ranking high on conservation and low on openness to change are less creative. This conforms to contentions that those who are less curious and broad-minded, and more conventional, are less creative (e.g., McCrae and Costa, 1997). This is also consistent with the findings of Rice (2006), who observed that creativity was negatively related to conformity, a value type comprised in resultant conservation.

Contrary to expectations and recent findings (e.g., Dollinger et al., 2007; Kasof et al., 2007), we found that resultant self-enhancement is positively related to creativity. Our result suggests creativity to be positively related to individuals who emphasize personal success, social status, prestige, and control or dominance over people (self-enhancement), and negatively to those individuals who transcend selfish concerns and promote the welfare of others, close and distant, and of nature (self-transcendence). Notwithstanding, this result appears to confirm Helson's (1996) findings that power motivation is important in creativity. Consistent with our result is also Mumford's (2000) argument that creative people demonstrate a strong achievement orientation and value time to pursue topics of personal professional interest.

A possible explanation for this unexpected relationship and contradictory result with the studies of Dollinger et al. (2007) and Kasof et al. (2007), could be related to the characteristics of the respondents. While in our study the participants were frontline employees, in the other two studies the respondents were university students. An employee who values personal success

through the demonstration of competence is likely to be stimulated to achieve higher performance levels (Rokeach, 1973), in order to have the desire for competence recognized internally and externally (i.e., by others, including peers, supervisors, and customers). This search for higher performance levels is also likely to stimulate employees to learn about their jobs, and this increased knowledge affects creativity (Amabile, 1996).

Organizational commitment contributes in a positive way to the adoption of creativity. This finding is consistent with the results obtained by Ganesan and Weitz (1996), who also observed a positive relationship between creativity and the commitment of retail buyers. Committed employees are emotionally attached to the organization, identifying with its goals and values. This implies that these employees have the conditions to concentrate their minds on task-related issues and not on extraneous factors, thus facilitating the generation of innovative ideas. Meyer and Allen (1997) also contend that employees with a high level of affective commitment are motivated to perform at higher levels and to deliver a higher contribution to their employer. Furthermore, we observe that when we include organizational commitment in the estimation (Model 3), the coefficient for resultant self-enhancement decreases substantially, thus indicating a mediating role for organizational commitment. Having regressed organizational commitment on personal values, we obtained evidence for the positive effect of resultant self-enhancement on this construct. This suggests that employees pursuing their personal success are more likely to develop a sense of attachment with their organization. A possible reason for this is that by adhering to organizational values, such employees will better reach their desire for having their competencies acknowledged as well as gaining dominance over people and resources within the organization.

Moreover, the study supports the contention that the effects of organizational commitment are mediated, to a certain degree, by employee customer orientation. Those employees who are emotionally attached to the organization where they work, adopt to a greater extent, customer-oriented behaviors, as they are likely to assume behaviors that benefit their employer. This follows the reasoning of Mowday et al. (1979) that committed employees are willing to make an extra effort for the fulfilment of the organization's goals. This rationale is also consistent, for example, with the Theory of Reasoned Action proposed by Fishbein and Ajzen (1975).

The results associated with the customer orientation indicate that the more employees are concerned with satisfying customer needs, the more they strive for creative ideas in their jobs. In the quest for customer satisfaction, customer-oriented employees adopt a problem-solving rather than a pressure-oriented approach. Given that frontline service employees face many and heterogeneous customers, satisfying customers implies attempting to serve their idiosyncratic needs and requests. However, this end result is only likely to happen to the extent to which the employee is creative.

The results further indicate that the contribution of personal values to the explanation of creativity is inferior to that of organizational commitment and customer orientation. However, this is not at all unexpected, given the conceptualization (and measurement) of personal values. Personal values, being guiding principles applicable across situations, contain a high degree of abstraction. Notwithstanding their lower explanatory power, personal values are still of importance, as they contribute to shape individuals' attitudes and behaviors in the workplace.

The results also indicate that organizational commitment moderates the effects of personal values. According to Figure 3, when organizational commitment is low, resultant conservation has a negative effect on creativity. However, for high levels of commitment, resultant conservation has no substantive effect on creativity. Thus, a high level of commitment over-rules the negative consequences associated with conservation. This implies that by building an appreciation of the organization's values, a firm may be able to counter the negative consequences of resultant conservation over creativity.

