The Relationship between Affective Organizational Commitment, Organizational Citizenship Behavior and Innovative Behavior

In a Research with Extensive Training and Innovative Organizational Climate as Moderators



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Abstract

The objective of this research is to investigate the relationship between affective organizational commitment and organizational citizenship behavior through the lens of the social exchange theory and the relationship between affective organizational commitment and innovative behavior through the lens of the social identity theory. Based on the social exchange theory, the moderator extensive training was used to explore the relationship between affective organizational commitment and organizational citizenship behavior. Based on the social identity theory, the moderator innovative organizational citizenship behavior. Based on the social identity theory, the moderator innovative organizational citizenship behavior. Based on the social identity theory, the moderator innovative organizational climate was used to study the relationship between affective organizational commitment and innovative behavior. For this research, data was used from the Global HRM project, which is a cross-sectional research conducted by an international team of researchers. By means of an online survey questionnaire data was collected from 2839 employees and 383 supervisors in 57 organizations in 11 countries.

For this research, multiple analyses were conducted. These analyses revealed a positive relationship between affective organizational commitment and organizational citizenship behavior. Moreover, this research also found evidence for the moderating effect of extensive training on the relationship between affective organizational commitment and innovative behavior. This research did not find evidence for the direct relationship between affective organizational commitment and innovative behavior nor for this relationship with innovative organizational climate as a moderator. Furthermore, this research did not provide evidence for the moderating effects of extensive training and innovative organizational climate on the relationship between affective organizational commitment and organizational citizenship behavior.

This research provides more insight in the theoretical development and empirical testing of the relationship between affective organizational commitment, organizational citizenship behavior and innovative behavior. In addition, this research might encourage other researchers to further theoretically develop and empirically test these relationships.

Keywords: Affective Organizational Commitment - Organizational Citizenship Behavior - Innovative Behavior - Social Exchange Theory - Social Identity Theory

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Chapter 1 - Introduction

1.1 Introduction

The objective of this research is to investigate the relationship between affective organizational commitment and organizational citizenship behavior through the lens of the social exchange theory and the relationship between affective organizational commitment and innovative behavior through the lens of the social identity theory. Based on previous studies organizational commitment, organizational citizenship behavior and innovative behavior are known to have an effect on organizational performance (e.g. Cesário & Chambel, 2017; Podsakoff, Whiting, Podsakoff, & Blume, 2009; Janssen, Van de Vliert & West, 2004). Enhancing organizational performance is the most fundamental goal for all organizations in the world (Damanpour, Szabat, & Evan, 1989). In order to achieve that goal, it is interesting for organizations to gain knowledge and understanding of the phenomena of organizational commitment, organizational citizenship behavior, innovative behavior and its underlying relationships in such a way that the organizations can use this knowledge and understanding to enhance organizational performance. For example, as Wagner (1993) stated about commitment "only by understanding commitment you can nurture it".

Over the years, organizational commitment, which can be defined as "a psychological attachment of employees to their organizations", has repeatedly been a topic of research (Cesário & Chambel, 2017, p. 153). According to Mowday, Porter and Steers (1982) a better understanding of organizational commitment can have consequences for employees, organizations and society in general. For employees, the level of organizational commitment may influence the willingness to receive extrinsic (e.g. wages and benefits) and intrinsic (e.g. relationships with colleagues) rewards (Mathieu & Zajac, 1990). For organizations with highly committed employees, the commitment is assumed to reduce withdrawal behaviors like for example turnover (Mathieu & Zajac, 1990). For society in general, a high level of organizational commitment is expected to reduce the number of job movements and might improve the national productivity and/or work quality (Mathieu & Zajac, 1990). With these expectations in mind, organizational commitment has been studied numerous times, both as a consequence and as an antecedent (Mathieu & Zajac, 1990). As a consequence, which means organizational commitment is the dependent variable, organizational commitment is related to personal variables (e.g. age, gender, education, tenure), role states (e.g. role ambiguity, role conflict) and work experiences (e.g. organizational support, transformational leadership, organizational justice) (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). As an antecedent, which means organizational commitment is the independent variable, organizational commitment is related to turnover, withdrawal cognition, absenteeism, job performance, stress and work-family

conflict and other behaviors such as organizational citizenship behavior (Meyer et al., 2002). Furthermore, organizational commitment also has several correlating variables such as job satisfaction and job involvement (Meyer et al., 2002).

Taking a closer look at the relationship between organizational commitment and organizational citizenship behavior, numerous studies reveal that organizational commitment is a key antecedent of organizational citizenship behavior (Allen & Rush, 1998). Originally, organizational citizenship behavior was defined as "behavior above and beyond role requirements that is organizationally functional" (Graham, 1991, p. 249). According to Allen and Rush (1998), it is essential for organizations to have employees that go above and beyond their normal job requirements in order to enhance organizational performance. In other words, it is essential for organizations that employees engage in extra-role behavior such as organizational citizenship behavior. Adding organizational commitment to these line of thoughts, employees with a higher level of organizational commitment are more eager to help the organization by means of their time and skills (Angle & Perry, 1981) and thus are more likely to express organizational citizenship behavior. There is empirical evidence which suggests that organizational commitment is positively related to organizational citizenship behavior (e.g. Van Dyne & Ang, 1998). Furthermore, many researchers found that affective organizational commitment is positively related to organizational citizenship behavior (e.g. Organ & Ryan, 1995; LePine, Erez, & Johnson, 2002; Meyer et al., 2002). A theoretical explanation for this relationship was found in the social exchange theory (Blau, 1964) and the inducements-contributions model (March & Simon, 1958). Based on the social exchange theory, employees who feel valued and respected by others are likely to give trust and emotional engagement in return (Ng & Feldman, 2011). Based on the inducements-contributions model, organizations offer employees motives to join or stay with the organization, while the employees contribute to the organizational performance by means of high levels of job performance (Ng & Feldman, 2011). Combining the theory and the model, employees with a higher level of affective organizational commitment will be more likely to give back to the organization by means of expressing organizational citizenship behavior (Ng & Feldman, 2011).

Innovative behavior is another type of behavior, which is considered to be essential for organizations in order to enhance organizational performance (Jafri, 2010). Innovative behavior can be defined as "an individual's ability within a role, a group or an entire organization to generate, promote and realize new ideas or solutions" (Spanuth & Wald, 2017, p. 1303). However, innovative behavior is often seen as a risky process, so innovative behavior is often only expressed by employees who feel organizationally committed (Xerri & Brunetto, 2013). Despite this relationship between organizational commitment and innovative behavior, there is only little empirical evidence

which tested this relationship (Jafri, 2010). Jafri (2010) found a positive relation between affective organizational commitment and innovative behavior of employees in the retail sector. Xerri and Brunetto (2013) found that affective organizational commitment is positively and significantly related to the innovative behavior of nursing employees. Thompson and Heron (2006) discovered that knowledge sharing fully mediated the relationship between affective organizational commitment and innovative behavior. In other words, the level of affective organizational commitment of an employee can influence the tendency of employees' knowledge sharing and innovative behavior (Xerri & Brunetto, 2013). Hakimian, Farid, Ismail and Nair (2016) found results that affective organizational commitment is significantly related to innovative behavior.

Besides the little empirical evidence, there is also little theoretical development on the relationship between organizational commitment and innovative behavior. Using the social exchange theory as a theoretical explanation, Xeri and Brunetto (2013) argue that when nurses experience effective workplace relationships, and thus support, then they will give back that same support to the organization. Supporting the organization can also be seen as being highly committed to the organization. As a consequence, it is probable that nurses who are highly committed to the organization will have a greater tendency to express innovative behavior. In fact, this explanation only explains the relationship between organizational commitment and innovative behavior as an indirect consequence, but it does not explain the relationship between organization emphasizes the theoretical relevance of my thesis. By focusing on the social identity theory (Tajfel & Turner, 1979) as a possible theoretical explanation, this thesis aims to contribute to the theoretical development of the relationship between organizational commitment and innovative behavior.

To recapitulate, numerous studies have proven that organizational commitment has a positive effect on organizational citizenship behavior, which can be theoretically explained by the social exchange theory. Yet only a few studies have proven that organizational commitment has a positive effect on innovative behavior. Above that, there is limited theoretical development to explain this positive effect of organizational commitment on innovative behavior. Despite the limited number of studies proving the positive relationship between organizational commitment and innovative behavior, there is literature saying that innovative behavior is essential for organizational performance. Based on the importance of this relationship, it is theoretically and practically relevant to further investigate the theoretical development and empirical testing of the relationship between organizational commitment and innovative behavior.

1.2 Problem Statement

As mentioned above, the problem within this research consists of the theoretical underdevelopment of the relationship between affective organizational commitment and innovative behavior. Therefore, the main objective of this thesis is to add and contribute to the theoretical development of the relationship between affective organizational commitment and innovative behavior. Furthermore, the literature provides a theoretical explanation and empirical evidence for the relationship between affective organizational commitment and organizational citizenship behavior. In order to investigate the theoretical explanation for both relationships, this research conducts an empirical test in which the social exchange theory functions as an theoretical explanation for the relationship between affective organizational commitment and organizational citizenship behavior and in which the social identity theory functions as an theoretical explanation for the relationship between affective organizational commitment and organizational citizenship behavior

The central research question can be formulated as follows:

Does affective organizational commitment affect work behaviors such as organizational citizenship behavior and innovative behavior through a social exchange or a social identity mechanism?

In order to answer the central research question, two sub questions have been formulated as follows:

- a. Does affective organizational commitment affect organizational citizenship behavior through a social exchange mechanism?
- b. Does affective organizational commitment affect innovative behavior through a social identity mechanism?

1.3 Theoretical and Practical Relevance

This research, including the research question and the sub questions as mentioned above, is relevant for several reasons. First, by examining the relationship between affective organizational commitment and innovative behavior, a contribution can be made to the theoretical development of the relationship. Yet there is only limited theoretical development on the relationship between affective organizational commitment and innovative behavior, even when the relationship is proven to be so important for organizational performance (the most important goal for all organizations). Therefore, it is important that this relationship will be further theoretically developed and also empirically tested. More theoretical and practical knowledge on the relationship between affective organizational commitment and innovative behavior is also practically relevant for organizations, because the organizations can use the knowledge and understanding to optimize the relationship in such a way that it enhances organizational performance. Second, by examining the relationship between affective organizational commitment and organizational citizenship behavior, this research makes it possible to verify the previous findings as described in the literature. In other words, this research makes it possible to control whether the results in this research will correspond with the results found in earlier research. Third, the results of this study provide empirical evidence that may provide insight into the mechanisms through which affective organizational commitment affects different types of work behavior. Insight into these mechanisms may serve as a basis for more effective management of workplace commitment and behaviors in a variety of workplaces.

1.4 Structure Thesis

The aim of this chapter was to give a short introduction on the concepts of organizational commitment, organizational citizenship behavior and innovative behavior. Furthermore, this introduction was used to provide insight and explain the aim of this research. In chapter 2, the theoretical background of the concepts mentioned in the research question (affective organizational commitment, organizational citizenship behavior and innovative behavior) will be given. In chapter 3, the methodology used in this research will be discussed. Chapter 4 will reveal the results of the analysis. Finally, conclusions, limitations and recommendations will be discussed in chapter 5.

Chapter 2 - Theoretical Background

2.1 Introduction

This chapter will, first, define the key concepts of the research question. The key concepts are affective commitment, organizational citizenship behavior and innovative behavior. Second, the relationships between these key concepts will be clarified. Third, based on the theoretical findings hypotheses will be formulated. At the end of this chapter, these hypotheses will be captured in a conceptual model.

2.2 Affective Commitment

The first important key concept of the research question is affective commitment. A more overarching term is organizational commitment. Over the years organizational commitment has been conceptualized and measured in many different ways (Allen & Meyer, 1990). When looking at early commitment research, Becker (1960) noted that sociologists used the concept of commitment for a wide variety of phenomena, but the construct itself was rarely defined nor integrated in the sociological theories. However, during the second half of the 20th century many different researchers defined the concept of commitment (Klein & Park, 2016). Basically, these researchers can be divided into two different streams: one which defines commitment as a unidimensional concept (e.g. Becker, 1960; Kiesler, 1971; Mowday, Steers, & Porter, 1979; Klein, Molley, & Brinsfield, 2012) and the other which defines commitment as a multidimensional concept (e.g. Kanter, 1968; Etzioni, 1975; Penley & Gould, 1988; O'Reilly, Chatman, & Caldwell, 1991; Allen & Meyer, 1990). The majority of the researchers within the field of commitment seem to support the stream which defines commitment as a multidimensional concept (Meyer et al., 2002). So from this point forward, the focus will be on commitment as a multidimensional concept.

In most commitment literature, multidimensionality means that commitment can be separated in "several psychological bases" (Allen, 2016, p. 30). By far the most well-known and accepted multidimensional model is the three-component model developed by Allen and Meyer (1990) and Meyer and Allen (1991; 1997). The three-component model identifies "three distinctable components, also often called dimensions or bases, of commitment, which are each characterized by a different mindset" (Allen, 2016, p. 31). The first dimension in the model is the dimension of affective commitment. According to Allen (2016, p. 31-32) "affective commitment refers to the employee's emotional attachment to the organization". Employees with a high level of affective commitment stay with the organization, because they *want* to (Allen, 2016). The second dimension

in the model is continuance commitment. "Continuance commitment reflects the extent to which employees perceive that leaving the organization would be costly" (Allen, 2016, p. 32). Employees with a high level of continuance commitment tend to stay with the organization, because they feel they *have* to (Allen, 2016). The third and final dimension in the model is normative commitment. "Normative commitment refers to the employee's feelings of obligation to the organization and the belief that staying is the right thing to do" (Allen, 2016, p. 32). Employees with a high level of normative commitment stay with the organization because they feel they *ought* to (Allen, 2016).

Research on this three-component model as a whole and dimensions of the threecomponent model individually has showed that affective commitment has a larger impact on for example turnover, performance, job satisfaction and organizational citizenship behavior (Cooper-Hakim & Viswesvaran, 2005; Mathieu & Zajac, 1990; Meyer et al., 2002; Riketta, 2005; Becker, 2009). Therefore, it can be said that the affective component seems to matter most in relation to performance outcomes (Mercurio, 2015). From this point forward, this thesis will only focus on the component of affective commitment.

Despite the possibility of seeing commitment as a unidimensional or multidimensional construct, both streams support the idea that commitment can be directed towards different targets or foci (Becker, 2016). The majority of theory and research focused on the organization as a target of commitment (Becker, 2016). Nevertheless, there are also many other targets of commitment like for example professions (e.g. Blau & Lunz, 1998; Wallace, 1995), supervisors (e.g. Becker & Billings, 1993), work teams (e.g. Becker, 2009), top management (e.g. Becker, 2009), customers (e.g. Becker, 2009) and unions (e.g. Gordon, Philpot, Burt, Thompson, & Spiller, 1980). Since, the organization as a target is most commonly used, this thesis will only focus on the affective commitment to the organization. Affective commitment to the organization can also be referred to as affective organizational commitment. Meyer and Allen (1991, p. 67) define affective organizational commitment as "the employees' emotional attachment to, involvement in and identification with the organization".

2.3 Organizational Citizenship Behavior

The second key concept in the research question is organizational citizenship behavior (OCB). Just like organizational commitment, organizational citizenship behavior is a concept which knows many different definitions. In early work on organizational citizenship behavior (e.g. Bateman & Organ, 1983; Smith, Organ, & Near, 1983), the concept was defined as "behavior above and beyond role requirements that is organizationally functional" (Graham, 1991, p. 249). A more recent definition of organizational citizenship behavior, defines organizational citizenship behavior as behavior which "contributes to the maintenance and enhancement of the social and psychological context that supports task performance" (Organ, 1997, p. 91). However, Podsakoff, MacKenzie, Paine and Bachrach (2000) point out the problem that the literature has put an emphasis on the understanding of the relationship between organizational citizenship behavior and other concepts, rather than focusing on a definition of organizational citizenship behavior itself.

Up to the new OCB definition (Organ, 1997), researchers always shared the idea that organizational citizenship behavior measured extra-role (or discretionary) behavior (Vey & Campbell, 2004). However, with the new OCB definition, Organ (1997) expressed his criticism that OCB actually measures in-role (or required) behaviors. This criticism was based on the work from Morrison (1994). Morrison (1994) reasoned that the boundary between in-role and extra-role behavior is not always the same for all employees, since every employee defines their job requirements differently. Furthermore, Morrison (1994) also argued that an employee is more likely to perform a job requirement when he/she sees it as an in-role task rather than when he/she sees it as an extra-role task, because in-role behavior is more likely to be extrinsically rewarded.

Consequently, the new OCB definition has led to a problem. According to Motowidlo (2000) not all researchers who perform research on organizational citizenship behavior have taken knowledge of the redefinition of organizational citizenship behavior. Above that, Motowidlo (2000) implies that there are now two separate definitions of organizational citizenship behavior, namely one who sees organizational citizenship behavior as extra-role behavior and one who sees organizational citizenship behavior as in-role behavior. Looking at the literature, there is empirical evidence which shows that there are still researchers who define organizational citizenship behavior as extra-role or discretionary behavior (e.g. Lambert, 2000; Donaldson, Ensher, & Grant-Vallone, 2000). In this thesis, organizational citizenship behavior will be viewed as extra-role behavior, since the exclusion of the extra-role feature would reduce the strength of the theoretical explanation of the concept (Vey & Campbell, 2004). The theoretical explanation of the concept will be discussed in section 2.6 of this chapter.

2.4 Innovative Behavior

The third and final key concept of the research question is innovative behavior (IB). In the past, the terms creativity and innovation were often used interchangeably, but over time researchers came to an agreement about their definitions (Scott & Bruce, 1994). Creativity focuses on the creation of new and useful ideas (Mumford & Gustafson, 1988), while innovation can be defined as the creation or

adoption of useful ideas including idea implementation (Kanter 1988/1996; Van de Ven, 1986). For the term innovative behavior, a similar definition was used. Innovative behavior can be described as "an individual's ability within a role, a group or an entire organization to generate, promote and realize new ideas, products or the like" (West & Farr, 1990; Janssen, 2000; De Jong & Den Hartog, 2010) (Spanuth & Wald, 2017, p. 1303). Many researchers identify innovative behavior as extra-role behavior, since it exceeds the normal job expectations (Van Dyne, Graham, & Dienesch, 1994; Van Dyne & LePine, 1998; Welbourne, Johnson, & Erez, 1998; Janssen, 2000; Dorenbosch, Van Engen, & Verhagen, 2005).

2.5 Commitment and Behavior in general

In general, commitment is conceptualized as "a stabilizing or obliging force that gives direction to behavior" (Meyer & Herscovitch, 2001, p. 301). In the literature, there seems to be agreement that this force needs to be seen as a mindset (Meyer & Herscovitch, 2001). "A mindset refers to a frame of mind or psychological state that forces an individual towards a course of action" (Meyer & Herscovitch, 2001, p. 303). However, there seems to be discussion about the nature of this mindset. With the nature of the mindset, there is being referred to the different dimensions of commitment. Just to point out, the basis of this thesis still is the three-component model (Allen & Meyer, 1990; Meyer & Allen, 1991 and 1997), so in this case only the affective, continuance and normative mindsets will be taking into account. Hence, the type of commitment mindset decides what type of behavior an individual will show. In other words, the type of commitment mindset will give "direction to the behavior" (Meyer & Herscovith, 2001, p. 301).

The consequences of each mindset can be illustrated by the following explanation given by Stanley and Meyer (2016). Continuance commitment is the most narrow type of mindset, which focuses on the costs associated with leaving the organization. Employees that only have continuance commitment, are likely to stay at the organization and do just enough work to maintain their job. Employees with normative commitment stay with the organization to make sure they are doing the right thing (Meyer & Allen, 1997). Doing the right thing implies that the employee is making a bigger effort, than when doing just enough. Finally, affective commitment is a desire-based mindset that can be characterized by identification with and attachment to the organization. Employees with strong affective commitment are likely to perceive the terms of their commitment to the organization very broadly (Stanley & Meyer, 2016). In other words, due to their commitment employees will go beyond their normal job behavior. In turn, this extra-role behavior is likely to result in better performance (Chang & Chen, 2011). Several researchers have written a meta-analysis, which proves the expectation that commitment will influence behavior, which in turn will influence performance (Riketta, 2002; Meyer et al., 2002; Cooper-Hakim & Viswesvaran, 2005). Based on these analyses, it can be said that affective commitment shows a greater influence than the other two components of commitment (Mercurio, 2015).

2.6 Affective Organizational Commitment and Organizational Citizenship Behavior

In the literature, organizational commitment is considered as a key antecedent of organizational citizenship behavior (e.g. Allen & Rush, 1998). Evidence in empirical studies suggests that organizational commitment positively affects organizational citizenship behavior (Wiener, 1982; Pearce, 1993; Van Dyne & Ang, 1998). Furthermore, the positive effect of affective commitment on organizational citizenship behavior has received most support (Moorman, Niehoff, & Organ, 1993; Shore & Wayne, 1993; Organ & Ryan, 1995). A more recent research that proves the positive relationship between affective organizational commitment and organizational citizenship behavior is the research from Kazemipour, Amin and Pourseidi (2012).

Numerous studies have revealed a positive relationship between organizational commitment and organizational citizenship behavior, yet only a limited number of these studies provide a theoretical explanation for this relationship. When an empirical research does give a theoretical explanation, it mostly evolves around the social exchange theory (Blau, 1964).

The social exchange theory was originally developed by Blau (1964). Blau (1964) stated that individuals often receive certain benefits from social relations, since most people are willing to help others. People deliberately go through some trouble to help others, in order to provide the benefits. In turn, the person receiving the help, or the favor, is grateful and is likely to return a favor when needed. Blau (1964, p. 16) calls this the "reciprocation of favors". Going back and forth in this reciprocation of favors, the social bond between individuals is strengthened (Blau, 1964). Furthermore, the value of the exchanged favors determines the strength of this social bond (Blau, 1964; Gouldner, 1960). In other words, "the value of the exchanged favors determines the strength and sustainability of the commitment to the relationship" (Lau, McLean, Lien, & Hsu, 2016, p. 571). When the exchanged favors are high in value, then the commitment to the relationship will also be high. Based on this explanation, the general presumption can be made that the value of the exchanged favors, will influence the level of commitment towards other employees, supervisors and the organization. The social exchange theory (Blau, 1964) can be adopted to the relationship between affective organizational commitment and organizational citizenship behavior. When employees working at an organization receive highly valued favors of (other people like employees or supervisors inside) the organization, the employees will be likely to feel committed towards the organization. When this commitment is affective commitment, the employees will feel "an emotional attachment towards the organization" (Allen, 2016, p. 31-32). This would mean that the high valued favors make the employees feel they belong or feel part of the family at the organization. Due to the affective commitment, employees who are performing their jobs are more willing to do something beyond their normal job requirements in return. This behavior, which rises above their normal job requirements, is the organizational citizenship behavior.

Over time, organizational citizenship behavior has been formulated by means of several different taxonomies. For example, Smith et al. (1983) made a distinction between two organizational citizenship behavior dimensions, namely altruism and generalized compliance. Altruism included the behaviors that tries to benefit a particular person (Stanley & Meyer, 2016). Generalized compliance enclosed behaviors related to viewing the norms that define a good employee (Stanley & Meyer, 2016). Another taxonomy is the one from Organ (1988), in which he added sportsmanship, courtesy and civic virtue to the earlier formulated dimensions of altruism and generalized compliance (Stanley & Meyer, 2016). Moreover, there are also researchers that have developed organizational citizenship behavior as a different multidimensional framework. For example, Williams and Anderson (1991), Coleman and Boreman (1991) and Lee and Allen (2002) have developed frameworks in which a distinction is made between OCB-Organization (OCB-O) and OCB-Individual (OCB-I). OCB-O includes behaviors that benefit the organization like for example altruism and courtesy (Stanley & Meyer, 2016). OCB-I includes behaviors that benefit individuals like for example sportsmanship, civic virtue and conscientiousness (Stanley & Meyer, 2016). So, just like commitment, organizational citizenship behavior can be focused on different targets namely the organization and the individual. From this point forward, this thesis will only focus on organizational citizenship behavior towards the organization (OCB-O). When employees express behaviors that benefit the organization, the organization will be likely to give the employees something in return (e.g. extrinsic rewards). Due to this return, the employees will feel valued and will become more committed towards the organization. Employees with a high level of commitment, are more willing to perform tasks beyond their normal job requirements. This makes the employees express extrarole behavior, which in turn benefits the organization again.

When organizational citizenship behavior would be seen as in-role behavior, such as Organ (1997) suggested, the social exchange theory would not fit properly as a theoretical explanation for

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the relationship between affective organizational commitment and organizational citizenship behavior (Vey & Campbell, 2004). In short, the social exchange theory evolves around the idea that an employee will get a favor and is willing to give something in return. If the favor will be seen as inrole behavior, the employees who receive the favor will give it a lower value, since it is a favor an employee would normally get. As a result of the lower value of the favor, the employees are less committed. When employees are less committed, the employees do not feel they belong or see themselves as part of the family at the organization. Due to the lower value and the lower level of commitment, the employees will feel less need to return the favor. When employees return less favors, the social bond between employees becomes less strong. This might even influence the fulfillment of the normal job requirements. In the end, the employees are not fulfilling their normal job requirements and are not showing behavior, which can be seen as organizational citizenship behavior. Based on this argumentation, seeing organizational citizenship behavior as in-role behavior, does not fit to the social exchange theory as a theoretical explanation for the relationship between affective organizational commitment and organizational citizenship behavior.

Based on the above, this research will expect that affective organizational commitment will have a positive effect on organizational citizenship behavior towards the organization (OCB-O).

Hypothesis 1: Affective organizational commitment will be positively related to organizational citizenship behavior towards the organization (OCB-O).

2.7 Affective Organizational Commitment and Innovative Behavior

In the literature some empirical evidence has been provided that organizational commitment has a positive effect on innovative behavior (Zhou & George, 2001; Camelo-Ordaz, García-Cruz, Sousa-Ginel, & Valle-Cabrera, 2011; Hou, Gao, Wang, Li, & Yu, 2011; Jafri, 2010; Xerri & Brunetto, 2013; Hakimian et al., 2016; Gu, Duverger, & Yu, 2017). Furthermore, a research from Spanuth and Wald (2017) investigated the effect of temporary organizational commitment on innovative behavior.

Xerri and Brunetto (2013) have tried to give a theoretical explanation for the relationship between affective organizational commitment and innovative behavior based on the social exchange theory (Blau, 1964). They argue that when employees and supervisors establish good workplace relationships, an exchange relationship will evolve that will benefit both the individuals and the organization. Moreover, they argue that under ideal conditions, the good workplace relationships will make the nurses feel supported, which makes them give back to the organization by means of affective commitment, organizational citizenship behavior and innovative behavior.

Section 2.6 elaborated on the proper fit of the social exchange theory as a theoretical explanation for the relationship between affective organizational commitment and organizational citizenship behavior. Furthermore, section 2.6 also discussed that the reason for the proper fit of the social exchange theory, can be explained by the nature of the construct of organizational citizenship behavior itself. Organizational citizenship behavior can be seen as extra-role or discretionary behavior (Smith et al., 1983; LePine et al., 2002). Looking at the nature of innovative behavior, this research identifies innovative behavior as extra-role behavior. Does this mean that the social exchange theory is also a well-fitting theoretical explanation for the relationship between affective organizational commitment and innovative behavior? In my opinion, the social exchange theory does not fit as a theoretical explanation for the relationship between affective organizational commitment and innovative behavior. When employees receive and give back favors, this strengthens the social bond and thus the commitment. Due to this commitment, employees will be more willing to go beyond their normal job requirements and will thus express extra-role behavior. However, expressing this extra-role behavior does not necessarily mean that this behavior can be qualified as innovative. It might be possible that this extra-role behavior is innovative, but it is not evident that extra-role behavior is automatically innovative. In order for behavior to be innovative, it needs to be behavior which generates, promotes and realizes new ideas, products or the like (West & Farr, 1990). Actually, innovative behavior is a more specific type of behavior than organizational citizenship behavior. Basically, organizational citizenship behavior could be any kind of behavior as long as it exceeds the normal job requirements and is organizationally functional. Hence, the nature of innovative behavior explains why the social exchange theory does not fit as a theoretical explanation for the relationship between affective organizational commitment and innovative behavior.

An alternative and potentially better fitting mechanism through which affective organizational commitment affects innovative behavior can be based on the social identity theory (Tajfel & Turner, 1979). The social identity theory suggests that a person's identity is partially formed by the groups to which the individual belongs. When a person identifies himself with a group, that is called the "in-group" (e.g. Tajfel & Turner, 1979, p. 33). Groups that a person does not identify with, but are comparable to the group that the person does identify itself with, is called the "out-group" (e.g. Tajfel & Turner, 1979, p. 36). According to Tajfel and Turner (1979), the essential element for group membership, it that both the individual and the other members of the group see someone as a member of the group. A group can be conceptualized as "a collection of individuals who perceive themselves to be members of the same social category, share some emotional involvement in this common definition of themselves, and achieve some degree of social consensus about the evaluation of their group and of their membership" (Tajfel & Turner, 1979, p. 40). The process of becoming a

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member of such a group starts off with social categorization. This means that an individual puts people in categories in order to understand and identify them. The categories help the individual to choose in which categories he/she belongs. By making categories, an individual can find his/her own place in society. When the individual knows in which categories he/she belongs, the individual will start identifying with those groups (social identification). Finally, when the individual categorized and identified himself/herself with a certain group, the individual will start comparing his/her group to the other group (social comparison) (Tajfel & Turner, 1979). Members of the in-group will compare the in-group favorable against the out-group (Tajfel , 1982).

If we apply the social identity theory (Tajfel & Turner, 1979) to the relationship between affective organizational commitment and innovative behavior, the argumentation could be as follows. If an employee feels affectively committed towards the organization, then employees feel emotionally attached to the organization. Being emotionally attached could be seen as categorizing and identifying themselves with the organization. The employee namely feels he/she belongs at the organization or he/she feels part of the family within the organization. Actually, the employee has identified himself/herself as being "in" the organization-group. When the employee identifies himself/herself with the organization, the employee will show behavior that is in line with what the organization expects. Then it might be likely that the highly committed employee will not express innovative behavior. Here, the marginal note needs to made that the employee will not express innovative behavior under every circumstance. More about this will be discussed in section 2.8.

The social identity theory and the social exchange theory are two important perspectives, which have been previously used by many researchers to investigate the psychological relationship between individuals and the organization (Van Knippenberg, Van Dick, & Tavares, 2007). By far, most researchers focused either on the social identity theory or the social exchange theory (Van Knippenberg et al., 2007). However, there is also several studies which reveal the possibility of using more than one theory or perspective to support their research (e.g. Van Knippenberg et al., 2007; Stets & Burke, 2000).

Based on the above, this research will expect that affective organizational commitment will have a positive effect on innovative behavior.

Hypothesis 2: Affective organizational commitment will be positively related to innovative behavior.

2.8 Training and Innovative Organizational Climate as Moderators

As previously discussed in section 2.6, the relationship between affective organizational commitment and organizational citizenship behavior is based on the social exchange theory. Based on this social exchange theory, the exchange of relationships makes employees feel committed, which in turn make them express extra-role behavior such as organizational citizenship behavior.

Building on this theoretical explanation, when an organization gives an employee the opportunity to follow extensive training, the employee could value this as an important favor. The employee could see this extensive training as the willingness of the organization to spend money on the employee in order for the employee to develop his/her skills and knowledge. It is likely that due to this extensive training, the employee would feel more highly committed towards the relationship and thus to the organization. The increase in commitment is likely to influence the behavior of the employee; the employee is expected to do even more than he/she did before. In the end, this will have a positive influence on the extra-role behavior such as organizational citizenship behavior.

Based on the above, this research will expect that extensive training positively moderates the effect of affective organizational commitment on organizational citizenship behavior towards the organization.

Hypothesis 3: Extensive training positively moderates the effect between affective organizational commitment and organizational citizenship behavior towards the organization (OCB-O) such that the effect of affective organizational commitment on organizational citizenship behavior towards the organization (OCB-O) will be stronger when employees experience high levels of extensive training.

As previously discussed in section 2.7, the relationship between affective organizational commitment and innovative behavior is based on the social identity theory. Based on the social identity theory, employees who identify themselves with the organization, will feel affectively committed and will show behavior that the organization expects them to express. For this explanation, the marginal note was made that the employee will not express innovative behavior under every circumstance.

In my opinion, what needs to be added to the theoretical explanation is the presence of the element of innovation. When an organization focuses on being a very innovative organization, the employee who identifies himself/herself with the organization is also likely to identify himself/herself with innovation and is thus likely to perform innovative behavior. The presence of an innovative organizational climate will make the employees more likely to express innovative behavior.

Based on the above, this research will expect that innovative organizational climate positively moderates the effect of affective organizational commitment on innovative behavior.

Hypothesis 4: Innovative organizational climate positively moderates the effect between affective organizational commitment and innovative behavior such that the effect of affective organizational commitment on innovative behavior will be stronger when employees identify themselves with a more innovative organizational climate.

2.9 Conceptual Model

Based on the hypothesis formulated above, the following conceptual model can be drawn.



Figure 1. The conceptual model

Chapter 3 - Methodology

3.1 Introduction

In chapter two literature and theories have been outlined in order to formulate hypotheses. This can be seen as deductive reasoning. Deductive reasoning is the process in which known theories are used to test the expected outcomes in different contexts and situations. By testing in these different contexts, researchers are able to check whether the theories can be applied in those contexts. The outcomes will eventually help the researchers to refine and reconsider the established theories. In short, deductive reasoning goes from theory to practice (Anderson, 2009).

In order to test certain hypotheses, an empirical research must be conducted. In this chapter the methodology section of this thesis will be outlined. First, the design and the strategy of this research will be discussed. Furthermore, the data collection method, the research ethics and the operationalization of the variables will be discussed.

3.2 Research Design and Research Strategy

The research design can be defined as the framework that will help to answer the research question. One of the main components of the research design is the research strategy. The research strategy involves the chosen approach (Anderson, 2009). In science researchers often make a choice between a qualitative or a quantitative research approach. Qualitative research focuses on exploring data in order to get a deeper understanding of objects and its context. Quantitative research focuses on numeric data that can be used to test hypotheses that describe the relationships between variables (Sanders, Cogin, & Bainbridge, 2013).

This thesis will focus on quantitative data from the Global HRM project. The Global HRM project is a research conducted by an international team of researchers. More specifically, the international team of researchers conducted a cross-sectional survey research. Cross-sectional research means collecting data from people at the same point in time (Anderson, 2009). Just as any other type of research, cross-sectional research does have its advantages and disadvantages. For example, several advantages are that it is relatively cheap to organize, produces a large volume of information and the research can be repeated again in a different location or at a different time (Anderson, 2009). Several disadvantages are that depth is given up for width, there is lack of control who is filling in the questionnaire and there is insecurity whether respondents interpreted the questions the same way (Anderson, 2009). Another disadvantage is that cross-sectional research puts variables and the related variables in a static model (Ployhart & Vandenberg, 2010). Since attitudes

and behavior can change over time, it is a regretful that the researchers have chosen to conduct a research at one single point in time. In order to get a better picture of the attitudes and the behaviors over time, it would perhaps be better to use a longitudinal design. A longitudinal research conducts multiple observations over a certain period of time. By conducting a longitudinal research, variables and the related variables are viewed as a dynamic model, which makes it possible to see a gradual change over time (Ployhart & Vandenberg, 2010). The minimum number of measures should be three, so when conducting longitudinal research the same measure should be measured at least three times (Ployhart & Vandenberg, 2010). More than three measures would be even better (Chan, 1998). However, a disadvantage of conducting longitudinal research is that when you measure a certain measure several times, it might be possible that another variable, besides the ones that are being measured, changes. This change in another variable could influence the final outcomes. Another research design which could prevent this problem from occurring is the experimental design. The experimental design is a type of design which is often used in psychological and social science research (Saunders, Lewis, & Thornhill, 2016). The idea behind an experimental design is to study the effect of a change in an independent variable on an dependent variable (Saunders et al., 2016). Within a classical experiment, participants are randomly divided into an experimental group or a control group (Saunders et al., 2016). In the experimental group, some form of change will be admitted to the independent variable, while this form of change is not admitted to the control group. Then both groups are measured on the same dependent variable in order to see whether the controlled change in the experimental group leads to different outcomes (Saunders et al., 2016). The difficulty with this type of research design is that an experiment is hard to conduct in a real-life organization. When employees are working in a real-life organization, there is possibility that the employees might be influenced by something else besides the controlled change of the experiment.

Besides the point on the cross-sectional research design, it also needs to be taken into account that the responses in the dataset are items scored by self-report. Self-reporting measures have several advantages namely that it is a cheap way of doing research, it can be used for a large sample, there is no interviewer bias and the response rate for delicate subjects will be higher due to the anonymity (Fan, Miller, Park, Winward, Christensen, Grotevant, & Tai, 2006). An important disadvantage of self-reporting measures is that the response validity might be in danger, since the researcher cannot be sure whether the respondents understand all the questions correctly. This may lead to inaccurate responses (Fan et al., 2016).

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Since the data from the Global HRM project is exclusively quantitative data, it is obvious that the research will focus on the quantitative approach. At first sight, it may look like this thesis had no choice in the research approach, but in fact it was a deliberate choice to use the ability of gaining access to the data of the Global HRM project and doing a quantitative research. Quantitative research namely has several evident advantages. First, quantitative research is par excellence useful to produce factual and reliable outcomes that can often be used to generalize the outcomes to a larger population (Steckler, McLeroy, Goodman, Bird, & McCormick, 1992). Furthermore, in quantitative research researchers do not interfere in the research environment (e.g. people, context), which means that researchers incline to measure objectively. Also the use of technology helps to contribute to the objectivity of the research (Steckler et al., 1992).

3.3 Data Collection Method

As mentioned above, an international team of researchers conducted a cross-sectional research between January 2013 and June 2014. In this research, the data was collected by means of a survey. Together the researchers made a joint survey, which was translated into several different languages. The researchers collected data from 100 employees and 10 supervisors from each organization in their home countries. The conducted sampling technique depended on the size of the organization. For larger organizations, researchers used a stratified sampling technique. In the case of smaller organizations, researchers approached all the employees of the organization. In order to collect the responses, an online survey tool was used, which surveyed voluntary employees and supervisors independently.

The data set used for this study contains responses from 2839 employees (88.1%) and 383 supervisors (11.9%) in 57 organizations in 11 countries (see Appendix 1). The data set included organizations from different sizes and different sectors like for example manufacturing (14.4%), financial and business services (26.0%) and education (14.7%) etc. There were 982 respondents who did not fill in the sector of the organization, which is 30.5% of the total (see Appendix 1). The 11 countries in the data set included Oman (3.3%), UK (3.1%), Denmark (8.2%), China (5.5%), Tanzania (3.4%), Nigeria (10.3%), Malaysia (3.2%), Indonesia (3.5%), Portugal (44.3%), Norway (5.1%) and Spain (10.0%) (see Appendix 1).

3.4 Research Ethics

Since the research is already been conducted by a team of international researchers, this thesis can only take into account the research ethics regarding the use of the collected data. Gaining access to use the data from the Global HRM project, emphasizes the importance of research integrity. Being able to use the data from the Global HRM project feels special, since other researchers trust you with their data. Therefore, it is important to handle this data with care and respect. Handling the data with care and respect is both a commitment towards the researchers as well as the respondents.

3.5 Measurements

3.5.1 Affective Organizational Commitment

In order to measure affective organizational commitment, Allen and Meyer (1990) have developed an Affective Commitment Scale. Allen and Meyer (1990) argued that if the three different components of commitment reflected different psychological states, then it should be possible to develop independent measures for these distinct states. Furthermore, Allen and Meyer (1990) also checked whether the measures of a certain component would not correlate with the measures of the other components. Figure 2 shows the measures (items) for affective commitment.

Affective Commitment Scale items

- 1. I would be very happy to spend the rest of my career with this organization
- 2. I enjoy discussing my organization with people outside it
- 3. I really feel as if this organization's problems are my own
- 4. I think that I could easily become as attached to another organization as I am to this one (R)
- 5. I do not feel like 'part of the family' at my organization (R)
- 6. I do not feel 'emotionally attached' to this organization (R)
- This organization has a great deal of personal meaning for me
- 8. I do not feel a strong sense of belonging to my organization (R)

Figure 2. Adapted from "The measurement and antecedents of affective, continuance and normative commitment to the organization.", by Allen, N. J., & Meyer, J. P. (1990). Journal of Occupational Psychology, 63, p. 6.

In the data set of the Global HRM project affective organizational commitment was measured by 4 items from the Affective Commitment Scale, namely "I do not feel a strong sense of

belonging to my organization", "I do not feel emotionally attached to my organization", "I do not feel like part of the family at my organization" and "This organization has a great deal of personal meaning for me". These survey items were measured using a six-point Likert scale, in which 1 = strongly disagree and 6 = strongly agree. The first three items are formulated negatively and the fourth item is formulated positively. To solve this difference, the first three items were recoded so that all four items have outcomes in the same (positive) direction.

3.5.2 Organizational Citizenship Behavior

Organizational citizenship behavior was measured using the measure developed by Lee and Allen (2002). In their measure, Lee and Allen (2002) made a distinction between OCB directed to the organization (OCB-O) and OCB directed to individuals (OCB-I). Lee and Allen (2002) selected items for each type of organizational citizenship behavior by using previous OCB scales. The items for respectively OCB-O and OCB-I are displayed in Figure 3.

OCBI Items

- 1. Help others who have been absent.
- Willingly give your time to help others who have work-related problems.
- Adjust your work schedule to accommodate other employees' requests for time off.
- Go out of the way to make newer employees feel welcome in the work group.
- Show genuine concern and courtesy toward coworkers, even under the most trying business or personal situations.
- 6. Give up time to help others who have work or nonwork problems.
- 7. Assist others with their duties.
- 8. Share personal property with others to help their work.

Figure 3. Adapted from "Organizational citizenship behavior and workplace deviance: The role of affect and cognitions.", by Lee, K, & Natalie J. A. (2002). Journal of Applied Psychology, 87(1), p. 142.

In the data set of the Global HRM project organizational citizenship behavior was measured by the 8 items, which Lee and Allen (2002) developed as the items for OCB-O. Example items are "I attend functions that I am not required to but that help the organizational image" and "I offer ideas to improve the functioning of the organization". These survey items were measured using a six-point Likert scale, in which 1 = strongly disagree and 6 = strongly agree.

3.5.3 Innovative Behavior

Over the years, several researchers have developed different scales to measure innovative behavior of employees. De Jong and Den Hartog (2010) noticed that many of the available measures of innovative behavior are mostly one-dimensional, while the concept itself is theoretically treated as

OCBO Items

- Attend functions that are not required but that help the organizational image.
- 2. Keep up with developments in the organization.
- 3. Defend the organization when other employees criticize it.
- 4. Show pride when representing the organization in public.
- 5. Offer ideas to improve the functioning of the organization.
- 6. Express loyalty toward the organization.
- 7. Take action to protect the organization from potential problems.
- 8. Demonstrate concern about the image of the organization.

multi-dimensional. Therefore, De Jong and Den Hartog (2010) developed a multi-dimensional measure of innovative behavior.

When taking a closer look at the uni-dimensional measures of innovative behavior, the measure from Scott and Bruce (1994) turns out to be a well-known and important measure in the field (De Jong & Den Hartog, 2010). Scott and Bruce (1994) developed a one-dimensional scale with six items. These six items cover three relevant stages of innovative behavior, namely idea generation, coalition building and idea realization. Figure 4 shows a copy of the six items that were used to measure the innovative behavior.

Innovative Behavior Measure

Instructions to respondents were as follows:

"Innovation is a process involving both the generation and implementation of ideas. As such, it requires a wide variety of specific behaviors on the part of individuals. While some people might be expected to exhibit all the behaviors involved in innovation, others may exhibit only one or a few types of behavior. Please rate each of your subordinates on the extent to which he or she:

- 1. Searches out new technologies, processes, techniques, and/or product ideas.
- 2. Generates creative ideas.
- 3. Promotes and champions ideas to others.
- 4. Investigates and secures funds needed to implement new ideas.
- 5. Develops adequate plans and schedules for the implementation of new ideas.
- 6. Is innovative."

Figure 4. Adapted from "Determinants of innovative behavior: A path model of individual innovation in the workplace." by Scott, S. G., & Bruce, R. A. (1994). Academy of Management Journal, 37(3), p. 606-607.

In the data set of the Global HRM project five out of the six items of the measure of Scott and Bruce (1994) were used to measure innovative behavior. Example items are "I often generate creative ideas" and "I am an innovative person". These survey items were measured using a six-point Likert scale, in which 1 = strongly disagree and 6 = strongly agree.

Despite the fact that this thesis uses existing measurement scales, an exploratory factor analysis (principal component factor analysis) was run in order to make sure that the items for affective organizational commitment, organizational citizenship behavior (OCB-O) and innovative behavior will be clustered into three component/factors. One of the reasons to run the factor analysis is that most data from the Global HRM project is based on items scored by self-report. This could mean that respondents did not understand the questions in the survey correctly or that respondents did not really know what was meant with concepts like affective organizational commitment, organizational citizenship behavior. Especially, since organizational citizenship behavior

and innovative behavior both concern extra-role behavior, it is important to check whether the respondents of the Global HRM project recognized organizational citizenship behavior and innovative behavior as two separate types of behavior (see Appendix 2). The output of SPSS showed that the factor analysis is applicable, since the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) is .919 and the Bartlett's Test of Sphericity is highly significant (p < .001). The value of KMO needs to be higher than .50 (Field, 2009). Having a KMO value above .90 is superb (Field, 2009). Furthermore, all the communalities after extraction are above .20 (Field, 2009). Based on the table with total variance explained and the screeplot, three factors had an eigenvalue higher than 1. Together these three factors can explain 60.454% of the variance. Ideally, the explained variance needs to be 60% or more (Field, 2009). So, an explained variance of 60.454% is just above this limit. Moreover, the rotated component matrix also reveals some interesting outcomes. The rotated component matrix is a matrix which shows the factor loadings for each item of affective organizational commitment, organizational citizenship behavior and innovative behavior onto each factor. Factor loadings lower than .30 will not be displayed, since the option in SPSS has been used to suppress these outcomes. First, the factor loadings of affective organizational commitment reveal that the item "This organization has a great deal of personal meaning for me" does not load on the same factor as the other three items of affective organizational commitment. That item loads on factor 1, while the other three items load on factor 3. Second, the factor loadings of two items belonging to organizational citizenship behavior namely "I attend functions that I am not required to but that help the organizational image" and "I offer ideas to improve the functioning of the organization" show rather low factor loadings on factor 1 (.532 and .479). Besides low factor loadings, there are also four items of organizational citizenship behavior and one item of innovative behavior that show loadings on both factor 1 and factor 2. The item "I offer ideas to improve the functioning of the organization" even shows cross loadings, since the difference between the highest factor loading of the item and the second highest factor loading of the item is smaller than .20 (Field, 2009). Being a cross loader means that the item could be grouped under either one of the factors. For the variable "I offer ideas to improve the functioning of the organization" the factor loading on factor 2 (.584) is even higher than on factor 1 (.479). So it could be questionable whether this item belongs to factor 1. However, since the factor loadings are both not relatively high on either one of the factors and since the items originate from previously developed and numerously tested measures (Lee & Allen, 2002; Scott & Bruce, 1994), the variables will be used as intended. Overall, the output of SPSS confirms that the items can be placed under the three different factors namely affective organizational commitment, organizational citizenship behavior and innovative behavior. The confirmation of three factors contributes to the validity. Validity means measuring what is wanted to be measured (Field, 2009).