In addition, Figure 3 indicates that when commitment is high, resultant self-enhancement has a significant positive effect on creativity. However, when commitment is low, resultant self-enhancement no longer significantly affects creativity. This implies that by building attachment to the organization, an organization not only avoids the negative consequences of resultant self-enhancement, but it also enables the positive effects of resultant self-enhancement to build. Consequently, the extent to which personal values influence creativity is dependent on how employees respond to the context in which they work.

Finally, age was found to be negatively related with creativity. This is consistent with the contention of Mumford and Gustafson (1988, p. 30) that young adults are motivated "to align desires and capabilities with the potentialities and expectations associated with movement into the adult social world" and that this drives them to restructure cognitions, thus leading younger adults to a new understanding of problems.

6. MANAGERIAL IMPLICATIONS

If managers value and want employees to be creative, they need to understand the factors that influence their employees' creativity. Our findings indicate that individuals who emphasize openness to change values rather than conservation values, and self-enhancement values rather than self-transcendence values, tend to demonstrate higher levels of creativity in the workplace. Thus, managers' consideration of employee values appears to be warranted. In the recruitment process managers should consider the use of selection criteria that favor applicants who demonstrate a higher predisposition to be creative. Assessing the values of current employees is also important because it allows managers to consciously factor in whether an employee who emphasizes certain values fits well with a job and the level of creativity that may be required within it.

In addition, because our research demonstrates that organizational commitment has a significant positive effect on creativity and plays a moderating role in the relationship between personal values and creativity, it suggests that engendering commitment among employees makes good business sense. The ability to establish trust in employees, offer career opportunities, and, where necessary, delegate authority, could increase employees' organizational commitment and, therefore, their creativity. Another important finding is that customer orientation enhances creativity. An obvious recommendation for managers is, therefore, that customer orientation should be cultivated, namely by: having senior managers reinforcing the importance of

customers to the rest of the organization, such as through customer-based mission statements; and creating programs tying incentives to market metrics.

7. LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH

This study contains a number of limitations that should be addressed in future research. Firstly, the study relied on a survey of the frontline employees of a single Portuguese bank. The relationships observed in retail banking may not replicate in other settings, and this should be assessed. Furthermore, testing the external validity of our findings would ideally necessitate replication of this study in other countries. Thus, generalizing the findings too broadly is unwarranted.

Throughout this paper we have assumed that the independent variables caused creativity. However, the study relied on a cross-sectional research design, which can only capture correlation mechanisms and not the dynamic aspects of the drivers of employee creativity. Future work should, therefore, consider adopting a longitudinal design to shed light on the evolution of these variables over time.

Future research should also investigate new predictors. Recently, the salesforce literature has been considering the effects of two motivational orientations, learning orientation and performance orientation, which drive people's behavior in achievement situations. Learning orientation steers people to improve their abilities and master the tasks they perform, whereas a performance orientation drives individuals to achieve a positive evaluation of their current abilities and performance from important others (Sujan et al., 1994). Because these orientations influence the way people approach their work, they are likely to affect creativity, and this deserves to be investigated.

Personal values are desirable goals that serve as guiding principles in people's lives. Consequently, they should influence people in a work context across a variety of behavior. However, personal values have been scarcely considered in investigations regarding the behavior of frontline employees. Our study contributed to close this void and hopefully will stimulate others to pursue this research stream.

Endnote:

¹ While the use of 46 items would yield identical results, Schwartz recommends the use of 57 items to correct for scale use.