Table 1 gives an overview of the results of the factor analysis of organizational citizenship behavior,

innovative behavior and affective organizational commitment.

Table 1								
Results of Factor Analysis of Organizational Citizenship Behavior, Innovative Behavior and Affective								
Organizational Commitment ^a								
Items	1	2	3					
1. Organizational Citizenship Behavior								
e5_17OCB1: I attend functions that I am not required to but that help the	.532							
organizational image								
e5_18OCB2: I keep up with developments in the organization	.625							
e5_19OCB3: I defend the organization when other employees criticize it	.814							
e5_20OCB4: I am proud when representing the organization in public	.773							
e5_21OCB5: I offer ideas to improve the functioning of the organization	.479	.584						
e5_22OCB6: I express loyalty towards the organization	.682	.318						
e5_23OCB7: I take action to protect the organization from potential problems	.654	.389						
e5_24OCB8: I demonstrate concern about the image of the organization	.635	.382						
2. Innovative Behavior								
e5_25INNBEH: I often generate creative ideas		.776						
e5_26INNBEH: I promote and champion ideas to others	.362	.666						
e5_27INNBEH: I investigate and secure funds needed to implement new ideas		.750						
e5_28INNBEH: I develop adequate plans and schedules for the implementation		.806						
of new idea								
e5_29INNBEH: I am an innovative person		.706						
3. Affective Organizational Commitment								
e5_12OC4: This organization has a great deal of personal meaning for me	.631							
OrgCommitment_item1_recoded			.835					
OrgCommitment_item2_recoded			.809					
OrgCommitment_item3_recoded			.833					
Eigenvalue	6.870	2.273	1.134					
Percentage of variance	40.412	13.373	6.669					

^a The extraction method was principal component factoring. The rotation method was Varimax with Kaiser normalization. Rotation converged in five iterations. The cutoff point was .30.

Besides having an indication which items belong to which measure, it is also important to investigate the reliability of the measures. With the help of a reliability analysis, it is possible to check whether several items may be seen as one measure (Field, 2009). First, a reliability analysis was run in SPSS for affective organizational commitment (see Appendix 3). The reliability of the scale was acceptable (Cronbach's α = .757). Ideally the Cronbach's Alpha coefficient of a scale should be above .7 (Field, 2009). According to the SPSS output, the Cronbach's Alpha could be raised to .808 if the item "This organization has a great deal of personal meaning for me" is deleted. Deleting item 4 and raising the Cronbach's Alpha coefficient to .808 actually means that the deletion of the fourth item improves reliability substantially. With a Cronbach's Alpha coefficient of .808 the reliability is good (Field, 2009). Knowing that the item "This organization has a great deal of personal meaning for me" loaded on another factor and deleting the item would raise the Cronbach's Alpha to .808, supports the decision to delete that item. From this point forward, affective organizational commitment will be measured using only 3 out of the 4 items from the data set of the Global HRM project. To be sure, another reliability analysis was run in SPSS (see Appendix 4). This time, the reliability of the scale was .808 (Cronbach's α = .808). Deleting any of the items would only decrease the Cronbach's Alpha coefficient. So, in order to measure affective organizational commitment, the following 3 items will be used: "I do not feel a strong sense of belonging to my organization", "I do not feel emotionally attached to my organization" and "I do not feel like part of the family at my organization". The selection of the items for affective organizational commitment in this research is comparable to the method Gellatly, Meyer and Luchak (2006) used in their research. Second, a reliability analysis was done for organizational citizenship behavior. The reliability of this scale was good (Cronbach's α = .875) (see Appendix 5). Based on the output of SPSS, the Cronbach's Alpha could be raised to .887 if the item "I attend functions that I am not required to but that help the organizational image" is deleted. Since, the Cronbach's Alpha of .875 is already well above the limit of .7 and deleting the item would not substantially affect reliability, the item will not be deleted. Third, a reliability analysis was run in SPSS for innovative behavior. The reliability of this scale was good (Cronbach's α = .853) (see Appendix 6). Based on the output of SPSS, Cronbach's Alpha could not be raised by deleting one of the items of innovative behavior.

3.5.4 Moderating Variables

Based on the theoretical explanation in section 2.8, two moderating variables were added. The first moderating variable is extensive training. Extensive training is one of the dimensions belonging to the High Performance Work Practices (HPWP). The HPWP were measured using five of the eight dimensions and thus using 17 out of the 27 item-scale of Sun, Aryee and Law (2007). For extensive

training four items were used. Example items are "I am given a real opportunity to improve my skills through education and training programs" and "I receive on-going training, which enables me to do my job better". These survey items were measured using a six-point Likert scale, in which 1 = strongly disagree and 6 = strongly agree. The reliability of this scale was good (Cronbach's α = .863) (see Appendix 7). Based on the output of SPSS, Cronbach's Alpha could not be raised by deleting one of the items of extensive training.

The second moderating variable is innovative organizational climate. Organizational climate was measured using the perception of the Organizational Climate Scale by Patterson, West, Shackleton, Dawson, Lawthom, Maitlis, Robinson and Wallace (2005). The original measure has 80 items and 16 scales. From these, there were 16 items used for 4 scales. One of these scales includes innovative organizational climate. The innovative organizational climate scale has 4 items. Example items are "New ideas are readily accepted here" and "People in this organization are always searching for new ways". These survey items were measured using a six-point Likert scale, in which 1 = strongly disagree and 6 = strongly agree. The reliability of this scale was good (Cronbach's α = .866) (see Appendix 8). Based on the output of SPSS, Cronbach's Alpha could not be raised by deleting one of the items of innovative organizational climate. The marginal note needs to be made that employees scored the items of innovative organizational climate by self-report. This could mean that employees see the organization as highly innovative, while in reality the organization is not.

3.5.5 Control Variables

Based on previous research (e.g. Kazemipour et al., 2012; Lau et al., 2016; Scott & Bruce, 1994; Hou et al., 2011) information on employees' age (in years), gender (1 = woman, 2 = man), tenure (in years) and position were used as control variables (see Appendix 9).

The average age of the respondents in the Global HRM project was 35.93 years. From the respondents, 44.6% was female and 55.4% was male. There were 292 respondents who did not fill in their gender, which was 9.1% of the total. Furthermore, the average tenure of the employees was 9.91 years. Finally, the respondents had different job positions. Namely, 5.1% of the respondents was top manager, 19.1% was middle manager, 30% was professional, 16% was administrative, 27.2% was technical and 2.5% was manual. There were 1530 respondents who did not fill in their position, which is 47.5% of the total.

3.6 Descriptive Statistics

Table 2 shows the means, standard deviations and the Pearson correlation coefficients of the studied variables (see Appendix 10). The correlation coefficient reveals the strength of a relationship between two variables (Field, 2009). The value of the correlation coefficient always lies between -1 and +1 (Field, 2009). If the correlation coefficient has a value of +1, this indicates that the two variables are perfectly positively correlated, which means that if one variable increases, the other variable also increases by a comparable amount (Field, 2009). If the correlation coefficient has a value of -1, this indicates that the two variables are perfectly negatively correlated, which means that if one variables increases, the other variable decreased by a comparable amount (Field, 2009). A correlation coefficient of 0 means that there is no relationship between the variables, so if one variable changes, the other variable will not change and will thus remain the same (Field, 2009). As is shown in Table 2, organizational citizenship behavior (r = .25, p < .01), innovative behavior (r = .06, p< .01), extensive training (r = .20, p < .01), innovative organizational climate (r = .14, p < .01) and tenure (r = .05, p < .05) all correlate with affective organizational commitment. Only age is not significant (p > .05), which means that there is not enough evidence that the two variables are related. Furthermore, all correlation coefficients are between .10 and .30, which means the correlations are small (Field, 2009). However, since the data involves a large sample size, also small correlations need to be investigated (Field, 2009).

Table 2									
Means, standard deviations and correlations of the studied variables									
	Mean	SD	1	2	3	4	5	6	7
1. Affective Organizational	4.05	1.20	1						
Commitment									
2. Organizational	4.59	.75	.25**	1					
Citizenship Behavior									
3. Innovative Behavior	4.41	.91	.06**	.68**	1				
4. Extensive Training	4.44	1.09	.20**	.42**	.35**	1			
5. Innovative	4.21	.99	.14**	.48**	.41**	.52**	1		
Organizational Climate									
6. Age	35.93	10.08	.04	01	02	06**	11**	1	
7. Tenure	9.91	47.71	.05*	01	.01	05*	08**	.12**	1

** Correlation is significant at the 0.01 level (1-tailed)

* Correlation is significant at the 0.05 level (1-tailed)

Chapter 4 - Results

4.1 Introduction

In chapter two, a theoretical explanation was used to formulate the expectations by means of hypotheses. In order to test these hypotheses, several statistical analyses were conducted using the Statistical Package for Social Sciences (SPPS version 23 and 25). This chapter will reveal the results of the analyses.

4.2 Testing the Hypotheses

4.2.1 Hypothesis 1

Hypothesis 1 proposes a positive relationship between affective organizational commitment and organizational citizenship behavior towards the organization (OCB-O). In order to test this hypothesis, a multiple regression analysis was run in SPSS with the predictor affective organizational commitment, the controls age, gender, tenure and position and the outcome organizational citizenship behavior (see Appendix 11). In the Model Summary of the SPSS output, the R Square (R^2) of model 1 is .020 and of model 2 it is .046. The R Square reveals how much variance the model predicts (Field, 2009). The R Square Change shows how much the next model (in this case model 2) predicts more variance than the previous model (model 1) (Field, 2009). In this case, model 2 predicts .025 more variance than model 1. Furthermore, the Model Summary also shows that the explained variance of model 1 is significant (p < .01) and the extra explained variance of model 2 is highly significant (p < .001). The ANOVA table in the SPSS output shows how useful the model is (Field, 2009). The higher the value of F, the more useful the model is (Field, 2009). From the ANOVA table, it can be interpreted that model 1 (*F*-ratio is 2.803, p < .01) significantly improved the ability to predict the dependent variable. However, model 2 (*F*-ratio is 5.727, p < .001) was even more able to predict the dependent variable, since the F-ratio was higher and more significant. In the Coefficients table, the B-values give information about the relationship between the dependent variable (OCB-O) and each predictor (Field, 2009). When the B-value is positive, this indicates a positive relationship between the dependent variable and the independent variable. When the B-value is negative, this indicates a negative relationship between the dependent variable and the independent variable. Moreover, the B-values also reveal to what degree each independent variable affects the dependent variable, if the effects of the other independent variables are kept constant (Field, 2009). Furthermore, if the value in the column Sig. is significant, then the independent variable makes a significant contribution to the model (Field, 2009). Since the independent variables have been standardized before running the regression analysis, the B-values of the unstandardized coefficient

will be used. Model 2 shows that the dummy variable for position 1 = top manager is positively and significantly related (b = .474, se = .201, p < .05), the dummy variable for position 5 = technical is negatively and significantly related (b = -.120, se = .055, p < .05), gender is positively and significantly related (b = .048, se = .024, p < .05) and affective organizational commitment is positively and highly significantly related to organizational citizenship behavior (*b* = .123, *se* = .023, *p* < .001). For example, age (b = -.009, se = .024, p > .05) and tenure (b = -.002, se = .018, p > .05) are not significantly related to organizational citizenship behavior. The value of Variance Inflation Factors (VIF) shows if a model still fits to the data and it also reveals the multicollinearity of the model. In the literature, several different levels have been noticed as an acceptable level of VIF. A VIF-value of 10 is perhaps most commonly accepted as the boundary (e.g. Field, 2009; Pallant, 2010). There are also researchers that recommend a maximum VIF-value of 4 (e.g. Pan & Jackson, 2008). Since the majority accepts a maximum VIF-value of 10, this thesis will also set the maximum VIF-value at 10. The VIF-values in the Coefficients table, which all lie around 1, show that the model is good and that multicollinearity does not seem to be a problem in the model. Moreover, the dummy variable for position 1 = top manager (*t*(1080) = 2.36, *p* < .05), dummy variable of position 5 = technical (t(1080) = -2.17, *p* < .05), gender (t(1080) = 2, p < .05) and affective organizational commitment (t(1080) = 5.34, p < .001) are all significant independent variables of organizational citizenship behavior. The size of the t-statistics shows that affective organizational commitment has a bigger impact as an independent variable. Overall, employees with a higher level of affective organizational commitment reported expressing more organizational citizenship behavior towards the organization (OCB-O). Table 3 on the next page gives an overview of the results of the regression analysis.

Table 3								
Results of Regression Analysis for Organizational Citizenship Behavior (OCB-O)								
	Model 1			Model 2				
Model	Variable	В	SE	В	SE	VIF		
1.	Dummy variable for position 1 = top manager	.526*	.203	.474*	.201	1.026		
Control	Dummy variable for position 2 = middle manager	.174	.099	.156	.097	1.123		
variables	Dummy variable for position 4 = administrative	.035	.069	.013	.068	1.278		
	Dummy variable for position 5 = technical	127*	.056	120*	.055	1.296		
	Dummy variable for position 6 = manual	.030	.138	.075	.137	1.056		
	Age	006	.025	009	.024	1.053		
	Gender	.045	.024	.048*	.024	1.074		
	Tenure	.003	.018	002	.018	1.016		
2. Main	Affective organizational commitment			.123***	.023	1.020		
effects								
R ²		.02	0	.046				
ΔR^2		.020** .026***						

Notes. * p < 0.05; ** p < 0.01; *** p < 0.001. B = unstandardized regression coefficient; SE = standard error.

Based on the above, hypothesis 1 is supported. This means that affective organizational commitment has a positive effect on organizational citizenship behavior towards the organization (OCB-O).

4.2.2 Hypothesis 2

Hypothesis 2 proposes a positive relationship between affective organizational commitment and innovative behavior. In order to test this hypothesis, a multiple regression analysis was run in SPSS with the predictor affective organizational commitment, the controls age, gender, tenure and position and the outcome innovative behavior (see Appendix 12). In the Model Summary of the SPSS output, the R Square (R^2) of model 1 is .033 and of model 2 it is .035. Model 2 predicts .002 more variance than model 1. This means that model 2 hardly explains more variance than model 1. Furthermore, the Model Summary also shows that the explained variance of model 1 is significant (p < .01) and the extra explained variance of model 2 is not significant (p > .05). The Sig F Change from model 1 to model 2 is not significant, which means that model 2 does not explain significantly more variance of innovative behavior. From the ANOVA table, it can be interpreted that model 1 (*F*-ratio is 4.645, p < .001) significantly improved the ability to predict the dependent variable, but model 2 (*F*-

ratio is 4.305, p < .001) had a lower F-ratio, which means that model 2 is not better at predicting the dependent variable. In the Coefficients table, the unstandardized coefficients will be used, since the independent variables have been standardized before running the regression analysis. Model 2 shows that the dummy variable for position 1 = top manager is positively and significantly related (*b* = .659, *se* = .226, *p* < .01), the dummy variable for position 5 = technical is negatively and significantly related (*b* = .629, *se* = .022, *se* = .062, *p* < .01) and gender is positively and significantly related (*b* = .078, *se* = .027, *p* < .01). However, age (*b* = -.042, *se* = .027, *p* > .05), tenure (*b* = .007, *se* = .020, *p* > .05) and affective organizational commitment (*b* = -.032, *se* = .026, *p* > .05) are not significantly related to innovative behavior. The VIF-values in the Coefficients table, which all lie around 1, show that the model is good and that multicollinearity does not seem to be a problem in the model. Moreover, dummy variable for position 1 = top manager (*t*(1079) = 2.92, *p* < .01), dummy variable of position 5 = technical (*t*(1079) = -3.24, *p* < .01) and gender (*t*(1079) = 2.86, *p* < .01) are all significant independent variables of innovative behavior. However, the independent variable affective organizational commitment is not a significant variable of innovative behavior. Table 4 gives an overview of the results of the regression analysis.

Table 4								
Results of Regression Analysis for Innovative Behavior								
		Model 1			Model 2			
Model	Variable	В	SE	В	SE	VIF		
1.	Dummy variable for position 1 = top manager	.645**	.226	.659**	.226	1.026		
Control	Dummy variable for position 2 = middle manager	.165	.110	.169	.110	1.124		
variables	Dummy variable for position 4 = administrative	092	.076	086	.077	1.279		
	Dummy variable for position 5 = technical	201**	.062	202**	.062	1.296		
	Dummy variable for position 6 = manual	209	.153	221	.154	1.056		
	Age	043	.027	042	.027	1.053		
	Gender	.078**	.027	.078**	.027	1.075		
	Tenure	.006	.020	.007	0.20	1.016		
2. Main	Affective organizational commitment			-0.32	.026	1.020		
effects								
R ²		.03	3	.035				
ΔR^2		.033*** .002						

Notes. * p < 0.05; ** p < 0.01; *** p < 0.001. B = unstandardized regression coefficient; SE = standard error.
Based on the above, hypothesis 2 is rejected. The results of the analysis showed that the relationship between affective organizational commitment and innovative behavior is not significant. Not finding a significant relationship between affective organizational commitment and innovative behavior makes it more interesting to further investigate the relationship with inclusion of the moderating variable innovative organizational climate.

4.2.3 Hypothesis 3

The analysis of hypothesis 1 showed that there is a positive relationship between affective organizational commitment and organizational citizenship behavior towards the organization (OCB-O). Obviously, it is interesting that the outcomes of the analysis reveal that there is a relationship, but it might be even more interesting to know if there are other variables that could influence this relationship. Hypothesis 3 proposes a positive moderation effect of extensive training on the relationship between affective organizational commitment and organizational citizenship behavior towards the organization (OCB-O) such that the effect of affective organizational commitment on organizational citizenship towards the organization (OCB-O) will be stronger when employees experience high levels of extensive training. In order to test this hypothesis, a multiple regression analysis was run in SPSS with the predictor affective organizational commitment, the controls age, gender, tenure and position, the outcome organizational citizenship behavior and the moderator extensive training (see Appendix 13). In the Model Summary of the SPSS output, the R Square (R^2) of model 1 is .020, of model 2 is .214 and of model 3 it is .215. Adding extensive training to the model as an independent variable significantly (p < .001) increases the explanatory power of the model. However, when the interaction effect is added to the model, only .001 more variance is predicted than model 2. Above that, this tiny increase in the explanatory power turns out to be not significant. From the ANOVA table, it can be interpreted that model 1 (*F*-ratio is 2.803, p < .01) significantly improved the ability to predict the dependent variable, but model 2 (F-ratio is 29.371, p < .001) was even better able to predict the dependent variable, since the F-ratio was higher and more significant. Model 3 shows a slight decrease in the F-value, but it shows to be significant (F-ratio is 26.901, $p < 10^{-10}$.001). A significance of p < .001 means that it is 99,9% certain that the model explains something. Regarding the B-values in the Coefficients table, the unstandardized coefficients will be used, since the independent variables were already standardized before running the regression analysis. Model 3 shows that the dummy variable for position 6 = manual is positively and significantly related (b =.291, se = .126, p < .05), affective organizational commitment is positively and significantly related (b = .071, se = .021, p < .01) and extensive training is positively and significantly related (b = .349, se = .023, p < .001). For example, age (b = .036, se = .022, p > .05), tenure (b = .016, se = .017, p > .05) and

the interaction effect between affective organizational commitment and extensive training (b = .029, se = .021, p > .05) are not significantly related to organizational citizenship behavior. The VIF-values in the Coefficients table, which all lie around 1, show that the model is good and that multicollinearity does not seem to be a problem in the model. Moreover, dummy variable for position 6 = manual (t(1078) = 2.30, p < .05), affective organizational commitment (t(1078) = 3.33, p < .01) and extensive training (t(1078) = 15.26, p < .001) are all significant independent variables of organizational citizenship behavior. The size of the *t*-statistics shows that extensive training has a much bigger impact as an independent variable. Overall, extensive training shows to have a significantly positive relationship with organizational citizenship behavior. When employees receive more extensive training, these employees also reported expressing more organizational citizenship behavior. Table 5 on the next page provides an overview of the results of the regression analysis.

		Tab	le 5					
	Results of Regression Analysis	for Orga	nizatior	al Citizens	hip Bel	navior (OCE	3-0)	
		Model 1	-	Model 2		Model 3		
Model	Variable	В	SE	В	SE	В	SE	VIF
1. Control	Dummy variable for position	.526*	.203	.250	.183	.241	.183	1.034
variables	1 = top manager							
	Dummy variable for position	.174	.099	.080	.089	.079	.089	1.127
	2 = middle manager							
	Dummy variable for position	.035	.069	018	.062	023	.062	1.284
	4 = administrative							
	Dummy variable for position	127*	.056	048	.051	055	.051	1.322
	5 = technical							
	Dummy variable for position	.030	.138	.315*	.125	.291*	.126	1.094
	6 = manual							
	Age	006	.025	.036	.022	.036	.022	1.074
	Gender	.045	.024	.015	.022	.015	.022	1.085
	Tenure	.003	.018	.013	.017	0.16	.017	1.031
2. Main	Affective organizational			.072**	.021	.071**	.021	1.050
effects	commitment							
	Extensive training			.345***	.023	.349***	.023	1.117
3.	Affective organizational					.029	.021	1.062
Interaction	commitment x Extensive							
effects	training							
R ²		.02	20	.214	1		.215	I
ΔR^2		.020)**	.194*	**		.001	

Notes. * p < 0.05; ** p < 0.01; *** p < 0.001. B = unstandardized regression coefficient; SE = standard error.

Despite the fact that the interaction effect of extensive training on the relationship between affective organizational commitment and organizational citizenship behavior towards the organization is not significant, the results of SPSS have been put in a graph (see Figure 5 on the next page). The graph provides a visual representation of the SPSS output on the relationship between affective organizational commitment and organizational citizenship behavior with extensive training as a moderator. When employees receive little extensive training, the level of affective organizational commitment hardly has any effect on organizational citizenship behavior. When employees receive much extensive training, the level of affective organizational commitment shows to have slightly more effect on organizational citizenship behavior. Based on the graph, there seems to be a small positive effect of affective organizational commitment on organizational citizenship behavior when extensive training is the moderator. However, the effect in this research is not significant.



Figure 5. Graph showing the relationship between affective organizational commitment and organizational citizenship behavior with extensive training as a moderator.

Based on the above, hypothesis 3 is rejected. The results of the analysis showed that the relationship between affective organizational commitment and organizational citizenship behavior (OCB-O) with extensive training as a moderator is not significant.