References

- Ackfeldt, A. L. and Coote, L. V. (2005), "A Study of Organizational Citizenship Behaviors in a Retail Setting", *Journal of Business Research*, Vol. 58, pp. 151-159.
- Aiken, L. S. and West, S. G. (1991), *Multiple regression: Testing and interpreting interactions*, Sage Publications, London.
- Allen, N. J. and Meyer, J. P. (1990), "Organizational Socialization Tactics: A Longitudinal Analysis of Links to Newcomers' Commitment and Role Orientation", *Academy of Management Journal*, Vol. 33 No. 4, pp. 847-858.
- Amabile, T. M. (1996), *Creativity in Context: Update to the Social Psychology of Creativity*, Westview Press, Boulder, CO.
- Amabile, T. M. (1997), "Motivating Creativity in Organizations: On Doing What You Love and Loving What You Do", *California Management Review*, Vol. 40 No. 1, pp. 39-58.
- Ajzen, I. (1985), "From intentions to actions: A theory of planned behavior", in Kuhl, J. and Beckmann, J. (Eds.), *Action control: From cognition to behavior*, New York: Springer-Verlag, pp. 11-39.
- Baer, M., Oldham, G. R. and Cummings, A. (2003), "Rewarding Creativity: When Does It Really Matter?" *The Leadership Quarterly*, Vol. 14 No. 4-5, pp. 569-586.
- Baron, R. M. and Kenny, D. A. (1986), "The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51, No. 6, pp. 1173-1182.
- Brown, T. J., Mowen, J. C., Donovan, D. T., and Licata, J. W. (2002), "The Customer Orientation of Service Workers: Personality Trait Effects on Self- and Supervisor Performance Ratings", *Journal of Marketing Research*, Vol. 29, pp. 110-119.
- Burroughs, J. E. and Mick, D. G. (2004), "Exploring Antecedents and Consequences of Consumer Creativity in a Problem-Solving Context", *Journal of Consumer Research*, Vol. 31 No. 2, pp. 402-411.
- Carr, J. Z., Schmidt, A. M., Ford, J. K. and DeShon, R. P. (2003), "Climate Perceptions Matter: A Meta-Analytic Path Analysis Relating Molar Climate, Cognitive and Affective States, and Individual Level Work Outcomes", *Journal of Applied Psychology*, Vol. 88 No. 4, pp. 605-619.
- Chan, D. (2000), "Understanding adaptation to changes in the work environment: Integrating individual difference and learning perspectives", *Research in Personnel and Human Resources Management*, Vol. 18, pp. 1-42.
- Chebat, J. C. and Kollias, P. (2000), "The Impact of Empowerment on Customer Contact Employees' Roles in Service Organizations", *Journal of Service Research*, Vol. 3 No. 1, pp. 66-81.
- Dollinger, S. J., Burke, P. A. and Gump, N. W. (2007), "Creativity and Values", *Creativity Research Journal*, Vol. 19 No. 2/3, pp. 91-103.
- Dubinsky, A. J., Howell, R. D., Ingram, T. N. and Bellenger, D. N. (1986), "Salesforce Socialization." *Journal of Marketing*, Vol. 50 No. 4, pp. 192-207.
- Ely, K., Zaccaro, S. J. and Conjar, E. A. (2009), "Leadership Development: Training Design Strategies for Growing Adaptability in Leaders", in Burke, R. J. and Cooper, C. L. (Eds.), *The Peak Performing Organization*, Routledge, pp. 175-196.

- Fishbein, M., and Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading: Addison-Wesley.
- Feather, N. T. (1995), "Values, Valences, and Choice: The influence of values on the perceived attractiveness and choice of alternatives", *Journal of Personality and Social Psychology*, Vol. 68 No. 6, pp. 1135-1151.
- Fornell, C. and Larcker, D. F. (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error", *Journal of Marketing Research*, Vol. 18 No. February, pp. 39-50.
- Ganesan, S. and Weitz, B. A. (1996), "The impact of staffing policies on retail buyer job attitudes and behaviors", *Journal of Retailing*, Vol. 72 No. 1, pp. 31-56.
- George, J. M. and Brief, A. P. (1992), "Feeling Good-Doing Good: A Conceptual Analysis of the Mood at Work-Organizational Spontaneity Relationship", *Psychological Bulletin*, Vol. 112 No. 2, pp. 310-329.
- Gruber, H. E. (1996), "The Life Space of a Scientist: The Visionary Function and Other Aspects of Jean Piaget's Thinking." *Creativity Research Journal*, Vol. 9 No. 2/3, pp. 251-265.
- Hartline, M. D., Maxham III, J. G. and McKee, D. O. (2000), "Corridors of Influence in the Dissemination of Customer-Oriented Strategy to Customer Contact Service Employees", *Journal of Marketing*, Vol. 64 No. April, pp. 35-50.
- Helson, R. (1990), "Creativity in Women: Outer and Inner Views over Time", in Runco, M. A. and Albert, R. S. (Eds.), *Theories of Creativity*, Sage, Newbury Park, CA, pp. 46-58.
- Helson, R. (1996), "In Search of the Creative Personality." *Creativity Research Journal*, Vol. 9 No. 4, pp. 295-306.
- Hunt, S. D., Chonko, L. B. and Wood, V. R. (1985), "Organizational Commitment and Marketing", *Journal of Marketing*, Vol. 49 No. 1, pp. 112-126.
- Joshi, A. W. and Randall, S. (2001), "The indirect effects of organizational controls on salesperson performance and customer orientation", *Journal of Business Research*, Vol. 54 No. 1, pp. 1-9.
- Kasof, J., Chen, C., Himsel, A. and Greenberger, E. (2007), "Values and Creativity", *Creativity Research Journal*, Vol. 19 No. 2/3, pp. 105-122.
- Madjar, N., Oldham, G. R. and Pratt, M. G. (2002), "There's No Place Like Home? The Contributions of Work and Non-work Creativity Support to Employees' Creative Performance", *Academy of Management Journal*, Vol. 45 No. 4, pp. 757-767.
- McCrae, R. R. and Costa, P. T. (1997), "Conceptions and Correlates of Openness to Experience", in Hogan, R., Johnson, J. and Briggs, S. (Eds.), *Handbook of Personality Psychology*, Academic Press, San Diego, CA, pp. 825-847.
- Meyer, J. P. and Allen, N. J. (1997), *Commitment in the Workplace: Theory, Research, and Application*, Sage, Thousand Oaks, CA.
- Meyer, J. P., Allen, N. J. and Smith, C. A. (1993), "Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conceptualization", *Journal of Applied Psychology*, Vol. (78) No. 4, pp. 538-551.
- Mowday, R. T., Steers, R. M. and Porter, L. W. (1979), "The Measurement of Organizational Commitment", *Journal of Vocational Behavior*, Vol. 14 No. April, pp. 224-247.
- Mumford, M. D. (2000), "Managing Creative People: Strategies and Tactics for Innovation", *Human Resource Management Review*, Vol. 10 No. 3, pp. 313-351.

- Mumford, M. D. and Gustafson, S. B. (1988), "Creativity syndrome: Integration, application, and innovation", *Psychological Bulletin*, Vol. 103 No. 1, pp. 27-43.
- Oldham, G. R. (2002), "Stimulating and Supporting Creativity in Organizations", in Jackson, S., Hitt, M. and DeNisi, A. (Eds.), *Managing Knowledge for Sustained Competitive Advantage*, Jossey-Bass Publishers, San Francisco, pp. 243-273.
- Oldham, G. R. and Cummings, A. (1996), "Employee Creativity: Personal and Contextual Factors at Work", *Academy of Management Journal*, Vol. 39 No. 3, pp. 607-634.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y. and Podsakoff, N. P. (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Rice, G. (2006), "Individual Values, Organizational Context, and Self-perceptions of Employee Creativity: Evidence from Egyptian Organizations", *Journal of Business Research*, Vol. 59 No. 2, pp. 233-241.
- Rokeach, M. (1973), *The nature of human values*, Free Press, New York.
- Runco, M. A. and Sakamoto, S. O. (1999), "Experimental Studies of Creativity", in Sternberg, R. J. (Ed.) *Handbook of Creativity*, Cambridge University Press, pp. 62-92.
- Sagiv, L. and Schwartz, S. H. (2004), "Values, Intelligence and Client Behavior in Career Counselling: A Field Study", *European Journal of Psychology of Education*, Vol. 19 No. 3, pp. 237-254.
- Saxe, R. and Weitz, B. A. (1982), "The SOCO Scale: A Measure of the Customer Orientation of Salespeople", *Journal of Marketing Research*, Vol. 19 No. August, pp. 343-351.
- Schneider, B. (1980), "The service organization: Climate is crucial", *Organizational Dynamics*, Vol. 9, pp. 52-65.
- Schwartz, S. H. (1992), "Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries", in Zanna, M. P. (Ed.) *Advances in experimental social psychology*, Academic Press, Orlando, pp. 1-65.
- Schwartz, S. H. (2006), "Basic Human Values: Theory, Measurement, and Applications", *Revue Française de Sociologie*, Vol. 47 No. 4, pp. 249-288.
- Schwartz, S. H. and Bardi, A. (2001), "Value Hierarchies Across Cultures: Taking a Similarities Perspective", *Journal of Cross-Cultural Psychology*, Vol. 32 No. 3, pp. 268-290.
- Schwartz, S. H. and Bilsky, W. (1990), "Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications", *Journal of Personality and Social Psychology*, Vol. 58 No. 5, pp. 878-891.
- Schwartz, S. H., Verkasalo, M., Antonovsky, A. and Sagiv, L. (1997), "Value Priorities and Social Desirability: Much Substance, Some Style", *British Journal of Social Psychology*, Vol. 36 No. 1, pp. 3-18.
- Shalley, C. E. and Gilson, L. L. (2004), "What leaders need to know: A review of social and contextual factors that can foster or hinder creativity", *The Leadership Quarterly*, Vol. 15 No. 1, pp. 33-53.
- Shalley, C. E., Zhou, J. and Oldham, G. R. (2004), "The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here?" *Journal of Management*, Vol. 30 No. 6, pp. 933-958.
- Spector, P. E. (2002), *Industrial and Organizational Psychology: Research and Practice*, Wiley: London.