Given that SPSS has showed that there is no moderation effect of extensive training on the relationship between affective organizational commitment and organizational citizenship behavior (OCB-O), it would be interesting to investigate whether extensive training has a moderation effect on the relationship between affective organizational commitment and innovative behavior. In order to test this, a multiple regression analysis was run in SPSS with the predictor affective organizational commitment, the controls age, gender, tenure and position, the outcome innovative behavior and the moderator extensive training (see Appendix 14). In the Model Summary of the SPSS output, the R Square (R^2) of model 1 is .033, of model 2 is .165 and of model 3 it is .170. Adding extensive training to the model as an independent variable significantly (p < .05) increases the explanatory power of

the model. However, when the interaction effect is added to the model, only .005 more variance is predicted than in model 2. From the ANOVA table, it can be interpreted that model 1 (F-ratio is 4.645, p < .001) significantly improved the ability to predict the dependent variable, but model 2 (Fratio is 21.315, p < .001) was even better able to predict the dependent variable, since the F-ratio was higher and more significant. Model 3 shows a slight decrease in the F-value, but it shows to be significant (*F*-ratio is 20.080, p < .001). A significance of p < .001 means that it is 99,9% certain that the model explains something. Regarding the B-values in the Coefficients table, the unstandardized coefficients will be used, since the independent variables were already standardized before running the regression analysis. Model 3 shows that dummy variable for position 1 = top manager is positively and significantly related (b = .419, se = .211, p < .05), dummy variable for position 5 = technical is negatively and significantly related (b = -.148, se = .059, p < .05), affective organizational commitment is negatively and highly significantly related (b = -.086, se = .024, p < .001), extensive training is positively and highly significantly related (b = .348, se = .026, p < .001) and the interaction effect between affective organizational commitment and extensive training is positively and significantly related (b = .062, se = .024, p < .05) to innovative behavior. For example, age (b = .002, se= .026, p > .05), tenure (b = .027, se = .019, p > .05) and gender (b = .045, se = .025, p > .05) are not significantly related to innovative behavior. The VIF-values in the Coefficients table, which all lie around 1, show that the model is good and that multicollinearity does not seem to be a problem in the model. Moreover, dummy variable for position 1 = top manager (t(1077) = 1.99, p < .05), dummy variable for position 5 = technical (t(1077) = -2.53, p < .05), affective organizational commitment (t(1077) = -3.53, p < .001), extensive training (t(1077) = 13.24, p < .001) and the interaction effect between affective organization commitment and extensive training (t(1077) = 2.57, p < .05) are all significant independent variables of innovative behavior. The size of the *t*-statistics shows that extensive training has a much bigger impact as an independent variable. Overall, affective organizational commitment shows to have a significantly negative effect on innovative behavior. Furthermore, extensive training shows to have a significantly positive relationship with innovative behavior. When employees receive more extensive training, these employees also reported expressing more innovative behavior. Above that, the effect of the interaction between affective organizational commitment and extensive training on innovative behavior shows to be significant and positive. Table 6 on the next page provides an overview of the results of the regression analysis.

		Tabl	e 6					
	Results of Regres	sion Analys	sis for I	nnovative	Behavi	or		
		Model 1		Model 2		Model 3		
Model	Variable	В	SE	В	SE	В	SE	VIF
1. Control	Dummy variable for position	.645**	.226	.437*	.211	.419*	.211	1.034
variables	1 = top manager							
	Dummy variable for position	.165	.110	.093	.102	.091	.102	1.128
	2 = middle manager							
	Dummy variable for position	092	.076	117	.071	128	.071	1.285
	4 = administrative							
	Dummy variable for position	201**	.062	132*	.058	148*	.059	1.323
	5 = technical							
	Dummy variable for position	209	.153	.014	.144	036	.145	1.094
	6 = manual							
	Age	043	.027	.003	.026	.002	.026	1.074
	Gender	.078**	.027	.045	.025	.045	.025	1.085
	Tenure	.006	.020	.021	.019	.027	.019	1.031
2. Main	Affective organizational			082**	.024	086***	.024	1.050
effects	commitment							
	Extensive training			.339***	.026	.348***	.026	1.117
3.	Affective organizational					.062*	.024	1.062
Interaction	commitment x Extensive							
effects	training							
R ²		.033	3	.16	5		.170	
ΔR ²		0.33*	* *	.132*	**		005*	

Notes. * p < 0.05; ** p < 0.01; *** p < 0.001. B = unstandardized regression coefficient; SE = standard error.

In this research, the relationship between affective organizational commitment and innovative behavior with extensive training as a moderator shows a significant effect. In order to make it easier to interpret the effect, a graph has been drawn based on the SPSS output (see Figure 6 on the next page). When employees receive little training, an increase in the level of affective organizational commitment shows a decrease on innovative behavior. In other words, when employees receive little training, but become more committed to the organization, the employees will express less innovative behavior. When employees receive much training, the level of affective organizational commitment seems to have hardly any impact on the amount of innovative behavior being expressed by the employees. In other words, it seems that employees receiving much extensive training give back innovative behavior, but affective organizational commitment does not seem to have an effect on this.





Based on the above, there is a significant positive effect of extensive training as a moderator on the relationship between affective organizational commitment and innovative behavior.

4.2.4 Hypothesis 4

Since the regression analysis on the relationship between affective organizational commitment and innovative behavior did not show a significant relationship, it is interesting to further investigate this relationship with inclusion of the moderating variable innovative organizational climate. Hypothesis 4 proposes a positive moderation effect of innovative organizational climate on the relationship between affective organizational commitment and innovative behavior such that the effect of affective organizational commitment on innovative behavior will be stronger when employees identify themselves with a more innovative organizational climate. In order to test this, a multiple regression analysis was run in SPSS with the predictor affective organizational commitment, the controls age, gender, tenure and position, the outcome innovative behavior and the moderator innovative organizational climate (see Appendix 15). In the Model Summary of the SPSS output, the R Square (R^2) of model 1 is .033, of model 2 is .204 and of model 3 it is .207. Adding innovative

organizational climate to the model as an independent variable significantly (p < .05) increases the explanatory power of the model. However, when the interaction effect is added to the model, only .003 more variance is predicted than in model 2. From the ANOVA table, it can be interpreted that model 1 (F-ratio is 4.645, p < .001) significantly improved the ability to predict the dependent variable, but model 2 (*F*-ratio is 27.592, p < .001) was even better able to predict the dependent variable, since the F-ratio was higher and more significant. Model 3 shows a slight decrease in the Fvalue, but it shows to be significant (*F*-ratio is 25.533, p < .001). A significance of p < .001 means that it is 99,9% certain that the model explains something. Regarding the B-values in the Coefficients table, the unstandardized coefficients will be used, since the independent variables were already standardized before running the regression analysis. Model 3 shows that dummy variable for position 1 = top manager is positively and significantly related (b = .598, se = .205, p < .01), dummy variable for position 5 = technical is negatively and significantly related (b = -.182, se = .057, p < .01), affective organizational commitment is negatively and significantly related (b = -.083, se = .024, p < .024.01), innovative organizational climate is positively and highly significantly related (b = .365, se = .024, p < .001) and the interaction effect between affective organizational commitment and innovative organizational climate is positively and significantly related (b = .046, se = .023, p < .05) to innovative behavior. For example, age (b = -.002, se = .025, p > .05), tenure (b = .031, se = .019, p > .05) and gender (b = .046, se = .025, p > .05) are not significantly related to innovative behavior. The VIFvalues in the Coefficients table, which all lie around 1, show that the model is good and that multicollinearity does not seem to be a problem in the model. Moreover, dummy variable for position 1 = top manager (t(1077) = 2.91, p < .01), dummy variable for position 5 = technical (t(1077)) = -1.82, p < .01, affective organizational commitment (t(1077) = -3.43, p < .01), innovative organizational climate (t(1077) = 15.27, p < .001) and the interaction effect between affective organization commitment and innovative organizational climate (t(1077) = 2.03, p < .05) are all significant independent variables of innovative behavior. The size of the *t*-statistics shows that innovative organizational climate has a much bigger impact as an independent variable. Overall, affective organizational commitment shows to have a significantly negative effect on innovative behavior. Furthermore, innovative organizational climate shows to have a significantly positive relationship with innovative behavior. When employees work in a more innovative organizational climate, these employees also reported expressing more innovative behavior. The interaction effect of affective organizational commitment and innovative organizational climate on innovative behavior turns out to be significantly positive. Table 7 on the next page provides an overview of the results of the regression analysis.

	Table 7							
	Results of Regressi	on Analysi	s for In	novative B	ehavio	r		
		Model 1		Model 2		Model 3		
Model	Variable	В	SE	В	SE	В	SE	VIF
1. Control	Dummy variable for position	.645**	.226	.610**	.205	.598**	.205	1.027
variables	1 = top manager							
	Dummy variable for position	.165	.110	.165	.100	.160	.099	1.125
	2 = middle manager							
	Dummy variable for position	092	.076	119	.070	135	.070	1.296
	4 = administrative							
	Dummy variable for position	201**	.062	168**	.057	182**	.057	1.318
	5 = technical							
	Dummy variable for position	209	.153	072	.140	097	.140	1.069
	6 = manual							
	Age	043	.027	.000	.025	002	.025	1.068
	Gender	.078**	.027	.049*	.025	.046	.025	1.085
	Tenure	.006	.020	.027	.019	.031	.019	1.034
2. Main	Affective organizational			072**	.024	083**	.024	1.086
effects	commitment							
	Innovative organizational			.362***	.024	.365***	.024	1.052
	climate							
3.	Affective organizational					.046*	.023	1.091
Interaction	commitment x Innovative							
effects	organizational climate							
R ²		.033		.204	1		.207	
ΔR^2		.033*	**	.171*	**		.003*	

Notes. * *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001. *B* = unstandardized regression coefficient; SE = standard error.

In this research, the relationship between affective organizational commitment and innovative behavior with innovative organizational climate as a moderator shows a significant effect. In order to make it easier to interpret the effect, a graph has been drawn based on the SPSS output (see Figure 7 on the next page). When employees work in a low innovative organizational climate, an increase in the level of affective organizational commitment shows a decrease on innovative behavior. When employees work in a high innovative organizational climate, an increase in the level of affective organizational commitment still shows a slight decrease on innovative behavior.



Figure 7. Graph showing the relationship between affective organizational commitment and innovative behavior with innovative organizational climate as a moderator.

Based on the above, hypothesis 4 is accepted. This means there is a significant effect of innovative organizational climate on the relationship between affective organizational commitment and innovative behavior.

Since the moderating variable of extensive training turned out to have an effect on innovative behavior, while this relationship was not expected on a theoretical basis, it is also interesting to investigate whether the moderating variable of innovative organizational climate has an effect on the relationship between affective organizational commitment and organizational citizenship behavior towards the organization (OCB-O). In order to test this, a multiple regression analysis was run in SPSS with the predictor affective organizational commitment, the controls age, gender, tenure and position, the outcome organizational citizenship behavior and the moderator innovative organizational citizenship behavior and the moderator innovative organizational climate (see Appendix 16). In the Model Summary of the SPSS output, the R Square (R^2) of model 1 is .020, of model 2 is .283 and of model 3 it is .284. Adding innovative organizational climate to the model as an independent variable significantly (p < .001) increases the explanatory power of the model. However, when the interaction of the moderation variable is added to the model, only .001 more variance is predicted than in model 2. From the ANOVA table, it can be interpreted that model 1 (*F*-ratio is 2.803, p < .01) significantly improved the ability to predict the dependent variable, but model 2 (*F*-ratio is 42.626, p < .001) was even much better able to predict

the dependent variable, since the F-ratio was higher and more significant. Model 3 shows a slight decrease in the F-value, but it shows to be significant (F-ratio is 38.909, p < .001). A significance of p < .001.001 means that it is 99,9% certain that the model explains something. Regarding the B-values in the Coefficients table, the unstandardized coefficients will be used, since the independent variables were already standardized before running the regression analysis. Model 3 shows that dummy variable for position 1 = top manager is positively and significantly related (b = .415, se = .174, p < .05), affective organizational commitment is positively and highly significantly related (b = .075, se = .021, p < .001) and innovative organizational climate is positively and highly significantly related (b = .385, se = .020, p < .001). For example, age (b = .035, se = .021, p > .05), tenure (b = .022, se = .016, p > .05), gender (b = .017, se = .021, p > .05) and the interaction effect between affective organizational commitment and innovative organizational climate (b = .024, se = .019, p > .05) are not significantly related to organizational citizenship behavior. The VIF-values in the Coefficients table, which all lie around 1, show that the model is good and that multicollinearity does not seem to be a problem in the model. Moreover, dummy variable for position 1 = top manager (t(1078) = 2.38, p < .05), affective organizational commitment (t(1078) = 3.65, p < .001) and innovative organizational climate (t(1078) = 18.96, p < .001) are all significant independent variables of organizational citizenship behavior. The size of the t-statistics shows that innovative organizational climate has a much bigger impact as an independent variable. Overall, affective organizational commitment shows to have a significant positive effect on organizational citizenship behavior. Furthermore, innovative organizational climate shows to have a significantly positive relationship with organizational citizenship behavior. When employees work in a more innovative organizational climate, these employees also reported expressing more organizational citizenship behavior. However, the interaction effect between affective organizational commitment and innovative organizational climate shows no significant relationship with organizational citizenship behavior. Table 8 on the next page provides an overview of the results of the regression analysis.

	Table 8							
	Results of Regression Ana	lysis for C)rganiz	ational Citi	izenship	Behavior		
		Model 1		Model 2		Model 3		
Model	Variable	В	SE	В	SE	В	SE	VIF
1. Control	Dummy variable for position	.526*	.203	.421*	.174	.415*	.174	1.027
variables	1 = top manager							
	Dummy variable for position	.174	.099	.150	.084	.147	.084	1.124
	2 = middle manager							
	Dummy variable for position	.035	.069	024	.059	032	.059	1.295
	4 = administrative							
	Dummy variable for position	127*	.056	085	.048	092	.049	1.317
	5 = technical							
	Dummy variable for position	.030	.138	.231	.119	.219	.119	1.069
	6 = manual							
	Age	006	.025	.036	.021	.035	.021	1.069
	Gender	.045	.024	.019	.021	.017	.021	1.085
	Tenure	.003	.018	0.19	.016	.022	.016	1.034
2. Main	Affective organizational			.081***	.020	.075***	.021	1.086
effects	commitment							
	Innovative organizational			.383***	.020	.385***	.020	1.052
	climate							
3.	Affective organizational					.024	.019	1.091
Interaction	commitment x Innovative							
effects	organizational climate							
R ²		.020)	.283		.284		
ΔR^2		.020*	**	.263***		.001		

Notes. * p < 0.05; ** p < 0.01; *** p < 0.001. B = unstandardized regression coefficient; SE = standard error.

According to the results, the relationship between affective organizational commitment and organizational citizenship behavior with innovative organizational climate as a moderator is not significant. Despite the non-significant relationship, it is interesting to interpret the effect in a graph (see Figure 8 on the next page). When employees work in a low innovative organizational climate, an increase in the level of affective organizational commitment shows a slight increase in organizational citizenship behavior. When employees work in a high innovative organizational climate, an increase in the level of affective organizational commitment shows a slight organizational climate and increase in the level of affective organizational commitment shows a slight organizational climate and citizenship behavior. When employees work in a high innovative organizational climate, an increase in the level of affective organizational commitment shows a larger increase on organizational citizenship behavior. Based on the graph, there seems to be a small effect of affective organizational commitment on organizational citizenship behavior when innovative organizational climate is the moderator. However, the effect in this research is not significant.



Figure 8. Graph showing the relationship between affective organizational commitment and organizational citizenship behavior with innovative organizational climate as a moderator.

Based on the above, there is no significant relationship between affective organizational commitment and organizational citizenship behavior when innovative organizational climate is the moderator.

4.2.5 Additional Analysis for Hypothesis 4

It is interesting to find that affective organizational commitment in relationship with innovative behavior becomes more important when there are certain factors present in the organization. In the analysis, the moderators extensive training and innovative organizational climate turn out to have a positive moderating effect on the relationship between affective organizational commitment and innovative behavior. At first sight these outcomes look promising. However, there might be a problem with the moderator of innovative organizational climate. Innovative organizational climate is namely a concept in the dataset of the Global HRM project, which includes 4 items scored by selfreport. Self-reporting measures mean that the items are being answered by the employees themselves and not by other, more objective, respondents such as for example supervisors. Regarding innovative organizational climate, this could mean that employees see their organization as being very innovative, while in practice the organization is not.

In order to overcome this possible problem, additional analysis was conducted. The data set of the Global HRM project also includes the concept innovativeness of the organization, which has been measured by supervisor ratings. For innovativeness of the organization, a four-item scale from West and Anderson (1996) was used. An example item of the organizational innovation scale is "We are more innovative than our competitors in developing new ways of achieving our targets and objectives".

The ratings of the supervisors were used to calculate an average for every organization. The average of each organization was then added to the supervisors and employees who work at each organization. Then the organizations were divided into two different groups (0 = not innovative and 1 = innovative).

First, a multiple regression analysis was run on the organizations that belong to the not innovative category to test the relationship between affective organizational commitment and innovative behavior (see Appendix 17). In the Model Summary of the SPSS output, the R Square (R^2) of model 1 is .052 and of model 2 is .104. Adding affective organizational commitment to the model as an independent variable significantly (p < .001) increases the explanatory power of the model. From the ANOVA table, it can be interpreted that model 1 (*F*-ratio is 2.325, p < .05) significantly improved the ability to predict the dependent variable, but model 2 (F-ratio is 4.329, p < .001) was even better able to predict the dependent variable, since the F-ratio was higher and more significant. Regarding the B-values in the Coefficients table, the unstandardized coefficients will be used, since the independent variables were already standardized before running the regression analysis. Model 2 shows that dummy variable for position 1 = top manager is positively and significantly related (b =.807, se = .345, p < .05) and affective organizational commitment is negatively and highly significantly related (b = -.214, se = .049, p < .001). For example, age (b = .007, se = .053, p > .05), tenure (b = .058, se = .441, p > .05) and gender (b = .082, se = .052, p > .05) are not significantly related to innovative behavior. The VIF-values in the Coefficients table, which all lie around 1, show that the model is good and that multicollinearity does not seem to be a problem in the model. Moreover, dummy variable for position 1 = top manager (t(335) = 2.34, p < .05) and affective organizational commitment (t(335)) = -4.40, p < .001) are all significant independent variables of innovative behavior. The size of the tstatistics shows that innovative organizational climate has a much bigger yet negative impact as an independent variable. Overall, for non-innovative organizations there seems to be a significant and negative relationship between affective organizational commitment and innovative behavior. When

the affective organizational commitment of employees working in non-innovative organizations increases, the amount of innovative behavior the employees express will decrease. Table 9 provides an overview of the results of the regression analysis.

	Table 9							
R	Results of Regression Analysis for Innovative Behavior (Not Innovative Organizations)							
		Model 1	1	Model 2				
Model	Variable	В	SE	В	SE	VIF		
1. Control	Dummy variable for position 1 = top manager	.679	.353	.807*	.345	1.036		
variables	Dummy variable for position 2 = middle manager	.225	.154	.292	.151	1.202		
	Dummy variable for position 4 = administrative	159	.155	121	.151	1.243		
	Dummy variable for position 5 = technical	.125	.142	.036	.140	1.231		
	Dummy variable for position 6 = manual	153	.185	228	.181	1.102		
	Age	010	.054	.007	.053	1.442		
	Gender	170*	.053	.082	.052	1.157		
	Tenure	.111	.450	.058	.441	1.407		
2. Main	Affective organizational commitment	-		214***	.049	1.148		
effects								
R ²		.05	2		104			
ΔR^2		.052	2*	.0	52***			

Notes. * p < 0.05; ** p < 0.01; *** p < 0.001. B = unstandardized regression coefficient; SE = standard error.

Second, a multiple regression analysis was run on the organizations that belong to the innovative category to test the relationship between affective organizational commitment and innovative behavior (see Appendix 18). In the Model Summary of the SPSS output, the R Square (R^2) of model 1 is .117 and of model 2 is .118. Adding affective organizational commitment to the model as an independent variable significantly (p < .001) yet hardly increases the explanatory power of the model. From the ANOVA table, it can be interpreted that model 1 (*F*-ratio is 3.893, p < .05) significantly improved the ability to predict the dependent variable. Model 2 (*F*-ratio is 3.478, p < .001) had lower F-ratio, which means it was not better at predicting the dependent variable. Regarding the B-values in the Coefficients table, the unstandardized coefficients will be used, since the independent variables were already standardized before running the regression analysis. Model 2 shows that only dummy variable for position 5 = technical is negatively and significantly related (b = .807, se = .345, p < .001). For example, age (b = .043, se = .079, p > .05), tenure (b = .005, se = .002, p > .05) and affective organizational commitment (b = .030, se = .060, p > .05) are not significantly related to innovative behavior. The VIF- values in the Coefficients

table, which all lie around 1, show that the model is good and that multicollinearity does not seem to be a problem in the model. Overall, for innovative organizations there seems to be no significant relationship between affective organizational commitment and innovative behavior. Table 10 provides an overview of the results of the regression analysis.

	Table 10						
	Results of Regression Analysis for Innovative Behavior (Innovative Organizations)						
		Model 1		Model 2			
Model	Variable	В	SE	В	SE	VIF	
1. Control	Dummy variable for position 1 = top manager	.244	.295	.238	.295	1.072	
variables	Dummy variable for position 2 = middle manager	238	.185	232	.186	1.143	
	Dummy variable for position 4 = administrative	118	.170	124	.171	1.184	
	Dummy variable for position 5 = technical	551***	.126	538***	.129	1.460	
	Dummy variable for position 6 = manual	380	.368	387	.369	1.056	
	Age	.038	.078	.043	.079	1.207	
	Gender	063	.062	063	.062	1.103	
	Tenure	.006	.019	.005	.020	1.081	
2. Main	Affective organizational commitment			.030	.060	1.090	
effects							
R ²		.117	1		118	1	
ΔR ²		.117**	*		001		

Notes. * *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001. *B* = unstandardized regression coefficient; SE = standard error.

Finding a non-significant relationship between affective organizational commitment and innovative behavior for innovative organizations, means that the initial found relationship based on the employee ratings is not supported by the outcomes based on the supervisor ratings. Based on the employee ratings, there was a significant interaction effect of innovative organizational climate on the relationship between affective organizational commitment and innovative behavior. Combining the initial analysis (see section 4.2.4) and the addition analysis, hypothesis 4 needs to be partially confirmed.

Chapter 5 - Conclusion and Discussion

5.1 Introduction

In chapter four the results of the analysis have been discussed. This chapter will first recapitulate and discuss the findings of the analysis. Then the limitations of this research will be discussed. Finally, recommendations will be given for future research and practice.

5.2 Conclusion

In order for organizations to enhance organizational performance, it is essential for organizations that employees engage in extra-role behavior such as organizational citizenship behavior and innovative behavior. According to empirical evidence, employees will be more likely to express extra-role behavior, when the employees feel committed towards the organization (e.g. Van Dyne & Ang, 1998; Organ & Ryan, 1995; LePine et al., 2002; Meyer et al., 2002; Jafri, 2010; Xerri & Brunetto, 2013). For organizational citizenship behavior, the relationship with affective organizational commitment has been theoretically developed and tested numerous times. However, for innovative behavior, there is only limited theoretical development and empirical testing regarding the relationship with affective organizational commitment. Therefore, this thesis focused on the following research question:

Does affective organizational commitment affect work behaviors such as organizational citizenship behavior and innovative behavior through a social exchange or a social identity mechanism?

In order to answer the central research question, two sub questions have been formulated as follows:

- a. Does affective organizational commitment affect organizational citizenship behavior through a social exchange mechanism?
- b. Does affective organizational commitment affect innovative behavior through a social identity mechanism?

In order to answer the research question and the sub questions, multiple hypotheses were formulated and tested by means of regression analysis (see Figure 9).