- Steenkamp, J.-B. E. M. (2001), "The Role of National Culture in International Marketing Research", *International Marketing Review*, Vol. 18 No. 1, pp. 30-44.
- Steers, R. M. (1977), "Antecedents and Outcomes of Organizational Commitment", *Administrative Science Quarterly*, Vol. 22 No. 1, pp. 46-56.
- Sujan, H., Weitz, B. A. and Kumar, N. (1994), "Learning, orientation, working smart, and effective selling", *Journal of Marketing*, Vol. 58 No. 3, pp. 39-52.
- Thakor, M. V. and Joshi, A. W. (2005), "Motivating salesperson customer orientation: insights from the job characteristics model", *Journal of Business Research*, Vol. 58 No. 5, pp. 584-592.
- Wang, G. and Netemeyer, R. G. (2004), "Salesperson creative performance: Conceptualization, measurement, and nomological validity", *Journal of Business Research*, Vol. 57 No. 8, pp. 805-812.

Figure 1: Conceptual Model

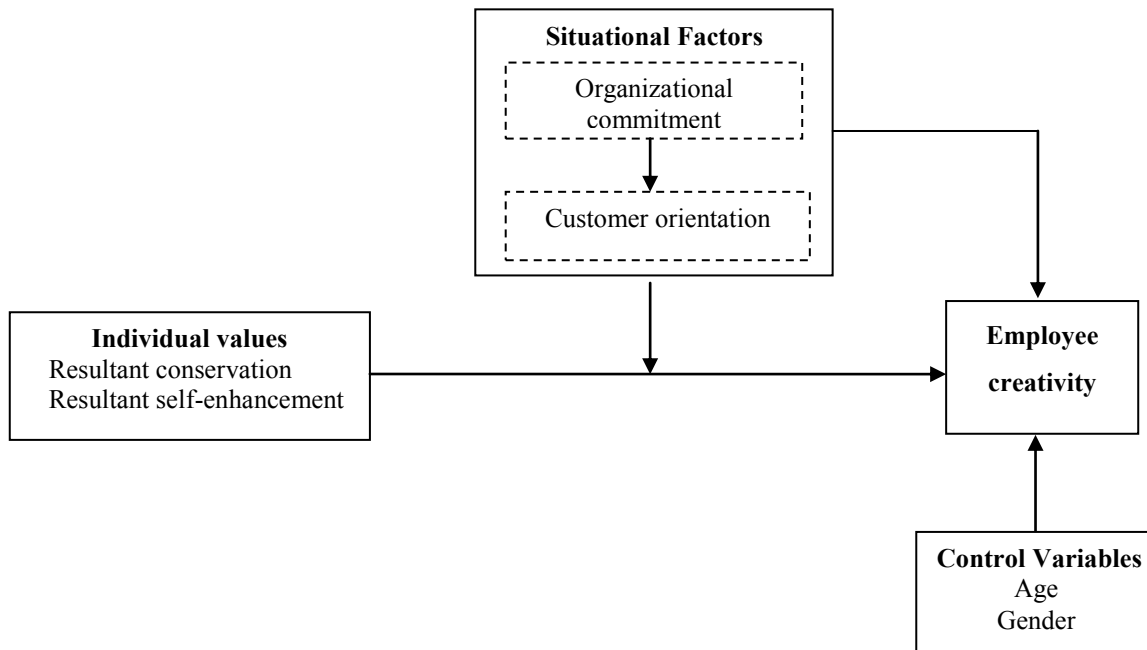
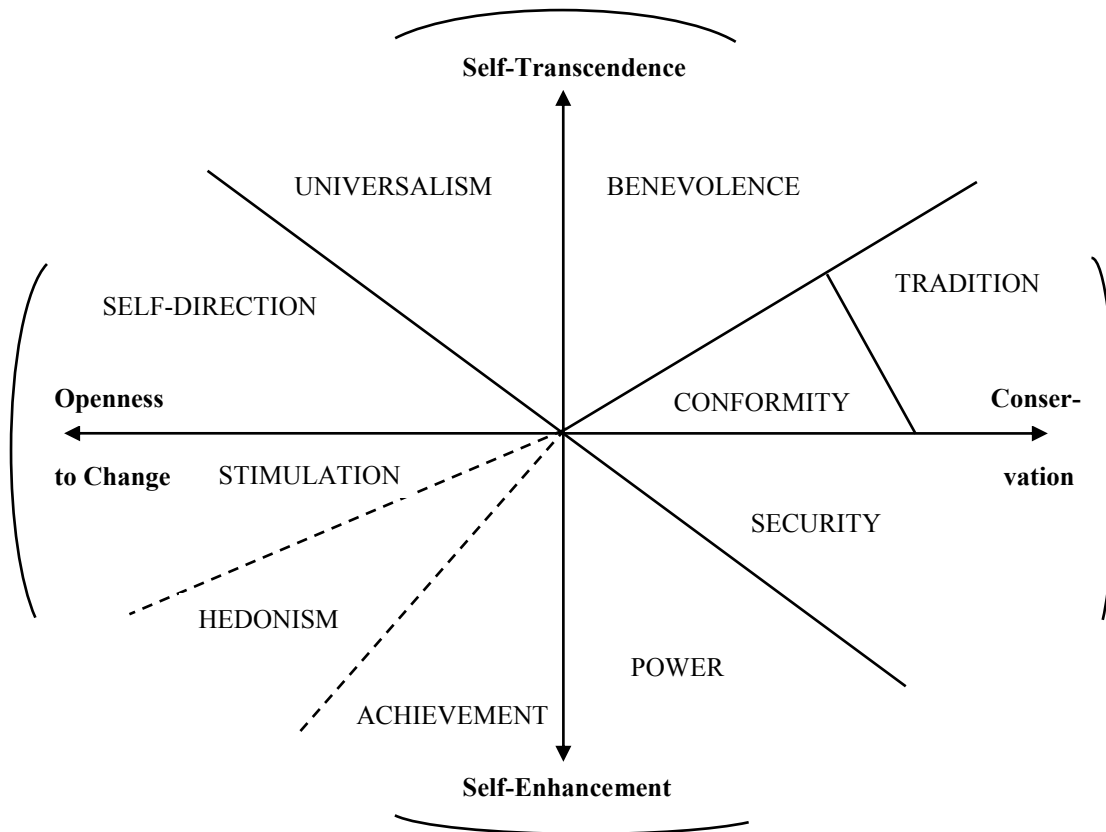


Figure 2: Schwartz's Theoretical Model



Source: Schwartz (1992)

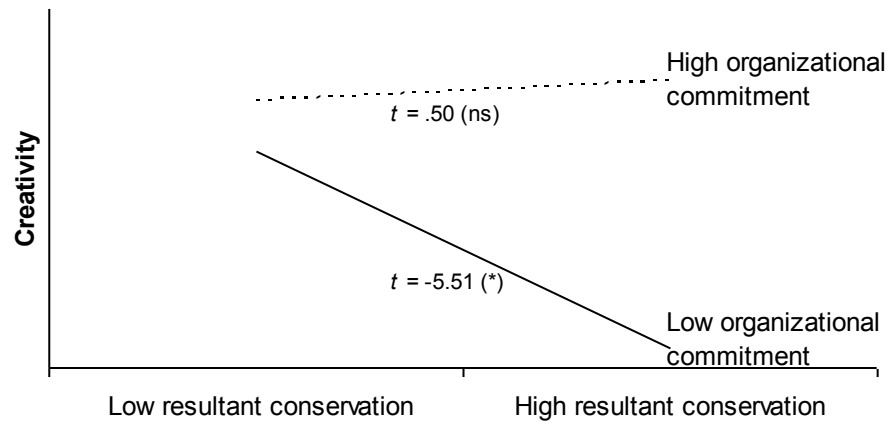
Table 1: Regression Results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Constant	6.128 **	5.895 **	5.728 **	5.715 **	5.586**	5.573 **
Sex	-.180	-.159	-.118	-.145	-.079	-.075
Age	-.201 **	-.142 **	-.111 **	-.095 **	-.088**	-.087 **
Resultant conservation		-.202 **	-.226 **	-.176 **	-.152**	-.139 **
Resultant self-enhancement		.104 *	.018	.092 *	.115**	.123 **
Organizational commitment			.340 **	.201 **	.223**	.229 **
Customer orientation				.655 **	.626**	.623 **
Resultant conservation x Organiz. commitment					.170**	.167 **
Resultant self-enhancement x Organiz. commitment					.059*	.057 *
Resultant conservation x Customer orientation						-.061
Resultant self-enhancement x Customer orientation						-.066
R ²	7.2%	13.1%	28.8%	48.5%	52.1%	52.4%
ΔR ²		5.9% (p<.01)	15.7% (p<.01)	19.7% (p<.01)	3.6% (p<.01)	.3% (p>.05)
% change in the R ²		81.9%	119.8%	68.4%	7.4%	.6%