Figure 9. The conceptual model

The first hypothesis proposed a positive effect of affective organizational commitment on organizational citizenship towards the organization. This hypothesis has been accepted in this thesis. The second hypothesis, which proposed a positive effect of affective organizational commitment on innovative behavior, was rejected. The results of the analysis showed that the relationship was not significant. Hypothesis 3 proposed a positive moderation effect of extensive training on the relationship between affective organizational commitment and organizational citizenship behavior (OCB-O) such that the effect of affective organizational commitment on organizational citizenship towards the organization will be stronger when employees experience high levels of extensive training. The results of the analysis showed that the relationship between affective organizational commitment and organizational citizenship behavior (OCB-O) with extensive training as a moderator was not significant. Hypothesis 4 proposed a positive moderation effect of innovative organizational climate on the relationship between affective organizational commitment and innovative behavior such that the effect of affective organizational commitment on innovative behavior will be stronger when employees identify themselves with a more innovative organizational climate. The results of the analyses showed contradictory outcomes. The analysis in which employee-ratings were used for the moderator of innovative organizational climate showed a positive interaction effect of innovative organizational climate on the relationship between affective organizational commitment and innovative behavior. However, the analysis in which supervisor-ratings were used for the moderator

of innovative organizational climate showed different results. For non-innovative organizations the relationship between affective organizational commitment and innovative behavior turns out to be significant yet negative. For innovative organizations, the relationship between affective organizational commitment and innovative behavior is not significant. Finding a non-significant relationship between affective organizational commitment and innovative behavior for innovative organizations, means that the initial found relationship based on the employee ratings is not supported by the outcomes based on the supervisor ratings. Therefore, hypothesis 4 was only partially confirmed.

5.3 Discussion

In order to get a better understanding of the outcomes of this research, this section will take a closer look at the results by making a link to the theoretical background. First, this research investigated the relationship between affective organizational commitment and organizational citizenship behavior. Just like many other researchers, the findings from this analysis indicate a positive and significant relationship between affective organizational commitment and organizational citizenship behavior (Moorman et al., 1993; Shore & Wayne, 1993; Organ & Ryan, 1995; Kazemipour et al., 2012). In other words, these findings correspond with the expectations deduced from previous empirical evidence. Finding a positive significant relationship between affective organizational commitment and organizational citizenship behavior, confirms that this relationship works through the mechanism of social exchange. When employees become more affectively committed towards the organization, employees will be more likely to give back by going beyond their normal job requirements and thus express extra-role behavior such as organizational citizenship behavior.

Second, the relationship between affective organizational commitment and innovative behavior was tested. The findings for the analysis indicate that there is no significant relationship between affective organizational commitment and innovative behavior. This finding does not correspond with previous empirical evidence (Camelo-Ordaz et al., 2011; Hou et al., 2011; Jafri, 2010; Xerri & Brunetto, 2013; Zhou & George, 2001; Gu et al., 2017). The reason for not finding a significant relationship could be explained by the fact that many organizations in the data set are not really innovative. Above that, a considerable amount of the organizations in the data set belong to the public sector (type of industry). Taking this into consideration, affectively committed employees working in non-innovative/less innovative organizations will identify themselves with these noninnovative. Perhaps there are also other variables that indirectly influence the relationship in such a way that the relationship between affective organizational commitment and innovative behavior becomes positively significant.

With regard to other variables possibly influencing a relationship, extensive training was tested as a moderator on the relationship between affective organizational commitment and organizational citizenship behavior. Drawing on the social exchange theory (Blau, 1964), a positive effect was expected from extensive training on the relationship between affective organizational commitment and organizational citizenship behavior. In order to interpret the effect, a graph was drawn based on the SPSS output. This graph showed that there seems to be a small positive effect of affective organizational commitment on organizational citizenship behavior when extensive training is the moderator. When employees receive much extensive training, employees will become more affectively committed and will be even more eager to give back by means of organizational citizenship behavior. However, the effect in this research is not significant. Perhaps employees value extensive training not as a highly valued favor, which makes the need to return the favor disappear. It could be that employees expect organizations to provide extensive training, simply in order to get better skilled employees. It could also be possible that employees see extensive training as an obligation rather than as a chance. Seeing something as an obligation could lead to negative emotions and thoughts such as unmotivation, resilience or employees might feel it is timeconsuming.

Since the relationship between affective organizational commitment and organizational citizenship behavior with extensive training as a moderator, led to a different outcome than was expected, it was interesting to investigate whether extensive training as a moderator would have an effect on the relationship between affective organizational commitment and innovative behavior. The findings of the analysis indicate a significant effect of extensive training on the relationship between affective organizational commitment and innovative behavior. The graph, which was drawn to interpret the effect, revealed that extensive training led to a negative relationship between affective organizational commitment and innovative behavior. For situations in which much extensive training was given, the employees gave back innovative behavior, but affective organizational commitment did not seem to have an influence. For situations in which less extensive training was given, it seemed that less committed employees expressed more innovative behavior than more committed employees. So, innovative behavior is influenced by extensive training, but affective organizational commitment does not seem to play a (major) role. In addition, the negative effect is only small and the effect could be significant due to the fact that this research includes a large sample. Overall, these findings confirm the social exchange mechanism for the relationship between extensive training and innovative behavior.

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Drawing on social identity theory (Tajfel & Turner, 1979), innovative organizational climate was used as a moderator to test the relationship between affective organizational commitment and innovative behavior. Based on this theory, a highly innovative organizational climate would make the employees identify themselves with the innovative organization and thus makes them express more innovative behavior. The results of the analyses showed contradictory outcomes. The analysis in which employee-ratings were used for the moderator of innovative organizational climate showed a positive interaction effect of innovative organizational climate on the relationship between affective organizational commitment and innovative behavior. This finding confirmed the social identity mechanism. However, the analysis in which supervisor-ratings were used showed different results. For non-innovative organizations the relationship between affective organizational commitment and innovative behavior turns out to be significant yet negative. Using the social identity mechanism, when employees become more committed towards a non-innovative organization, employees will identify themselves with this non-innovative organization and will express less innovative behavior. This finding confirmed the social identity mechanism. For innovative organizations, the relationship between affective organizational commitment and innovative behavior is not significant. Due to these contradictory outcomes, hypothesis 4 was only partially confirmed. The contradictory outcomes could have been caused by the fact that the employees and supervisors were asked different questions. Employees were asked to rate the innovativeness of the organization itself. Supervisors were asked to rate the innovativeness of the organization in comparison with competitors. For example, when competitors are not innovative at all, a supervisor might conclude that his/her organization is very innovative, while in reality the organization is not that innovative. Another issue could be that supervisors do not know how innovative the competitors are. Perhaps if the same items would have been used for both the employees and the supervisors, the outcomes could have been different. In my opinion, it would be best to ask the employees and the supervisors to rate the innovativeness of the organization itself (items from innovative organizational climate).

Since the relationship between affective organizational commitment and innovative behavior with innovative organizational climate as a moderator, led to a different outcome than was expected, it was interesting to investigate whether innovative organizational climate as a moderator would have an effect on the relationship between affective organizational commitment and organizational citizenship behavior. The findings of the analysis indicated that there is no significant relationship between affective organizational commitment and organizational citizenship behavior, when innovative organizational climate is the moderator. In my opinion, it is logical that this relationship turned out to be not significant. When employees are affectively committed towards the organization, employees will identify themselves with the innovative climate of the organization. It is likely that once employees have identified themselves with the innovative organizational climate, they will express innovative behavior. These findings confirm that this relationship cannot be explained by the social identity mechanism. Organizational citizenship behavior is expressed when employees feel they have to return the favor they received from the organization (social exchange).

5.4 Contribution

5.4.1 Theoretical Contribution

Innovative behavior and organizational citizenship behavior are both considered to be essential for organizations in order to enhance organizational performance (e.g. Jafri, 2010; Allen & Rush, 1998). Above that, organizational commitment is a key antecedent of organizational citizenship behavior (Allen & Rush, 1998). Thus, in order for organizations to enhance organizational performance, it is important that organizations have theoretical knowledge and understanding on how to influence behavior such as organizational citizenship behavior and innovative behavior. This research's main contribution is developing a theoretical explanation for the relationship between affective organizational commitment and innovative behavior. The social identity theory was used to explain the relationship between affective organizational commitment and innovative behavior. If an employee feels affectively committed towards the organization, then employees feel emotionally attached to the organization. Being emotionally attached could be seen as categorizing and identifying themselves with the organization. If this organization turns out to be a very innovative organization, the employee will identify itself with this innovativeness and will express behavior which is in line with what the innovative organization expects. Thus, the behavior the employees express will be innovative behavior. However, the results from the analyses revealed that the social identity theory might not be applicable as a mechanism for the relationship between affective organizational commitment and innovative behavior in all situations. The findings did indicate that the mechanism of the social identity theory works for the effect of affective organizational commitment on innovative behavior when the organization has an innovative organizational climate. Furthermore, the results also revealed that the social identity mechanism explained the relationship between affective organizational commitment and innovative behavior for non-innovative organizations. Using the social identity mechanism, when employees become more committed towards a non-innovative organization, employees will identify themselves with this non-innovative organization and will express less innovative behavior. This finding confirmed the social identity mechanism. For innovative organizations, the relationship between affective organizational commitment and innovative behavior is not significant. So, for innovative organizations the social

identity mechanism was not confirmed. Moreover, the moderator extensive training, which was derived from the social exchange theory, did have a significant effect on the relationship between affective organizational commitment and innovative behavior. These outcomes provide a better insight in the relationship between affective organizational commitment and innovative behavior. Above that, these outcomes may also help to further develop the theoretical explanation for the relationship between affective organizational commitment and innovative behavior.

Besides attempting to develop a theoretical explanation for the relationship between affective organizational commitment and innovative behavior, this research also contributes by testing the social exchange theory as a theoretical explanation for the relationship between affective organizational commitment and organizational citizenship behavior. The findings of the analyses showed that there was a significant positive relationship between affective organizational commitment and organizational citizenship behavior. However, adding the moderator extensive training led to non-significant relationship between affective organizational commitment and organizational citizenship behavior.

Combining all outcomes, this research shows that there might be limits to the use of the social exchange theory on the relationship between affective organizational commitment and work behavior, and social identity can be used as an additional explaining mechanism.

5.4.2 Practical Contribution

As mentioned in section 5.4.1, organizational citizenship behavior and innovative behavior can enhance organizational performance. In order to be able to enhance organizational performance, organizations need to have knowledge and understanding on how these behaviors can be triggered. This research is practically relevant, since it contributes to the practical understanding of the relationship between affective organizational commitment and organizational citizenship behavior, on the one hand and the relationship between affective organizational commitment and innovative behavior, on the other hand. Just like prior empirical evidence, this research found a positive effect of affective organizational commitment on organizational citizenship behavior. So, organizations know that organizational citizenship behavior can be triggered by making sure that their employees are affectively committed towards the organization. Besides that, organizations can see that affective organizational commitment is not always positively related to innovative behavior. Prior empirical research did find a positive relationship between affective organizational commitment and innovative behavior, but this research showed the relationship was not significant. Above that, this research showed that adding the moderator extensive training did lead to a significant relationship between affective organizational commitment and innovative behavior. Moreover, this research partially showed that the moderator innovative organizational climate can lead to a significant relationship between affective organizational commitment and innovative behavior.

5.5 Limitations and Directions for Future Research

Despite the contributions for theory and practice, this research also has its limitations. One of these limitations is the cross-sectional research design. Cross-sectional research design has several disadvantages namely that depth is given up for width, there is lack of control who is filling in the questionnaire and there is insecurity whether respondents interpreted the questions the same way (Anderson, 2009). Another disadvantage is that a cross-sectional research design is not an adequate design to draw conclusions regarding causality. Future research could focus on conducting a similar research by using a longitudinal research. A longitudinal research conducts multiple observations over a certain period of time. By conducting a longitudinal research, variables and the related variables are viewed as a dynamic model, which makes it possible to see a gradual change over time (Ployhart & Vandenberg, 2010).

Another limitation of this research is the use of items scored by self-report. An important disadvantage of self-reporting measures is that the response validity might be in danger. It might be possible that respondents exaggerate or under-report their responses. Furthermore, the researcher cannot be sure whether the respondents understand all the questions correctly. Taken together, this means that self-reports could have led to common method bias (Podsakoff, MacKenzie & Podsakoff, 2012). According to Podsakoff, MacKenzie, Lee and Podsakoff (2003), common method bias can occur when dependent and independent variables are measured at the same point in time using the same source. When dependent and independent variables are measured at the same point in time using the same source, this can influence the relationship between the variables that a researcher is trying to investigate. Taking this into consideration, the limitation of common method bias needs to be pointed out regarding the analyses with the moderator innovative organizational climate. The moderator innovative organizational climate namely led to contradictory outcomes. It could be the case that it was due to using self-report that the moderating effect of innovative organizational climate was significant. However, using the supervisor ratings to measure the moderator innovative organizational climate led to a significant relationship for not innovative organizations and to a nonsignificant relationship for innovative organizations. Regarding this point, it also needs to be taken into account that the self-reporting measures and the supervisor items did not include the same questions. Other researchers could conduct a research in the future, in which the same questions are

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used for the employees and the supervisors. For this future research, I would recommend using the 4 items from the Organizational Climate Scale (Patterson et al., 2005) that have been used in this research for the measure innovative organizational climate. According to Patterson et al. (2005), the Organizational Climate Scale is a measure, which has been designed to be used for all employee levels in a range of different work settings. This means that the Organizational Climate Scale is applicable for both employees and supervisors.

Furthermore, the factor analysis on the variables affective organizational commitment, organizational citizenship behavior and innovative behavior also caused a limitation in this research. Based on the factor analysis, there were several items that did have rather low factor loadings. There were also several items that loaded on two variables. The main problem within the factor analysis was caused by an item from organizational citizenship behavior namely the item "I offer ideas to improve the functioning of the organization". This item was an actual cross loader, which means that the item could be grouped under either one of the factors. Future research could focus on reformulating the items of organizational citizenship behavior and innovative behavior. The use of the word "ideas" in the item "I offer ideas to improve the functioning for respondents, since innovative behavior especially focuses on generating, promoting and realizing new ideas.

Focusing on organizational citizenship behavior, it is important to keep in mind that this research only focused on organizational citizenship behavior towards the organizational citizenship behavior towards individuals. Keeping the social exchange theory in mind, it might be thinkable that the exchange of favors can also be applicable in case of organizational citizenship behavior towards individuals. An employee can value help from another employee as a high favor, which could make the employee return the favor. However, what changes is that the return of favors is on individual level. Therefore, it might be a possibility that affective organizational commitment does not influence organizational citizenship behavior towards individuals. Future research could focus on investigating both organizational citizenship behavior towards the organization and towards individuals, such that a comparison can be made between the two types of organizational citizenship behavior.

Finally, this research did not use a multi-level design. A multi-level design uses data from different levels (e.g. individual level, organizational level, country level) combined in our data set. It might be possible that numerous other variables like for example organizational factors (e.g. human resource practices, management, organizational culture), people working in teams, culture or country might influence the relationship between affective organizational commitment,

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organizational citizenship behavior and innovative behavior. Adding extra levels to a research possibly result in more substantial and sustained outcomes. It could be possible that there is a relationship between variables on an individual level, but that this relationship does not exist on organizational level. Furthermore, it might also be possible that a certain relationship exists on more levels, so adding an extra level makes it possible to further clarify the relationship. Empirical evidence shows that there are many factors which can influence affective organizational commitment (e.g. Meyer et al., 2002; Lok & Crawford, 2004; Chordiya, Sabharwal & Goodman, 2017). For example, if the country-level was added to this research, it could be possible that the level of affective organizational commitment is different due to the country employees live in. Having a different level of affective organizational commitment in different countries, might also lead to a different strength of the relationship between affective organizational commitment, organizational citizenship and innovative behavior. Other researchers could conduct a research, which takes into account the multi-level perspective. Researchers could also conduct research in which other variables are taking into account as moderators for the relationship between affective organizational commitment, organizational comm

References

- Allen, N. J. (2016). Commitment as a multidimensional construct. In J. P. Meyer (Ed.), *Handbook of employee commitment* (pp. 28-42). Cheltenham, England: Edward Elgar.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology, 63,* 1-18.
- Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology, 83*(2), 247-260.
- Angle, H. L., & Perry, J. L. (1981). An empirical-assessment of organizational commitment and organizational-effectiveness. *Administrative Science Quarterly, 26*(1), 1-14.
- Anderson, V. (2009). Research methods in human resource management. London, England: CIPD.
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and 'citizenship'. *Academy of Management Journal, 26*(4), 587-595.
- Becker, H. S. (1960). Notes on the concept of commitment. *American Journal of Sociology, 66*(1), 32-40.
- Becker, T. E. (2009). Interpersonal commitments. In H. J. Klein, T. E. Becker, & J. P. Meyer (Eds.), Commitment in organizations. Accumulated wisdom and new directions (pp. 137-179). New York, NY: Taylor & Francis Group.
- Becker, T. E. (2016). Multiple foci of workplace commitments. In J. P. Meyer (Ed.), *Handbook of employee commitment* (pp. 43-58). Cheltenham, England: Edward Elgar.
- Becker, T. E., & Billings, R. S. (1993). Profiles of commitment: An empirical test. *Journal of Organizational Behavior, 14*, 177-190.
- Blau, G., & Lunz, M. (1998). Testing the incremental effect of professional commitment on intent to leave one's profession beyond the effects of external, personal, and work-related variables. *Journal of Vocational Behavior*, 52, 260-269.
- Blau, P. (1964). Exchange and power in social life. New York, NY: John Wiley and Sons.

- Camelo-Ordaz, C., García-Cruz, J., Sousa-Ginel, E., & Valle-Cabrera, R. (2011). The influence of human resource management in Spain: The mediating role of affective commitment. *The International Journal of Human Resource Management*, *22*(7), 1442-1463.
- Cesário, F., & Chambel, M. J. (2017). Linking organizational commitment and work engagement to employee performance. *Knowledge and Process Management, 24*(2), 152-158.
- Chan, D. (1998). The conceptualization and analysis of change over time: An integrative approach incorporating longitudinal mean and covariance structures analysis (LMACS) and multiple indicator latent growth modeling (MLGM). *Organizational Research Methods, 1*(4), 421-483.
- Chang, P. C., & Chen, S. J. (2011). Crossing the level of employee's performance: HPWS, affective commitment, human capital, and employee job performance in professional service organizations. *The International Journal of Human Resource Management, 22*(4), 883-901.
- Chordiya, R., Sabharwal, M., & Goodman, D. (2017). Affective organizational commitment and job satisfaction: A cross-national comparative study. *Public Administration*, *95*(1), 178-195.
- Coleman, V. I., & Borman, W. C. (2000). Investigating the underlying structure of the citizenship performance domain. *Human Resource Management, 10,* 25-44.
- Cooper-Hakim, A., & Viswesvaran, C. (2005). The construct of work commitment: Testing an integrative framework. *Psychological Bulletin*, *131*(2), 241-259.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal* of Management, 31(6), 874-900.
- Damanpour, F., Szabat, K. A., & Evan, W. M. (1989). The relationship between types of innovation and organizational performance. *Journal of Management Studies, 26*(6), 587-601.
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behavior. *Creativity and innovation management, 19*(1), 23-36.
- Den Hartog, D. N., & Verburg, R. M. (2004). High performance work systems, organisational culture and firm effectiveness. *Human Resource Management Journal,* 14(1), 55-78.
- Donaldson, S. I., Ensher, E. A., & Grant-Vallone, E. J. (2000). Longitudinal examination of mentoring relationships on organizational commitment and citizenship behavior. *Journal of Career Development, 26*(4), 233-249.

Dorenbosch, L., Van Engen, M. L., & Verhagen, M. (2005). On-the-job innovation: The impact

of job design and human resource management through production ownership. *Creativity and Innovation Management*, 14(2), 129-141.

- Etzioni, A. (1975). *A comparative analysis of complex organizations: On power, involvement, and their correlates.* New York, NY: Free Press.
- Fan, X., Miller, B. C., Park, K. E., Winward, B. W., Christensen, M., Grotevant, H. D., & Tai, R. H. (2006).
 An exploratory study about inaccuracy and invalidity in adolescent self-report surveys. *Field Methods*, *18*(3), 223-244.
- Field, A. (2009). *Discovering statistics using SPSS (and sex and drugs and rock 'n' roll)*. Los Angeles, LA: Sage Publications.
- Gellatly, I. R., Meyer, J. P., & Luchak, A. A. (2006). Combined effects of the three commitment components on focal and discretionary behaviors: A test of Meyer and Herscovitch's propositions. *Journal of Vocational Behavior*, 69, 331-345.
- Graham, J. W. (1991). An essay on organizational citizenship behavior. *Employee Responsibilities and Rights Journal, 4*(4), p. 249-270.
- Gordon, M. E., Philpot, J. W., Burt, R.E., Thompson, C. A., & Spiller, W. E. (1980). Commitment to the union: Development of a measure and an examination of its correlates. *Journal of Applied Psychology, 65*, 479-499.
- Gouldner, A.W. (1960). The norm of reciprocity: a preliminary statement. *American Sociological Review*, *25*(2), 161-178.
- Hakimian, F., Farid, H., Ismail, M. N., & Nair, P. K. (2016). Importance of commitment in encouraging employees' innovative behaviour. *Asia-Pacific Journal of Business Administration*, 8(1), 70-83.
- Hou, Y., Gao, G., Wang, F., Li, T., & Yu, Z. (2011). Organizational commitment and creativity: The influence of thinking style. *Annals of Economic and Finance, 12*(2), 411-431.
- Jafri, M. H. (2010). Organizational commitment and employee's innovative behavior. A study in retail sector. *Journal of Management Research*, *10*(1), 62-68.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behavior. *Journal of Occupational and Organizational Psychology*, *73*, 287-302.
- Janssen, O., Van de Vliert, E., & West, M. (2004). The bright and dark sides of individual and group innovation: A special issue introduction. *Journal of Organizational Behavior, 25*, 129-145.

- Kanter, R. M. (1968). Commitment and social organization: A study of commitment mechanisms in utopian communities. *American Sociological Review, 33*(4), 499-517.
- Kanter, R. M. (1996). When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organizations. In P. S. Myers (Ed.), *Knowledge management and organizational design* (pp. 93-132). Boston: Butterworth-Heinemann. (Reprinted from *Research in organizational behavior*, pp. 169-211, by B. M. Staw & L. L. Cummings (Eds.), 1988, Greenwich, CT: JAI Press).
- Kazemipour, F., Amin, S. M., & Pourseidi, B. (2012). Relationship between workplace spirituality and organizational citizenship behavior among nurses through mediation of affective organizational commitment. *Journal of Nursing Scholarship, 44*(3), 302-310.
- Kiesler, C. A. (1971). *The psychology of commitment: Experiments linking behavior to belief.* New York, NY: Academic Press.
- Klein, H. J., Molley, J. C., & Brinsfield, C. B. (2012). Reconceptualizing workplace commitment to redress a stretched construct: Revisiting assumptions and removing confounds. Academy of Management Review, 37, 130-151.
- Klein, H. J., & Park, H. M. (2016). Commitment as a unidimensional construct. In J. P. Meyer (Ed.), Handbook of employee commitment (pp. 15-27). Cheltenham, England: Edward Elgar.
- Lau, P. Y. Y., McLean, G. N., Lien, B. Y., & Hsu, Y. (2016). Self-rated and peer-rated organizational citizenship behavior, affective commitment, and intention to leave in a Malaysian context. *Personnel Review*, 45(3), 569-592.
- Lambert, S. J. (2000). Added benefits: The link between work-life benefits and organizational citizenship behavior. *Academy of Management Journal, 43*(5), 801-815.
- Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology, 87, 131-142.*
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *The Journal of Applied Psychology, 87,* 52–65.
- Lok, P., & Crawford, J. (2004). The effect of organisational culture and leadership style on job satisfaction and organisational commitment: A cross-national comparison. *Journal of Management Development, 23*(4), 321-338.

March, J. G., & Simon, H. A. (1958). Organizations. New York, NY: Wiley.

- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, *108*(2), 171-194.
- Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment: An integrative literature review. *Human Resource Development Review*, *14(4)*, 389-414.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, *1*, 61-89.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research and application*. Los Angeles, LA: Sage Publications.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace. Toward a general model. *Human Resource Management Review, 11,* 299-326.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61*, 20-52.
- Moorman, R. H., Niehoff, B. P., & Organ, D. W. (1993). Treating employees fairly and organizational citizenship behavior: Sorting the effects of job satisfaction, organizational commitment, and procedural justice. *Employee Responsibilities and Rights Journal*, *6*(3), 209-225.
- Morrison, E. W. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Academy of Management Journal, 37*(6), 1543-1567.
- Motowidlo, S. J. (2000). Some basic issues related to contextual performance and organizational citizenship behavior in human resource management. *Human Resource Management Review, 10*(1), 115-126.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organizational linkages: The psychology of commitment, absenteeism, and turnover.* New York, NY: Academic Press.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior, 14,* 224-247.
- Mumford, M., & Gustafson, S. (1988). Creativity syndrome: Integration, application, and innovation. *Psychological Bulletin, 103,* 27-43.

- Ng, T. W. H., & Feldman, D. C. (2011). Affective organizational commitment and citizenship behavior: Linear and non-linear moderating effects of organizational tenure. *Journal of Vocational Behavior, 79,* 528–537.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification and internalization on prosocial behavior. *The Journal of Applied Psychology*, *71*, 492–499.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal, 34,* 487-516.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome.* Chicago, IL: Lexington Books/DC Health & Company.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct cleanup time. *Human Performance, 10*(2), 85-97.
- Organ, D. W., & Ryan, K. (1995). A meta-analytical review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology, 48,* 775–802.
- Pallant, J. SPSS survival manual: A step by step guide to data analysis using SPSS. Maidenhead, England: Open University Press McGraw-Hill.
- Pan, Y., & Jackson, R. T. (2008). Ethnic difference in the relationship between acute inflammation and serum ferritin in US adult males. *Epidemiology and Infection, 136*, 421-431.
- Patterson, M.G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., Robinson, D. L.,
 & Wallace, A. M. (2005). Validating the organizational climate measure: Links to managerial practices, productivity and innovation. *Journal of Organizational Behavior, 26*, 379-408.
- Pearce, J. L. (1993). Toward an organizational behavior of contract laborers: Their psychological involvement and effects on employee co-workers. *Academy of Management Journal*, 36(5), 1082-1096.
- Penley, L. E., & Gould, S. (1988). Etzioni's model of organizational involvement: A perspective for understanding commitment to organizations. *Journal of Organizational Behavior, 9,* 43-59.
- Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design and analysis of change. *Journal of Management*, *36*(1), 94-120.

- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behavior: A meta-analysis. *Journal of Applied Psychology*, 94(1), 122-141.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879-903.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management, 26*(3), 513-563.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology, 63*, 539-569.
- Riketta, M. (2002). Attitudinal organizational commitment and job performance: A meta-analysis. Journal of Organizational Behavior, 23, 257-266.
- Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of Vocational Behavior, 66,* 358-384.
- Rotondo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology, 87*(1), 66-80.
- Sanders, K., Cogin, J. A., & Bainbridge, H. T. J. (Eds.) (2013). *Research methods for human resource management*. Retrieved from <u>http://ebookcentral.proquest.com</u>
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research methods for business students*. Retrieved from http://lib.myilibrary.com/Open.aspx?id=819487
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal, 37*(3), 580-607.
- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology*, *78*(5), 774-780.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology, 68*(4), 653-663.

- Spanuth, T., & Wald, A. (2017). How to unleash the innovative work behavior of project staff? The role of affective and performance-based factors. *International Journal of Project Management, 35*, 1302-1311.
- Stanley, D. J., & Meyer, J. P. (2016). Employee commitment and performance. In J. P. Meyer (Ed.), Handbook of employee commitment (pp. 209-221). Cheltenham: Edward Elgar.
- Steckler, A., McLeroy, K. R., Goodman, R. M., Bird, S. T., & McCormick, L. (1992). Toward integrating qualitative and quantitative methods: An introduction. *Health Education & Behavior, 19*(1), 1-8.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quaterly, 63*(3), 224-237.
- Sun, L., Aryee, S., & Law, K. S. (2007). High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal*, *50*(3), 558-577.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin & S.
 Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33-47). Monterey, CA:
 Brooks/Cole.
- Tajfel, H. (1982). Social psychology of intergroup relations. Annual Review of Psychology, 33, 1-39.
- Thompson, M., & Heron, P. (2006). Relational quality and innovative performance in R&D based science and technology firms. *Human Resource Management Journal, 16*(1), 28-47.
- Van de Ven, A. (1986). Central problems in the management of innovation. *Management Science, 32*(5), 590-607.
- Van Knippenberg, D., Van Dick, R., & Tavares, S. (2007). Social identity and social exchange: Identification, support, and withdrawal from the job. *Journal of Applied Social Psychology, 37*(3), 457-477.
- Van Dyne, L., & Ang, S. (1998). Organizational citizenship behavior of contingent workers in Singapore. *Academy of Management Journal*, *41*(6), 692-703.
- Van Dyne, L., Graham J., & Dienesch R. M. (1994). Organizational citizenship behavior: Construct redefinition, operationalization, and validation. *Academy of Management Journal*, *37*, 765-802.

- Van Dyne, L., & LePine J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal, 42*, 108-119.
- Vey, M. A., & Campbell, J. P. (2004). In-role or extra-role organizational citizenship behavior: Which are we measuring?. *Human Performance*, *17*(1), 119-135.
- Wagner, F. (1993). No commitment? No R&D success, R&D Innovator, 2(7).
- Wallace, J. E. (1995). Organizational and professional commitment in professional and nonprofessional organizations. *Administrative Science Quarterly, 40*, 228-255.
- Welbourne, T. M., Johnson, D. E., & Erez, A. (1998). The role-based performance scale: Validity analysis and theory-based measure. *Academy of Management Journal, 41*, 540-555.
- West, M. A., & Anderson, N. R. (1996). Innovation in top management teams. *Journal of Applied Psychology*, *81*(6), 680-693.
- West, M. A., & Farr, J. L. (1990). Innovation at work. In M. A. West & J. L. Farr (Eds.), Innovation and creativity at work: Psychological and organizational strategies (pp. 3-13). Chichester: John Wiley & Sons.
- Wiener, Y. (1982). Commitment in organizations: A normative view. *Academy of Management Review*, *7*(3), 418-428.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management, 17,* 601-617.
- Xerri, M. J., & Brunetto, Y. (2013). Fostering innovative behavior: The importance of employee commitment and organizational citizenship behavior. *The International Journal of Human Resource Management, 24*(16), 3163-3177.
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, *44*(4), 682-696.

Appendices

Appendix 1

Statistics

employee manager

Ν	Valid	3222
	Missing	0

employee manager

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	employee	2839	88,1	88,1	88,1
	manager or supervisor	383	11,9	11,9	100,0
	Total	3222	100,0	100,0	

Statistics

Organisation size

N	Valid	2407
	Missing	815

Cumulative Frequency Percent Valid Percent Percent Valid < 25 99 3,1 4,1 4,1 26-100 441 13,7 18,3 22,4 22,0 101-500 529 16,4 44,4 501-1000 429 13,3 17,8 62,2 > 1000 909 28,2 37,8 100,0 Total 2407 74,7 100,0 Missing -999,00 815 25,3 Total 3222 100,0

Organisation size
Statistics

Org_Industry

N	Valid	2240
	Missing	982

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Energy and water	247	7,7	11,0	11,0
	Chemical products	224	7,0	10,0	21,0
	Metal manufacturing	114	3,5	5,1	26,1
	Other manufacturing (food, drink and tobacco, textiles, paper, plastics, etc.)	209	6,5	9,3	35,4
	Building and civil engineering	4	,1	,2	35,6
	Retail and distribution, tourism, catering, repairs	343	10,6	15,3	50,9
	Transport and communication	52	1,6	2,3	53,3
	Financial services and business services (consulting, law firms, advertising, etc.)	583	18,1	26,0	79,3
	Personal, domestic and recreational services	4	,1	,2	79,5
	Health services	77	2,4	3,4	82,9
	Education	330	10,2	14,7	97,6
	Social Services	1	,0	,0	97,7
	Other services (TV and Radio, R&D, charities, etc)	2	,1	,1	97,8
	Public administration	14	,4	,6	98,4
	16,00	36	1,1	1,6	100,0
	Total	2240	69,5	100,0	
Missing	-999,00	982	30,5		
Total		3222	100,0		

Statistics

country name

Ν	Valid	3222
	Missing	0

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Oman	107	3,3	3,3	3,3
	UK	100	3,1	3,1	6,4
	Denmark	264	8,2	8,2	14,6
	China	178	5,5	5,5	20,1
	Tanzania	110	3,4	3,4	23,6
	Nigeria	333	10,3	10,3	33,9
	Malaysia	103	3,2	3,2	37,1
	Indonesia	114	3,5	3,5	40,6
	Portugal	1426	44,3	44,3	84,9
	Norway	165	5,1	5,1	90,0
	Spain	322	10,0	10,0	100,0
	Total	3222	100,0	100,0	

country name

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure	,919	
Bartlett's Test of Sphericity	Approx. Chi-Square	17841,202
	df	136
	Sig.	,000

Communalities

	Initial	Extraction
This organisation has a great deal of personal meaning for me (OC)	1,000	,474
OrgCommitment_item1_recoded	1,000	,708
OrgCommitment_item2_recoded	1,000	,670
OrgCommitment_item3_recoded	1,000	,713
I attend functions that I?m not required to but that help the organisational image (OCB)	1,000	,352
I keep up with developments in the organisation (OCB)	1,000	,478
I defend the organisation when other employees criticize it (OCB)	1,000	,700
I am proud when representing the organisation in public (OCB)	1,000	,685
I offer ideas to improve the functioning of the organisation (OCB)	1,000	,579
I express loyalty toward the organisation (OCB)	1,000	,610
I take action to protect the organisation from potential problems (OCB)	1,000	,604
I demonstrate concern about the image of the organisation (OCB)	1,000	,579
I often generate creative ideas (IB)	1,000	,674
I promote and champion ideas to others (IB)	1,000	,585
I investigate and secure funds needed to implement new ideas (IB)	1,000	,606
I develop adequate plans and schedules for the implementation of new idea (IB)	1,000	,689
I am an innovative person (IB)	1,000	,571

Extraction Method: Principal Component Analysis.

Total Variance Explained

Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings				
Compo		% of	Cumulative		% of			% of	
nent	Total	Variance	%	Total	Variance	Cumulative %	Total	Variance	Cumulative %
1	6,870	40,412	40,412	6,870	40,412	40,412	4,258	25,048	25,048
2	2,273	13,373	53,785	2,273	13,373	53,785	3,733	21,960	47,007
3	1,134	6,669	60,454	1,134	6,669	60,454	2,286	13,447	60,454
4	,948	5,577	66,032						
5	,669	3,936	69,968						
6	,652	3,837	73,805						
7	,589	3,466	77,271						
8	,528	3,106	80,377						
9	,498	2,930	83,308						
10	,434	2,555	85,862						
11	,423	2,490	88,352						
12	,397	2,336	90,688						
13	,395	2,324	93,012						
14	,319	1,874	94,886						
15	,311	1,830	96,716						
16	,294	1,727	98,443						
17	,265	1,557	100,000						

Extraction Method: Principal Component Analysis.



Component	Matrix ^a
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	C	component	
	1	2	3
This organisation has a great deal of personal meaning for me (OC)	,603		
OrgCommitment_item1_recoded		,755	
OrgCommitment_item2_recoded		,733	
OrgCommitment_item3_recoded		,759	
I attend functions that I?m not required to but that help the organisational image (OCB)	,493		
I keep up with developments in the organisation (OCB)	,658		
I defend the organisation when other employees criticize it (OCB)	,728		-,397
I am proud when representing the organisation in public (OCB)	,761		
I offer ideas to improve the functioning of the organisation (OCB)	,748		
I express loyalty toward the organisation (OCB)	,750		
I take action to protect the organisation from potential problems (OCB)	,765		
I demonstrate concern about the image of the organisation (OCB)	,750		
I often generate creative ideas (IB)	,690	-,335	
I promote and champion ideas to others (IB)	,716		
I investigate and secure funds needed to implement new ideas (IB)	,628	-,328	,321
I develop adequate plans and schedules for the implementation of new idea (IB)	,669	-,308	,383
I am an innovative person (IB)	,642	-,311	

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

Rotated Component Matrix^a

	Component		
	1	2	3
This organisation has a great deal of personal meaning for me (OC)	,631		
OrgCommitment_item1_recoded			,835
OrgCommitment_item2_recoded			,809
OrgCommitment_item3_recoded			,833
I attend functions that I?m not required to but that help the organisational image (OCB)	,532		
I keep up with developments in the organisation (OCB)	,625		
I defend the organisation when other employees criticize it (OCB)	,814		
I am proud when representing the organisation in public (OCB)	,773		
I offer ideas to improve the functioning of the organisation (OCB)	,479	,584	
I express loyalty toward the organisation (OCB)	,682	,318	
I take action to protect the organisation from potential problems (OCB)	,654	,389	
I demonstrate concern about the image of the organisation (OCB)	,635	,382	
I often generate creative ideas (IB)		,776	
I promote and champion ideas to others (IB)	,362	,666	
I investigate and secure funds needed to implement new ideas (IB)		,750	
I develop adequate plans and schedules for the implementation of new idea (IB)		,806	
I am an innovative person (IB)		,706	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 5 iterations.

Component Transformation Matrix

Component	1	2	3
1	,736	,644	,209
2	,130	-,437	,890
3	-,665	,627	,406

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Case Processing Summary

		Ν	%
Cases	Valid	2475	76,8
	Excluded ^a	747	23,2
	Total	3222	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's	
Alpha	N of Items
,757	4

Item Statistics

	Mean	Std. Deviation	Ν
This organisation has a great deal of personal meaning for me (OC)	4,4172	1,19409	2475
OrgCommitment_item1_recoded	4,0251	1,40855	2475
OrgCommitment_item2_recoded	3,9810	1,42192	2475
OrgCommitment_item3_recoded	4,1693	1,38243	2475

Item-Total Statistics

				Cronbach's
	Scale Mean if	Scale Variance if Item	Corrected Item-Total	Alpha if Item
	Item Deleted	Deleted	Correlation	Deleted
This organisation has a great deal of	10 1754	12 920	201	000
personal meaning for me (OC)	12,1754	12,020	,321	,000
OrgCommitment_item1_recoded	12,5675	9,472	,638	,651
OrgCommitment_item2_recoded	12,6116	9,426	,635	,653
OrgCommitment_item3_recoded	12,4233	9,605	,639	,652

Mean	Variance	Std. Deviation	N of Items
16,5926	16,991	4,12196	4

Case Processing Summary

		Ν	%
Cases	Valid	2494	77,4
	Excluded ^a	728	22,6
	Total	3222	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's	
Alpha	N of Items
,808,	3

Item Statistics

	Mean	Std. Deviation	Ν
OrgCommitment_item1_recoded	4,0200	1,41066	2494
OrgCommitment_item2_recoded	3,9767	1,42335	2494
OrgCommitment_item3_recoded	4,1620	1,38361	2494

Item-Total Statistics

	Scale Mean if	Scale Variance	Corrected Item-	Cronbach's Alpha
	Item Deleted	if Item Deleted	Total Correlation	if Item Deleted
OrgCommitment_item1_recoded	8,1387	6,205	,664	,730
OrgCommitment_item2_recoded	8,1820	6,258	,643	,752
OrgCommitment_item3_recoded	7,9968	6,328	,664	,731

Mean	Variance	Std. Deviation	N of Items
12,1588	12,861	3,58626	3

Case Processing Summary

-		Ν	%
Cases	Valid	2198	68,2
	Excluded ^a	1024	31,8
	Total	3222	100,0

a. Listwise deletion based on all variables in the

procedure.

Reliability Statistics

-	-
Cronbach's	
Alpha	N of Items
,875	8

Item Statistics

	Mean	Std. Deviation	Ν
I attend functions that I?m not required to but that help the organisational image (OCB)	4,2330	1,24324	2198
I keep up with developments in the organisation (OCB)	4,4281	1,06491	2198
I defend the organisation when other employees criticize it (OCB)	4,5563	1,00121	2198
I am proud when representing the organisation in public (OCB)	4,7306	,98290	2198
I offer ideas to improve the functioning of the organisation (OCB)	4,4843	,99171	2198
I express loyalty toward the organisation (OCB)	4,7630	,98267	2198
I take action to protect the organisation from potential problems (OCB)	4,7252	,91367	2198
I demonstrate concern about the image of the organisation (OCB)	4,7685	,93123	2198

Item-Total Statistics

	Scale	Scale		Cronbach's
	Mean if	Variance if	Corrected	Alpha if
	Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
I attend functions that I?m not required to but that help the	32 4560	28 138	/31	887
organisational image (OCB)	32,4300	20,130	, 4 01	,007
I keep up with developments in the organisation (OCB)	32,2609	27,599	,593	,864
I defend the organisation when other employees criticize it (OCB)	32,1327	27,024	,705	,852
I am proud when representing the organisation in public (OCB)	31,9584	26,968	,728	,849
I offer ideas to improve the functioning of the organisation (OCB)	32,2047	27,727	,637	,859
I express loyalty toward the organisation (OCB)	31,9260	27,328	,688	,854
I take action to protect the organisation from potential problems (OCB)	31,9638	27,822	,696	,854
I demonstrate concern about the image of the organisation (OCB)	31,9205	27,890	,672	,856

Mean	Variance	Std. Deviation	N of Items
36,6890	35,366	5,94695	8

Case Processing Summary

-		Ν	%
Cases	Valid	2594	80,5
	Excluded ^a	628	19,5
	Total	3222	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's	-
Alpha	N of Items
,853	5

Item Statistics

	Mean	Std. Deviation	Ν
I often generate creative ideas (IB)	4,5129	1,08478	2594
I promote and champion ideas to others (IB)	4,5823	1,08241	2594
I investigate and secure funds needed to implement new ideas (IB)	4,1106	1,27820	2594
I develop adequate plans and schedules for the implementation of new idea (IB)	4,1763	1,20169	2594
I am an innovative person (IB)	4,6533	1,05413	2594

Item-Total Statistics

	Scale	Scale		Cronbach's
	Mean if	Variance if	Corrected	Alpha if
	Item	Item	Item-Total	Item
	Deleted	Deleted	Correlation	Deleted
I often generate creative ideas (IB)	17,5225	13,743	,707	,813
I promote and champion ideas to others (IB)	17,4531	14,322	,624	,834
I investigate and secure funds needed to implement new ideas (IB)	17,9247	13,108	,634	,835
I develop adequate plans and schedules for the implementation of new idea (IB)	17,8591	12,974	,715	,810
I am an innovative person (IB)	17,3821	14,213	,665	,824

Mean	Variance	Std. Deviation	N of Items
22,0354	20,607	4,53954	5

Case Processing Summary

		Ν	%
Cases	Valid	2970	92,2
	Excluded ^a	252	7,8
	Total	3222	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics



Item Statistics

	Mean	Std. Deviation	Ν
EMPLOYEES AND SUPERVISORS I am given a real opportunity to improve	4,6551	1,26515	2970
my skills through education and training programs			
I have had sufficient job-related training	4,5629	1,21907	2970
I receive on-going training, which enables me to do my job better	4,3446	1,32219	2970
HR practices here help me a great deal to develop my knowledge and skills	4,1619	1,34638	2970

Item-Total Statistics

	Scale Mean if	Scale Variance	Corrected Item-	Cronbach's Alpha
	Item Deleted	if Item Deleted	Total Correlation	if Item Deleted
EMPLOYEES AND SUPERVISORS I am given a real	13,0694	11,114	,725	,819
opportunity to improve my skills through education				
and training programs				
I have had sufficient job-related training	13,1616	11,842	,656	,846
I receive on-going training, which enables me to do	13,3800	10,365	,789	,791
my job better				
HR practices here help me a great deal to develop	13,5626	10,991	,675	,840
my knowledge and skills				

Mean	Variance	Std. Deviation	N of Items
17,7246	18,832	4,33961	4

Case Processing Summary

		Ν	%
Cases	Valid	2211	68,6
	Excluded ^a	1011	31,4
	Total	3222	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics



Item Statistics

	Mean	Std. Deviation	Ν
New ideas are readily accepted here	4,2756	1,14455	2211
This organisation is quick to respond when changes need to be made	4,1860	1,23230	2211
This organisation is very flexible	4,1318	1,22692	2211
People in this organisation are always searching for new ways	4,2589	1,07754	2211

Item-Total Statistics

	Scale Mean	Scale	Corrected Item-	Cronbach's
	if Item	Variance if	Total	Alpha if Item
	Deleted	Item Deleted	Correlation	Deleted
New ideas are readily accepted here	12,5767	9,720	,651	,854
This organisation is quick to respond when changes	12,6664	8,505	,786	,799
need to be made				
This organisation is very flexible	12,7205	8,623	,770	,806
People in this organisation are always searching for	12,5934	9,998	,663	,850
new ways				

Mean	Variance	Std. Deviation	N of Items
16,8524	15,675	3,95923	4

Statistics

Age_in_years

Ν	Valid	1867
	Missing	1355
Mean		35,9330

Statistics

Gender

Ν	Valid	2930
	Missing	292

Gender

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	woman	1307	40,6	44,6	44,6
	Man	1623	50,4	55,4	100,0
	Total	2930	90,9	100,0	
Missing	-999,00	292	9,1		
Total		3222	100,0		

Statistics

Tenure_Years

Ν	Valid	1823
	Missing	1399
Mean		9,9074

Statistics

Position

Ν	Valid	1692
	Missing	1530

					Cumulative					
		Frequency	Percent	Valid Percent	Percent					
Valid	Top manager	87	2,7	5,1	5,1					
	Middle manager	324	10,1	19,1	24,3					
	Professional	508	15,8	30,0	54,3					
	Administrative	271	8,4	16,0	70,3					
	Technical	460	14,3	27,2	97,5					
	Manual	42	1,3	2,5	100,0					
	Total	1692	52,5	100,0						
Missing	-999,00	1530	47,5							
Total		3222	100,0							

Position

Descriptive Statistics

	Mean	Std. Deviation	Ν
Affective OrgCommitment first 3 items recoded	4,0458	1,20413	2533
OCB 8 items, alpha .875	4,5858	,74550	2236
IB 5 items alpha .853	4,4102	,90913	2621
Extensive Training 4 items	4,4385	1,09060	3014
Innovative Organizational Climate 4 items	4,2115	,99019	2221
Age_in_years	35,9330	10,07758	1867
Tenure_Years	9,9074	47,70878	1823

Correlations

		Affective	OCB 8	IB 5		Innovative		
		OrgCommitme	items,	items	Extensive	Organizatio		
		nt first 3 items	alpha	alpha	Training 4	nal Climate	Age_in	Tenure_
		recoded	.875	.853	items	4 items	_years	Years
Affective	Pearson Correlation	1	,252**	,061**	,204**	,143**	,042	,045*
OrgCommitment	Sig. (1-tailed)		,000	,001	,000	,000	,052	,041
first 3 items	Ν	2533	2236	2520	2533	2126	1535	1/105
recoded		2000	2200	2023	2000	2120	1000	1435
OCB 8 items,	Pearson Correlation	,252**	1	,678**	,422**	,475**	-,007	-,005
alpha .875	Sig. (1-tailed)	,000		,000	,000	,000	,386	,433
	Ν	2236	2236	2234	2236	2124	1535	1202
IB 5 items alpha	Pearson Correlation	,061**	,678**	1	,354**	,408**	-,018	,011
.853	Sig. (1-tailed)	,001	,000		,000	,000	,241	,341
	Ν	2529	2234	2621	2621	2206	1534	1501
Extensive	Pearson Correlation	,204**	,422**	,354**	1	,523**	-,063**	-,046*
Training 4 items	Sig. (1-tailed)	,000	,000	,000		,000	,004	,026
	Ν	2533	2236	2621	3014	2221	1788	1755
Innovative	Pearson Correlation	,143**	,475**	,408**	,523**	1	-,107**	-,078**
Organizational	Sig. (1-tailed)	,000	,000	,000	,000		,000	,004
Climate 4 items	Ν	2126	2124	2206	2221	2221	1449	1131
Age_in_years	Pearson Correlation	,042	-,007	-,018	-,063**	-,107**	1	,120**
	Sig. (1-tailed)	,052	,386	,241	,004	,000		,000
	Ν	1535	1535	1534	1788	1449	1867	1493
Tenure_Years	Pearson Correlation	,045*	-,005	,011	-,046*	-,078**	,120**	1
	Sig. (1-tailed)	,041	,433	,341	,026	,004	,000	
	Ν	1495	1202	1501	1755	1131	1493	1823

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Zscore: Gender, Dummy variable for position 6 = manual,		
	Dummy variable for position 1 = top manager, Zscore:		
	Tenure_Years, Dummy variable for position 2 = middle		Enter
	manager, Zscore: Age_in_years, Dummy variable for position 4		
	= administrative, Dummy variable for position 5 = technical ^b		
2	Zscore: Affective OrgCommitment first 3 items recoded ^b		Enter

a. Dependent Variable: OCB 8 items, alpha .875

b. All requested variables entered.