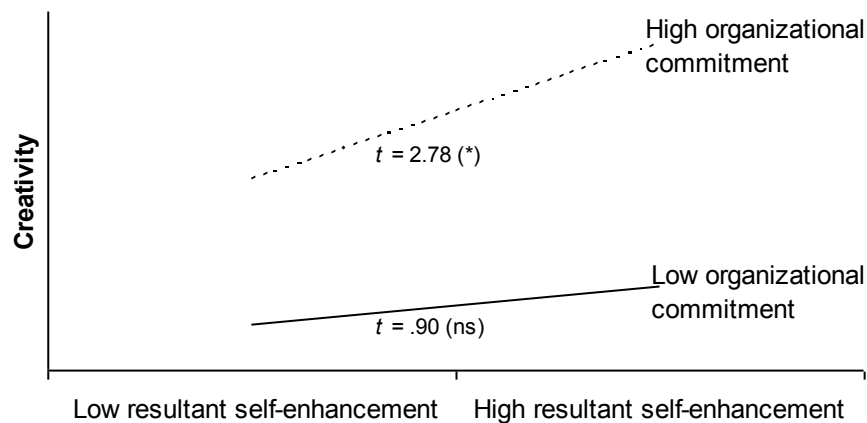
Note: Tests of hypotheses are one-tail tests; * $p \leq 0.05$; ** $p \leq 0.01$.

Figure 3: Illustration of Moderating Effects

3a) Resultant conservation x organizational commitment



3b) Resultant self-enhancement x organizational commitment



Notes: Underneath each line is the t -value for the corresponding slope. (*) means that the slope is statistically significant; (ns) means the slope is not statistically different from zero

Appendix I

Measures

Organizational commitment (seven-point scale)

- I talk up this organization to my friends as a great organization to work for
- I find that my values and the organization's values are very similar
- This organization really inspires the very best in me in the way of job performance
- I am proud to tell others that I am part of this organization
- For me, this is the best of all possible organizations for which to work
- I really care with the fate of this organization
- I am extremely glad that I chose this organization to work for over others I was considering at the time I joined
- I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful

Customer orientation (seven-point scale)

- I always present the customer with a realistic picture of what my firm's product can do
- I wait until I fully understand the customer's needs before making my presentation
- I am always candid in discussions with my customers
- I try to determine how I can best help the customer solve his/her problem

Creativity (seven-point scale)

- I experiment with new approaches to sell my products
- I am always on the lookout for new ideas to apply in my job
- I try to be as creative as I can in my job
- My boss feels that I am creative in my job
- When new trends develop, I am usually the first to get on board

Appendix II
Descriptive Statistics and Pearson Correlation Coefficients

	SD	X₁	X₂	X₃	X₄	X₅	X₆	CA	CR	AVE
Age (X_1)	1.34	-								
Resultant conservation (X_2)	0.89	0.28	-							
Resultant self-enhancement (X_3)	0.95	-0.25	-0.36	-						
Organizational commitment (X_4)	1.09	-0.12	-0.05	0.23	-			0.93	0.93	0.63
Customer orientation (X_5)	0.66	-0.09	-0.08	-0.04	0.32	-		0.74	0.75	0.44
Creativity (X_6)	0.91	-0.25	-0.29	0.23	0.45	0.57	-	0.89	0.90	0.64

Notes: SD-standard deviation; CA-Cronbach alpha; CR-composite reliability; AVE-average variance extracted