Model Summary^c

		-			Change Statistics						
			Adjusted	Std. Error of the	R Square			Sig. F			
Model	R	R Square	R Square	Estimate	Change	F Change	df1	df2	Change		
1	,143 ^a	,020	,013	,77287	,020	2,803	8	1081	,004		
2	,213 ^b	,046	,038	,76321	,025	28,550	1	1080	,000		

a. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded

c. Dependent Variable: OCB 8 items, alpha .875

[Sum of				
Mode	el	Squares	df	Mean Square	F	Sig.
1	Regression	13,393	8	1,674	2,803	,004 ^b
	Residual	645,716	1081	,597		
	Total	659,109	1089			
2	Regression	30,023	9	3,336	5,727	,000 ^c
	Residual	629,086	1080	,582		
	Total	659,109	1089			

ANOVA^a

a. Dependent Variable: OCB 8 items, alpha .875

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded

-		Unstan	dardized	Standardized				
		Coef	ficients	Coefficients			Collinearity	/ Statistics
Mode	1	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4,584	,039		118,240	,000		
	Dummy variable for position 1 = top manager	,526	,203	,079	2,589	,010	,977	1,024
	Dummy variable for position 2 = middle manager	,174	,099	,056	1,763	,078	,891	1,122
	Dummy variable for position 4 = administrative	,035	,069	,017	,514	,607	,785	1,273
	Dummy variable for position 5 = technical	-,127	,056	-,078	-2,263	,024	,772	1,295
	Dummy variable for position 6 = manual	,030	,138	,007	,219	,827	,950	1,052
	Zscore: Age_in_years	-,006	,025	-,008	-,248	,804	,950	1,053
	Zscore: Tenure_Years	,003	,018	,004	,139	,889	,986,	1,014
	Zscore: Gender	,045	,024	,057	1,840	,066	,931	1,074
2	(Constant)	4,595	,038		119,851	,000		
	Dummy variable for position 1 = top manager	,474	,201	,071	2,360	,018	,975	1,026
	Dummy variable for position 2 = middle manager	,156	,097	,050	1,601	,110	,890	1,123
	Dummy variable for position 4 = administrative	,013	,068	,006	,189	,850	,782	1,278
	Dummy variable for position 5 = technical	-,120	,055	-,073	-2,170	,030	,772	1,296
	Dummy variable for position 6 = manual	,075	,137	,017	,546	,585	,947	1,056
	Zscore: Age_in_years	-,009	,024	-,012	-,390	,697	,949	1,053
	Zscore: Tenure_Years	-,002	,018	-,003	-,093	,926	,984	1,016
	Zscore: Gender	,048	,024	,062	2,005	,045	,931	1,074
	Zscore: Affective OrgCommitment first 3 items recoded	,123	,023	,160	5,343	,000	,980	1,020

Coefficients^a

a. Dependent Variable: OCB 8 items, alpha .875

Excluded Variables^a

						Collinearity Statistics		tistics
Model		Beta In	t	Sig.	Partial Correlation	Tolerance	VIF	Minimum Tolerance
1	Zscore: Affective OrgCommitment first 3 items recoded	,160 ^b	5,343	,000	,160	,980	1,020	,772

a. Dependent Variable: OCB 8 items, alpha .875

b. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical

	-						Vari	ance Proportio	ns				
													Zscore:
													Affective
					Dummy		Dummy	Dummy	Dummy				OrgComm
					variable for	Dummy variable	variable for	variable for	variable for	Zscore:	Zscore:		itment first
			Condition		position 1 =	for position 2 =	position 4 =	position 5 =	position 6 =	Age_in_	Tenure_	Zscore:	3 items
Model	Dimension	Eigenvalue	Index	(Constant)	top manager	middle manager	administrative	technical	manual	years	Years	Gender	recoded
1	1	1,812	1,000	,10	,01	,02	,04	,08	,01	,01	,00	,00	
	2	1,309	1,176	,00	,00	,01	,15	,04	,00	,14	,02	,24	
	3	1,137	1,262	,00	,00	,33	,04	,00	,01	,23	,05	,11	
	4	1,025	1,329	,00	,06	,07	,00	,06	,15	,00	,53	,00	
	5	1,000	1,346	,00	,74	,00	,00	,00,	,21	,00	,00	,00	
	6	,990	1,353	,00	,14	,03	,02	,00	,51	,00	,23	,00	
	7	,796	1,509	,00	,00	,32	,02	,01	,00	,50	,08	,19	
	8	,729	1,577	,00	,00	,00	,25	,14	,00	,12	,09	,45	
	9	,203	2,987	,90	,05	,21	,46	,67	,11	,00	,00	,00	
2	1	1,825	1,000	,10	,00	,02	,04	,08	,01	,01	,00	,00	,01
	2	1,347	1,164	,00	,00	,01	,14	,02	,00	,12	,03	,19	,07
	3	1,140	1,265	,00	,00	,31	,05	,00	,01	,18	,05	,14	,01
	4	1,050	1,318	,00	,14	,04	,00	,04	,33	,05	,03	,01	,24
	5	1,021	1,337	,00	,30	,05	,00	,04	,01	,00	,50	,00	,02
	6	,991	1,357	,00	,39	,04	,02	,00,	,26	,00	,23	,00	,00
	7	,906	1,419	,00	,11	,00	,00	,00,	,24	,07	,00	,02	,60
	8	,794	1,516	,00	,00	,32	,03	,01	,01	,44	,07	,23	,02
	9	,723	1,589	,00	,00	,00	,25	,15	,01	,12	,10	,40	,03
	10	,203	3,001	,90	,05	,21	,46	,66	,11	,00	,00	,00	,00

Collinearity Diagnostics^a

a. Dependent Variable: OCB 8 items, alpha .875

		Variables										
Model	Variables Entered	Removed	Method									
1	Zscore: Gender, Dummy variable for											
	position 6 = manual, Dummy variable											
	for position 1 = top manager, Zscore:											
	Tenure_Years, Dummy variable for		Entor									
	position 2 = middle manager, Zscore:		Enter									
	Age_in_years, Dummy variable for											
	position 4 = administrative, Dummy											
	variable for position 5 = technical ^b											
2	Zscore: Affective OrgCommitment		Entor									
	first 3 items recoded ^b		Enter									

-1/D

a. Dependent Variable: IB 5 items alpha .853

b. All requested variables entered.

Model Summary^c

					Change Statistics					
		R	Adjusted	Std. Error of	R Square					
Model	R	Square	R Square	the Estimate	Change	F Change	df1	df2	Sig. F Change	
1	,182ª	,033	,026	,85839	,033	4,645	8	1080	,000	
2	,186 ^b	,035	,027	,85817	,001	1,564	1	1079	,211	

a. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded

c. Dependent Variable: IB 5 items alpha .853

ANOVA^a

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27,382	8	3,423	4,645	,000 ^b
	Residual	795,780	1080	,737		
	Total	823,162	1088			
2	Regression	28,534	9	3,170	4,305	,000 ^c
	Residual	794,628	1079	,736		
	Total	823,162	1088			

a. Dependent Variable: IB 5 items alpha .853

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical
c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Gender, Dummy variable for position 2 = middle manager, Zscore: 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded

-		Unsta	ndardized	Standardized				
		Coe	fficients	Coefficients			Collinearity	/ Statistics
Mode	l	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4,384	,043		101,699	,000		
	Dummy variable for position 1 = top manager	,645	,226	,086	2,857	,004	,977	1,024
	Dummy variable for position 2 = middle manager	,165	,110	,048	1,503	,133	,891	1,123
	Dummy variable for position 4 = administrative	-,092	,076	-,040	-1,198	,231	,785	1,274
	Dummy variable for position 5 = technical	-,201	,062	-,109	-3,214	,001	,772	1,296
	Dummy variable for position 6 = manual	-,209	,153	-,042	-1,364	,173	,950	1,053
	Zscore: Age_in_years	-,043	,027	-,049	-1,583	,114	,950	1,053
	Zscore: Tenure_Years	,006	,020	,008	,281	,779	,986	1,014
	Zscore: Gender	,078	,027	,090	2,892	,004	,931	1,074
2	(Constant)	4,381	,043		101,511	,000		
	Dummy variable for position 1 = top manager	,659	,226	,088	2,915	,004	,975	1,026
	Dummy variable for position 2 = middle manager	,169	,110	,049	1,546	,123	,890	1,124
	Dummy variable for position 4 = administrative	-,086	,077	-,038	-1,119	,263	,782	1,279
	Dummy variable for position 5 = technical	-,202	,062	-,110	-3,242	,001	,771	1,296
	Dummy variable for position 6 = manual	-,221	,154	-,044	-1,438	,151	,947	1,056
	Zscore: Age_in_years	-,042	,027	-,048	-1,550	,121	,949	1,053
	Zscore: Tenure_Years	,007	,020	,010	,335	,738	,984	1,016
	Zscore: Gender	,078	,027	,089	2,859	,004	,931	1,075
	Zscore: Affective OrgCommitment first 3 items recoded	-,032	,026	-,038	-1,251	,211	,980	1,020

Coefficients^a

a. Dependent Variable: IB 5 items alpha .853

					Partial		Statistics	
Model		Beta In	t	Sig.	Correlation	n Tolerance VIF Minimur		Minimum Tolerance
1	Zscore: Affective							
	OrgCommitment first	-,038 ^b	-1,251	,211	-,038	,980	1,020	,771
	3 items recoded							

Excluded Variables^a

a. Dependent Variable: IB 5 items alpha .853

b. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical

		1			J	1	Va	ariance Proport	tions				
		 '	1		,	Dummy					· · ·		Zscore:
		i '	1	1	Dummy	variable for	Dummy	Dummy	Dummy	1	ļ		Affective
1		l '	1	1	variable for	position 2 =	variable for	variable for	variable for	Zscore:	Zscore:		OrgCommitme
1		 '	Condition	1	position 1 =	middle	position 4 =	position 5 =	position 6 =	Age_in_	Tenure_	Zscore:	nt first 3 items
Model	Dimension	Eigenvalue	Index	(Constant)	top manager	manager	administrative	technical	manual	years	Years	Gender	recoded
1	1	1,812	1,000	,10	,01	,02	,04	,08	,01	,01	,00	,00	
	2	1,310	1,176	,00	,00,	,01	,15	,04	,00	,14	,02	,24	
	3	1,137	1,263	,00	,00,	,33	,04	,00	,01	,23	,05	,11	
	4	1,025	1,330	,00	,06	,07	,00	,06	,15	,00	,53	,00	
	5	1,000	1,346	,00	,74	,00	,00	,00	,21	,00	,00	,00	'
	6	,990	1,353	,00	,14	,03	,02	,00	,51	,00	,23	,00	1
	7	,795	1,510	,00	,00,	,32	,02	,01	,00	,50	,08	,19	1
	8	,729	1,576	,00	,00	,00	,25	,14	,00	,12	,09	,45	1
	9	,203	2,990	,90	,05	,21	,46	,67	,11	,00	,00	,00	L
2	1	1,826	1,000	,09	,00	,02	,04	,08	,01	,01	,00	,00	,01
	2	1,347	1,164	,00	,00	,01	,14	,02	,00	,12	,03	,19	,07
	3	1,139	1,266	,00	,00	,31	,05	,00	,01	,18	,05	,14	,01
	4	1,051	1,318	,00	,14	,04	,00	,04	,33	,05	,03	,01	,24
	5	1,021	1,337	,00	,30	,05	,00,	,04	,01	,00	,50	,00	,02
	6	,991	1,357	,00	,39	,03	,02	,00	,26	,00	,23	,00	,00
	7	,906	1,419	,00	,11	,00	,00,	,00	,24	,07	,00	,02	,60
	8	,793	1,518	,00	,00	,32	,03	,01	,01	,44	,07	,23	,02
	9	,724	1,588	,00	,00	,00	,25	,15	,01	,12	,10	,40	,03
	10	,202	3,003	,90	,05	,21	,47	,66	,11	,00	,00	,00	,00

Collinearity Diagnostics^a

a. Dependent Variable: IB 5 items alpha .853

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Zscore: Gender, Dummy variable for position		
	6 = manual, Dummy variable for position 1 =		
	top manager, Zscore: Tenure_Years, Dummy		
	variable for position 2 = middle manager,		Enter
	Zscore: Age_in_years, Dummy variable for		
	position 4 = administrative, Dummy variable		
	for position 5 = technical ^b		
2	Zscore: Affective OrgCommitment first 3		
	items recoded, Zscore: Extensive Training 4		Enter
	items ^b		
3	COMxTRAINING ^b		Enter

a. Dependent Variable: OCB 8 items, alpha .875

b. All requested variables entered.

Model Summary^d

						С	hange Stat	istics	
			Adjusted	Std. Error of	R Square				Sig. F
Model	R	R Square	R Square	the Estimate	Change	F Change	df1	df2	Change
1	,143ª	,020	,013	,77287	,020	2,803	8	1081	,004
2	,463 ^b	,214	,207	,69293	,194	132,907	2	1079	,000
3	,464 ^c	,215	,207	,69263	,001	1,947	1	1078	,163

a. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items

c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items, COMxTRAINING

d. Dependent Variable: OCB 8 items, alpha .875

		Sum of				
Mode	.l	Squares	df	Mean Square	F	Sig.
1	Regression	13,393	8	1,674	2,803	,004 ^b
	Residual	645,716	1081	,597		
	Total	659,109	1089			
2	Regression	141,024	10	14,102	29,371	,000 ^c
	Residual	518,085	1079	,480		
	Total	659,109	1089			
3	Regression	141,958	11	12,905	26,901	,000 ^d
	Residual	517,151	1078	,480		
	Total	659,109	1089			

a. Dependent Variable: OCB 8 items, alpha .875

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1
= top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical

c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1

top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective
 OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items

d. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1
= top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective
OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items, COMxTRAINING

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ANOVA^a

Coefficients^a Unstandardized Standardized Collinearity Coefficients Coefficients Statistics Std. Model В Error Beta Sig. Tolerance VIF t 1 (Constant) 4,584 118,240 ,000, ,039 ,010 Dummy variable for position 1 = top manager ,526 ,203 .079 2,589 ,977 1,024 ,174 1,763 ,078 1,122 Dummy variable for position 2 = middle manager .099 .056 .891 Dummy variable for position 4 = administrative ,035 ,069 ,017 ,514 ,607 ,785 1,273 Dummy variable for position 5 = technical -,127 ,056 -,078 -2,263 ,024 ,772 1,295 1,052 ,030 ,138 ,007 ,827 ,950 Dummy variable for position 6 = manual ,219 -,006 ,025 -,008 -,248 ,804 ,950 1,053 Zscore: Age_in_years Zscore: Tenure Years ,003 .018 ,004 .139 .889 .986 1,014 Zscore: Gender ,045 ,024 ,057 1,840 ,066 ,931 1.074 2 (Constant) 132,688 4,627 .035 ,000, Dummy variable for position 1 = top manager ,250 ,183 .037 1,364 .173 ,968 1.033 Dummy variable for position 2 = middle manager ,080, ,089 ,026 ,904 ,366 ,888, 1,127 -,018 -,294 ,769 1,280 Dummy variable for position 4 = administrative ,062 -,009 ,781 ,051 Dummy variable for position 5 = technical -,048 -,029 -,946 ,345 ,765 1,307 ,315 ,125 ,070, 2,516 ,012 .932 1.073 Dummy variable for position 6 = manual ,022 Zscore: Age_in_years ,036 ,046 1,639 ,102 ,932 1,073 ,013 ,017 .790 .430 1.020 Zscore: Tenure_Years .022 .981 Zscore: Gender .015 ,022 .019 .691 ,490 ,922 1,085 Zscore: Affective OrgCommitment first 3 items ,072 ,021 .095 3,424 .001 .956 1,046 Zscore: Extensive Training 4 items ,345 ,023 ,430 15,205 ,000, ,910 1,098 3 (Constant) ,000, 4,627 ,035 132,743 Dummy variable for position 1 = top manager ,241 ,183 .036 1,317 .188 ,967 1,034 Dummy variable for position 2 = middle manager ,079 ,089 ,894 ,372 ,026 ,887 1,127 -,376 Dummy variable for position 4 = administrative -,023 ,062 ,707 1,284 -,012 ,779 Dummy variable for position 5 = technical -,055 ,051 -,034 -1,090 ,276 ,756 1,322 ,065 2,304 1,094 Dummy variable for position 6 = manual ,291 ,126 ,021 ,914 ,036 .022 .045 1,601 .931 1,074 Zscore: Age_in_years ,110 ,016 ,017 Zscore: Tenure_Years ,026 ,935 ,350 ,969 1,031 ,487 1,085 Zscore: Gender ,015 ,022 .020 ,696 ,922 Zscore: Affective OrgCommitment first 3 items ,071 3.328 1,050 .021 .092 .001 .952 Zscore: Extensive Training 4 items ,349 ,023 ,435 15,264 ,000, ,895 1,117 ,029 ,163 COMxTRAINING ,021 .039 1,395 ,942 1,062

a. Dependent Variable: OCB 8 items, alpha .875

						Collin	earity Sta	atistics	
					Partial			Minimum	
Model		Beta In	t	Sig.	Correlation	Tolerance	VIF	Tolerance	
1	Zscore: Affective								
	OrgCommitment first	,160 ^b	5,343	,000	,160	,980	1,020	,772	
	3 items recoded								
	Zscore: Extensive	4.4 E b	15 960	000	425	024	1 071	765	
	Training 4 items	,445*	10,002	,000	,435	,934	1,071	,705	
	COMxTRAINING	-,009 ^b	-,297	,766	-,009	,960	1,042	,761	
2	COMxTRAINING	,039 ^c	1,395	,163	,042	,942	1,062	,756	

Excluded Variables^a

a. Dependent Variable: OCB 8 items, alpha .875

b. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical

c. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items

-	-							Variar	nce Propor	tions					
					Dummy	Dummy		Dummy	Dummy				Zscore:		
					variable	variable		variable	variable				Affective		
					for	for	Dummy	for	for	Zscore			OrgComm	Zscore:	
					position 1	position 2	variable for	position 5	position	:	Zscore:		itment first	Extensive	COMx
		Eigenv	Condition		= top	= middle	position 4 =	=	6 =	Age_in	Tenure_	Zscore:	3 items	Training 4	TRAIN
Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	_years	Years	Gender	recoded	items	ING
1	1	1,812	1,000	,10	,01	,02	,04	,08	,01	,01	,00	,00			
	2	1,309	1,176	,00	,00	,01	,15	,04	,00	,14	,02	,24			
	3	1,137	1,262	,00	,00	,33	,04	,00	,01	,23	,05	,11			
	4	1,025	1,329	,00	,06	,07	,00	,06	,15	,00	,53	,00			
	5	1,000	1,346	,00	,74	,00	,00	,00	,21	,00	,00	,00			
	6	,990	1,353	,00	,14	,03	,02	,00	,51	,00	,23	,00	4		
	7	,796	1,509	,00	,00	,32	,02	,01	,00	,50	,08	,19	4		
	8	,729	1,577	,00	,00	,00	,25	,14	,00	,12	,09	,45	u .	u	
	9	,203	2,987	,90	,05	,21	,46	,67	,11	,00	,00	,00			
2	1	1,879	1,000	,09	,00	,01	,03	,08	,02	,00	,00	,00	,01	,03	
	2	1,347	1,181	,00	,00	,01	,14	,02	,00	,13	,03	,20	,06	,00	
	3	1,253	1,225	,01	,08	,03	,01	,00	,08	,03	,04	,03	,13	,28	
	4	1,139	1,285	,00	,00	,29	,06	,00	,00	,21	,06	,12	,00	,00	
	5	1,036	1,347	,00	,00	,09	,00	,07	,18	,01	,43	,00	,05	,00	
	6	,995	1,375	,00	,67	,02	,02	,00	,15	,00	,06	,00	,00	,00	
	7	,918	1,431	,00	,17	,00	,00	,00	,40	,06	,07	,01	,29	,02	
	8	,819	1,515	,00	,00	,10	,01	,03	,00	,17	,29	,03	,35	,14	
	9	,776	1,556	,00	,00	,18	,17	,01	,01	,15	,02	,40	,07	,08	
	10	,635	1,720	,00	,02	,03	,10	,13	,06	,24	,00	,21	,03	,44	
	11	,203	3,045	,90	,05	,21	,47	,65	,10	,00	,00	,00	,00	,00	

Collinearity Diagnostics^a

a. Dependent Variable: OCB 8 items, alpha .875

	-							Variar	nce Propor	tions					
								Dummy	Dummy				Zscore:		
					Dummy	Dummy		variable	variable				Affective		
					variable for	variable for	Dummy	for	for	Zscore			OrgCommit	Zscore:	
					position 1 =	position 2 =	variable for	position	position	:	Zscore:		ment first 3	Extensive	COMx
		Eigenv	Condition		top	middle	position 4 =	5 =	6 =	Age_in	Tenure_	Zscore:	items	Training 4	TRAIN
Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	_years	Years	Gender	recoded	items	ING
3	1	1,969	1,000	,07	,00	,01	,03	,06	,02	,00	,00	,00	,01	,03	,04
	2	1,348	1,209	,00	,00	,01	,13	,03	,00	,13	,03	,20	,06	,00	,00
	3	1,266	1,247	,02	,07	,05	,02	,01	,09	,03	,02	,02	,10	,25	,03
	4	1,146	1,311	,00	,01	,25	,04	,00	,01	,19	,12	,09	,00	,01	,03
	5	1,074	1,354	,00	,04	,09	,01	,05	,14	,04	,23	,02	,01	,01	,16
	6	1,006	1,399	,00	,38	,07	,04	,01	,02	,00	,23	,00	,11	,00	,04
	7	,957	1,434	,00	,35	,01	,00	,02	,02	,00	,00	,02	,37	,00	,17
	8	,905	1,475	,00	,06	,02	,01	,02	,48	,11	,14	,00	,03	,06	,07
	9	,779	1,590	,00	,00	,24	,14	,01	,02	,22	,00	,42	,01	,03	,01
	10	,713	1,662	,01	,00	,02	,02	,03	,05	,03	,23	,01	,26	,16	,44
	11	,635	1,761	,00	,02	,03	,09	,12	,05	,24	,00	,21	,04	,45	,00
	12	,202	3,124	,89	,05	,21	,47	,66	,11	,00	,00	,00	,00	,00	,01

Collinearity Diagnostics^a

a. Dependent Variable: OCB 8 items, alpha .875

Model	Variables Entered	Variables Removed	Method
1	Zscore: Gender, Dummy variable for position 6		
	= manual, Dummy variable for position 1 = top		
	manager, Zscore: Tenure_Years, Dummy		
	variable for position 2 = middle manager,		Enter
	Zscore: Age_in_years, Dummy variable for		
	position 4 = administrative, Dummy variable for		
	position 5 = technical ^b		
2	Zscore: Affective OrgCommitment first 3 items		Entor
	recoded, Zscore: Extensive Training 4 items ^b		Enter
3	COMxTRAINING ^b		Enter

Variables Entered/Removed^a

a. Dependent Variable: IB 5 items alpha .853

b. All requested variables entered.

Model Summary^d

					Change Statistics								
		R	Adjusted	Std. Error of	R Square				Sig. F				
Model	R	Square	R Square	the Estimate	Change	F Change	df1	df2	Change				
1	,182ª	,033	,026	,85839	,033	4,645	8	1080	,000				
2	,406 ^b	,165	,157	,79846	,132	85,101	2	1078	,000				
3	,413°	,170	,162	,79639	,005	6,620	1	1077	,010				

a. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items

c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items, COMxTRAINING

d. Dependent Variable: IB 5 items alpha .853

ANOVA^a

		Sum of				
Mode)	Squares	df	Mean Square	F	Sig.
1	Regression	27,382	8	3,423	4,645	,000 ^b
	Residual	795,780	1080	,737		
	Total	823,162	1088			
2	Regression	135,893	10	13,589	21,315	,000 ^c
	Residual	687,269	1078	,638		
	Total	823,162	1088			
3	Regression	140,092	11	12,736	20,080	,000 ^d
	Residual	683,070	1077	,634		
	Total	823,162	1088			

a. Dependent Variable: IB 5 items alpha .853

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical
c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items
d. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Gender, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items, COMxTRAINING

	Coefficients ^a													
		Unstand	dardized	Standardized			Collinea	arity						
		Coeff	icients	Coefficients			Statist	ics						
			Std.											
Μ	odel	В	Error	Beta	t	Sig.	Tolerance	VIF						
1	(Constant)	4,384	,043		101,699	,000								
	Dummy variable for position 1 = top manager	,645	,226	,086	2,857	,004	,977	1,024						
	Dummy variable for position 2 = middle manager	,165	,110	,048	1,503	,133	,891	1,123						
	Dummy variable for position 4 = administrative	-,092	,076	-,040	-1,198	,231	,785	1,274						
	Dummy variable for position 5 = technical	-,201	,062	-,109	-3,214	,001	,772	1,296						
	Dummy variable for position 6 = manual	-,209	,153	-,042	-1,364	,173	,950	1,053						
	Zscore: Age_in_years	-,043	,027	-,049	-1,583	,114	,950	1,053						
	Zscore: Tenure_Years	,006	,020	,008	,281	,779	,986	1,014						
	Zscore: Gender	,078	,027	,090	2,892	,004	,931	1,074						
2	(Constant)	4,414	,040		109,701	,000								
	Dummy variable for position 1 = top manager	,437	,211	,059	2,072	,039	,968	1,033						
	Dummy variable for position 2 = middle manager	,093	,102	,027	,914	,361	,887	1,128						
	Dummy variable for position 4 = administrative	-,117	,071	-,052	-1,643	,101	,781	1,280						
	Dummy variable for position 5 = technical	-,132	,058	-,072	-2,261	,024	,765	1,308						
	Dummy variable for position 6 = manual	,014	,144	,003	,100	,920	,932	1,073						
	Zscore: Age_in_years	,003	,026	,004	,133	,894	,931	1,074						
	Zscore: Tenure_Years	,021	,019	,031	1,120	,263	,981	1,020						
	Zscore: Gender	,045	,025	,052	1,785	,075	,922	1,085						
	Zscore: Affective OrgCommitment first 3 items	-,082	,024	-,096	-3,366	,001	,956	1,046						
	Zscore: Extensive Training 4 items	,339	,026	,379	12,977	,000	,910	1,099						
3	(Constant)	4,414	,040		109,982	,000								
	Dummy variable for position 1 = top manager	,419	,211	,056	1,988	,047	,967	1,034						
	Dummy variable for position 2 = middle manager	,091	,102	,026	,896	,370	,887	1,128						
	Dummy variable for position 4 = administrative	-,128	,071	-,057	-1,798	,072	,778	1,285						
	Dummy variable for position 5 = technical	-,148	,059	-,081	-2,529	,012	,756	1,323						
	Dummy variable for position 6 = manual	-,036	,145	-,007	-,250	,802	,914	1,094						
	Zscore: Age_in_years	,002	,026	,002	,063	,950	,931	1,074						
	Zscore: Tenure_Years	,027	,019	,039	1,390	,165	,969	1,031						
	Zscore: Gender	,045	,025	,052	1,798	,072	,922	1,085						
1	Zscore: Affective OrgCommitment first 3 items	-,086	,024	-,101	-3,534	,000	,952	1,050						
	Zscore: Extensive Training 4 items	,348	,026	,388	13,235	,000	,895	1,117						
	COMxTRAINING	,062	,024	,074	2,573	,010	,942	1,062						

a. Dependent Variable: IB 5 items alpha .853

						Collin	earity Sta	atistics	
					Partial			Minimum	
Model		Beta In	t	Sig.	Correlation	Tolerance	VIF	Tolerance	
1	Zscore: Affective								
	OrgCommitment first	-,038 ^b	-1,251	,211	-,038	,980	1,020	,771	
	3 items recoded								
	Zscore: Extensive	acab	10 5 4 4	000	257	022	1 071	765	
	Training 4 items	,303*	12,544	,000	,357	,933	1,071	,705	
	COMxTRAINING	,023 ^b	,742	,458	,023	,960	1,042	,761	
2	COMxTRAINING	,074 ^c	2,573	,010	,078	,942	1,062	,756	

Excluded Variables^a

a. Dependent Variable: IB 5 items alpha .853

b. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical

c. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Extensive Training 4 items

	-		· · · · · · · · · · · · · · · · · · ·					Varia	nce Propor	rtions					
		l '	1	1	Dummy	Dummy	[Dummy	Dummy	· · · · · · · · · · · · · · · · · · ·	('		Zscore:	· · · · · · · · · · · · · · · · · · ·	
	1	l '	1	'	variable	variable	1 1	variable	variable	1	1 '	1	Affective	1	
	1	l '	1 '	'	for	for	Dummy	for	for	1	1 '	1	OrgComm	Zscore:	
	1	l '	1	'	position 1	position 2	variable for	position 5	position	Zscore:	Zscore:	1	itment first	Extensive	COMx
	1	Eigenv	Condition	'	= top	= middle	position 4 =	=	6 =	Age_in_	Tenure_	Zscore:	3 items	Training 4	TRAIN
Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	years	Years	Gender	recoded	items	ING
1	1	1,812	1,000	,10	,01	,02	,04	,08	,01	,01	,00	,00			
	2	1,310	1,176	,00	,00	,01	,15	,04	,00	,14	,02	,24	ĺ	ľ	!
	3	1,137	1,263	,00	,00	,33	,04	,00	,01	,23	,05	,11	Í '		
	4	1,025	1,330	,00	,06	,07	,00,	,06	,15	,00	,53	,00	'	'	
	5	1,000	1,346	,00	,74	,00	,00,	,00	,21	,00	,00	,00	'	'	
	6	,990	1,353	,00	,14	,03	,02	,00	,51	,00	,23	,00	'	'	
	7	,795	1,510	,00	,00	,32	,02	,01	,00	,50	,08	,19	'	'	
1	8	,729	1,576	,00	,00	,00	,25	,14	,00	,12	,09	,45	'	'	
	9	,203	2,990	,90	,05	,21	,46	,67	,11	,00	,00	,00	 '	 '	ļ!
2	1	1,880	1,000	,09	,00	,01	,03	,08	,02	,00	,00	,00	,01	,03	
	2	1,348	1,181	,00	,00	,01	,14	,02	,00	,13	,03	,20	,06	,00	
	3	1,254	1,225	,01	,08	,03	,01	,00	,07	,04	,04	,02	,13	,28	
	4	1,138	1,285	,00	,00	,30	,06	,00,	,00	,21	,06	,12	,00	,00	
	5	1,036	1,347	,00	,00	,10	,00	,07	,18	,01	,43	,00	,05	,00	
	6	,995	1,375	,00	,67	,02	,02	,00,	,15	,00,	,06	,00,	,00	,00	
	7	,918	1,431	,00,	,17	,00,	,00,	,00,	,40	,06	,07	,01	,29	,02	1
	8	,820	1,515	,00,	,00,	,10	,01	,03	,00,	,16	,29	,03	,35	,14	1
	9	,//5	1,558	,00,	,00,	,18	,17	,01	,01	,15	,01	,40	,07	,08	1
	10	,635	1,721	,00	,02	,04	,09	,13	,06	,25	,00,	,20	,04	,45	1
	11	,202	3,048	,90	,05	,21	,47	,65	,10	,00	,00	,00	,00	,00	1

Collinearity Diagnostics^a

a. Dependent Variable: IB 5 items alpha .853
-	-							Varia	ince Propo	rtions					
					Dummy	Dummy		Dummy	Dummy				Zscore:		
					variable	variable		variable	variable				Affective		
					for	for	Dummy	for	for				OrgComm	Zscore:	
					position 1	position 2	variable for	position 5	position	Zscore:	Zscore:		itment first	Extensive	COMx
		Eigenv	Condition		= top	= middle	position 4 =	=	6 =	Age_in_	Tenure_	Zscore:	3 items	Training 4	TRAIN
Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	years	Years	Gender	recoded	items	ING
3	1	1,970	1,000	,07	,00	,01	,03	,06	,02	,00	,00	,00	,01	,03	,04
	2	1,349	1,209	,00	,00	,01	,13	,03	,00	,13	,03	,20	,06	,00	,00
	3	1,266	1,247	,02	,07	,05	,02	,01	,09	,03	,02	,02	,10	,24	,03
	4	1,146	1,311	,00	,01	,25	,04	,00	,01	,19	,12	,09	,00	,01	,03
	5	1,074	1,354	,00	,04	,09	,01	,05	,14	,04	,23	,02	,01	,01	,16
	6	1,006	1,399	,00	,38	,07	,04	,01	,02	,00	,23	,00	,11	,00	,04
	7	,957	1,434	,00	,35	,01	,00	,02	,02	,00	,00	,02	,37	,00	,17
	8	,905	1,476	,00	,06	,02	,01	,02	,48	,11	,14	,00	,03	,06	,07
	9	,777	1,592	,00	,00	,24	,14	,01	,02	,22	,00	,42	,01	,03	,01
	10	,713	1,662	,01	,00	,02	,02	,03	,05	,03	,23	,01	,26	,16	,44
	11	,635	1,762	,00	,02	,03	,09	,12	,05	,24	,00	,20	,04	,46	,00
	12	,201	3,128	,89	,05	,21	,47	,66	,11	,00	,00	,00	,00	,00	,01

Collinearity Diagnostics^a

Appendix 15

Model	Variables Entered	Variables Removed	Method
1	Zscore: Gender, Dummy variable for		
	position 6 = manual, Dummy variable for		
	position 1 = top manager, Zscore:		
	Tenure_Years, Dummy variable for		Entor
	position 2 = middle manager, Zscore:	•	Enter
	Age_in_years, Dummy variable for position		
	4 = administrative, Dummy variable for		
	position 5 = technical ^b		
2	Zscore: Affective OrgCommitment first 3		
	items recoded, Zscore: Innovative		Enter
	Organizational Climate 4 items ^b		
3	COMXINNOVATIVE ^b		Enter

Variables Entered/Removed^a

a. Dependent Variable: IB 5 items alpha .853

b. All requested variables entered.

Model Summary^d

					Change Statistics					
			Adjusted	Std. Error of	R Square				Sig. F	
Model	R	R Square	R Square	the Estimate	Change	F Change	df1	df2	Change	
1	,182ª	,033	,026	,85839	,033	4,645	8	1080	,000	
2	,451 ^b	,204	,196	,77973	,171	115,443	2	1078	,000	
3	,455 ^c	,207	,199	,77860	,003	4,136	1	1077	,042	

a. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items

c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items, COMxINNOVATIVE

		Sum of				
Mode	əl	Squares	df	Mean Square	F	Sig.
1	Regression	27,382	8	3,423	4,645	,000 ^b
	Residual	795,780	1080	,737		
	Total	823,162	1088			
2	Regression	167,757	10	16,776	27,592	,000 ^c
	Residual	655,405	1078	,608		
	Total	823,162	1088			
3	Regression	170,265	11	15,479	25,533	,000 ^d
	Residual	652,898	1077	,606		
	Total	823,162	1088			

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items d. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items, COMxINNOVATIVE

	Coefficients ^a											
Γ		Unstand	dardized	Standardized			Collinea	arity				
		Coeff	icients	Coefficients			Statist	ics				
			Std.									
Μ	odel	В	Error	Beta	t	Sig.	Tolerance	VIF				
1	(Constant)	4,384	,043		101,699	,000						
	Dummy variable for position 1 = top manager	,645	,226	,086	2,857	,004	,977	1,024				
	Dummy variable for position 2 = middle manager	,165	,110	,048	1,503	,133	,891	1,123				
	Dummy variable for position 4 = administrative	-,092	,076	-,040	-1,198	,231	,785	1,274				
	Dummy variable for position 5 = technical	-,201	,062	-,109	-3,214	,001	,772	1,296				
	Dummy variable for position 6 = manual	-,209	,153	-,042	-1,364	,173	,950	1,053				
	Zscore: Age_in_years	-,043	,027	-,049	-1,583	,114	,950	1,053				
	Zscore: Tenure_Years	,006	,020	,008	,281	,779	,986	1,014				
	Zscore: Gender	,078	,027	,090	2,892	,004	,931	1,074				
2	(Constant)	4,395	,039		112,043	,000						
	Dummy variable for position 1 = top manager	,610	,205	,082	2,969	,003	,974	1,026				
	Dummy variable for position 2 = middle manager	,165	,100	,048	1,661	,097	,890	1,124				
	Dummy variable for position 4 = administrative	-,119	,070	-,053	-1,714	,087	,781	1,280				
	Dummy variable for position 5 = technical	-,168	,057	-,092	-2,960	,003	,770	1,298				
	Dummy variable for position 6 = manual	-,072	,140	-,014	-,517	,605	,942	1,062				
	Zscore: Age_in_years	,000	,025	,000	-,012	,991	,938	1,067				
	Zscore: Tenure_Years	,027	,019	,040	1,441	,150	,979	1,021				
	Zscore: Gender	,049	,025	,056	1,989	,047	,925	1,081				
	Zscore: Affective OrgCommitment first 3 items	-,072	,024	-,084	-3,054	,002	,968	1,033				
	Zscore: Innovative Organizational Climate 4	.362	.024	.420	15,132	.000	.957	1.045				
	items	,001	,•= .	,	,	,	,001	.,0.10				
3	(Constant)	4,398	,039		112,199	,000						
	Dummy variable for position 1 = top manager	,598	,205	,080,	2,913	,004	,974	1,027				
	Dummy variable for position 2 = middle manager	,160	,099	,046	1,606	,109	,889	1,125				
	Dummy variable for position 4 = administrative	-,135	,070	-,060	-1,930	,054	,772	1,296				
	Dummy variable for position 5 = technical	-,182	,057	-,099	-3,190	,001	,759	1,318				
	Dummy variable for position 6 = manual	-,097	,140	-,019	-,688	,491	,935	1,069				
	Zscore: Age_in_years	-,002	,025	-,003	-,096	,924	,936	1,068				
	Zscore: Tenure_Years	,031	,019	,046	1,662	,097	,967	1,034				
	Zscore: Gender	,046	,025	,053	1,859	,063	,922	1,085				
	Zscore: Affective OrgCommitment first 3 items	-,083	,024	-,097	-3,433	,001	,921	1,086				
	Zscore: Innovative Organizational Climate 4											
	items	,365	,024	,425	15,269	,000	,951	1,052				
ĺ	COMXINNOVATIVE	,046	,023	,058	2,034	,042	,916	1,091				

						Colli	Collinearity Statistic	
					Partial			Minimum
Model		Beta In	t	Sig.	Correlation	Tolerance	VIF	Tolerance
1	Zscore: Affective OrgCommitment first 3 items recoded	-,038 ^b	-1,251	,211	-,038	,980	1,020	,771
	Zscore: Innovative Organizational Climate 4 items	,411 ^b	14,828	,000,	,411	,969	1,032	,770
	COMXINNOVATIVE	,014 ^b	,453	,650	,014	,967	1,035	,761
2	COMXINNOVATIVE	,058 ^c	2,034	,042	,062	,916	1,091	,759

Excluded Variables^a

a. Dependent Variable: IB 5 items alpha .853

b. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

c. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items

					Variance Proportions										
					Dummy	Dummy		Dummy	Dummy				Zscore:	Zscore:	
					variable	variable		variable	variable				Affective	Innovative	
					for	for	Dummy	for	for				OrgCommit	Organizati	COMx
					position 1	position 2	variable for	position 5	position	Zscore:	Zscore:		ment first 3	onal	INNO
		Eigenv	Condition		= top	= middle	position 4 =	=	6 =	Age_in_	Tenure_	Zscore:	items	Climate 4	VATIV
Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	years	Years	Gender	recoded	items	Е
1	1	1,812	1,000	,10	,01	,02	,04	,08	,01	,01	,00	,00			
	2	1,310	1,176	,00	,00	,01	,15	,04	,00	,14	,02	,24			
	3	1,137	1,263	,00	,00	,33	,04	,00	,01	,23	,05	,11			
	4	1,025	1,330	,00	,06	,07	,00	,06	,15	,00	,53	,00			
	5	1,000	1,346	,00	,74	,00	,00	,00	,21	,00	,00	,00			
	6	,990	1,353	,00	,14	,03	,02	,00	,51	,00	,23	,00			
	7	,795	1,510	,00	,00	,32	,02	,01	,00	,50	,08	,19			
	8	,729	1,576	,00	,00	,00	,25	,14	,00	,12	,09	,45			
	9	,203	2,990	,90	,05	,21	,46	,67	,11	,00	,00	,00			
2	1	1,833	1,000	,09	,00	,02	,03	,08	,02	,01	,00	,00	,01	,00	
	2	1,354	1,164	,00	,00	,01	,12	,02	,00	,14	,04	,19	,05	,02	
	3	1,199	1,236	,00	,03	,01	,05	,00	,06	,08	,07	,00	,14	,32	
	4	1,134	1,271	,00	,01	,30	,03	,00	,06	,11	,01	,15	,07	,02	
	5	1,035	1,331	,00	,00	,11	,00	,07	,16	,01	,44	,00	,04	,01	
	6	1,001	1,353	,00	,79	,01	,02	,00	,08	,00	,01	,00	,01	,01	
	7	,929	1,404	,00	,09	,00	,00	,00	,48	,02	,14	,01	,20	,07	
	8	,823	1,492	,00	,01	,01	,02	,02	,00	,00	,23	,00	,48	,37	
	9	,792	1,522	,00,	,00,	,31	,05	,00,	,01	,44	,03	,27	,00	,01	
	10	,697	1,621	,00	,00	,01	,21	,13	,02	,20	,03	,36	,00	,17	
	11	,202	3,010	,90	,05	,21	,46	,66	,11	,00	,00	,00	,00,	,00	

Collinearity Diagnostics^a

								Varia	ance Propo	rtions					
					Dummy	Dummy		Dummy	Dummy				Zscore:	Zscore:	
					variable	variable		variable	variable				Affective	Innovative	
	ļ				for	for	Dummy	for	for				OrgComm	Organizati	COMx
					position 1	position 2	variable for	position 5	position	Zscore:	Zscore:		itment first	onal	INNO
	ļ	Eigenv	Condition		= top	= middle	position 4 =	=	6 =	Age_in_	Tenure_	Zscore:	3 items	Climate 4	VATIV
Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	years	Years	Gender	recoded	items	E
3	1	1,869	1,000	,09	,00	,02	,04	,07	,01	,01	,00	,00	,00	,00	,02
	2	1,370	1,168	,00	,00	,01	,11	,03	,00	,13	,02	,16	,10	,01	,03
	3	1,237	1,229	,00	,02	,00	,00	,00	,03	,05	,10	,02	,20	,22	,11
	4	1,149	1,275	,00	,00	,21	,09	,00	,00	,14	,02	,18	,03	,02	,05
	5	1,073	1,320	,01	,00	,08	,01	,00	,27	,00	,05	,00	,00	,15	,24
	6	1,033	1,345	,00	,00	,17	,01	,07	,06	,01	,38	,00	,07	,04	,02
	7	,997	1,369	,00	,87	,00	,01	,01	,04	,00	,00	,00	,00	,00	,02
	8	,918	1,427	,00	,03	,01	,00	,01	,42	,02	,23	,00	,06	,19	,02
	9	,796	1,532	,00	,00	,23	,06	,00	,00	,39	,00	,23	,08	,11	,00
	10	,699	1,635	,00	,00	,02	,19	,14	,03	,24	,07	,29	,02	,10	,01
	11	,659	1,684	,01	,00	,03	,01	,00	,01	,01	,12	,11	,44	,17	,46
	12	,200	3,057	,89	,05	,21	,47	,67	,11	,00	,00	,00	,00	,00	,02

Collinearity Diagnostics^a

Appendix 16

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Zscore: Gender, Dummy variable for position 6 =		
	manual, Dummy variable for position 1 = top manager,		
	Zscore: Tenure_Years, Dummy variable for position 2		Enter
	= middle manager, Zscore: Age_in_years, Dummy	•	Enter
	variable for position 4 = administrative, Dummy variable		
	for position 5 = technical ^b		
2	Zscore: Affective OrgCommitment first 3 items		
	recoded, Zscore: Innovative Organizational Climate 4		Enter
	items ^b		
3			Enter

a. Dependent Variable: OCB 8 items, alpha .875

b. All requested variables entered.

Model Summary^d

				Std. Error of	Change Statistics				
			Adjusted R	the	R Square				Sig. F
Model	R	R Square	Square	Estimate	Change	F Change	df1	df2	Change
1	,143 ^a	,020	,013	,77287	,020	2,803	8	1081	,004
2	,532 ^b	,283	,277	,66172	,263	197,839	2	1079	,000
3	,533℃	,284	,277	,66155	,001	1,530	1	1078	,216

a. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items

c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items, COMxINNOVATIVE

ſ		Sum of			· · · · · · · · · · · · · · · · · · ·	
Mode	¥	Squares	df	Mean Square	F	Sig.
1	Regression	13,393	8	1,674	2,803	,004 ^b
	Residual	645,716	1081	,597		
	Total	659,109	1089			
2	Regression	186,648	10	18,665	42,626	,000 ^c
	Residual	472,461	1079	,438		
	Total	659,109	1089			
3	Regression	187,318	11	17,029	38,909	,000 ^d
	Residual	471,791	1078	,438		
	Total	659,109	1089			

ANOVA^a

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical

c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items

d. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items, COMxINNOVATIVE

Coefficients ^a										
	Unstand	dardized	Standardized			Collinea	arity			
	Coeff	icients	Coefficients			Statist	ics			
		Std.								
Model	В	Error	Beta	t	Sig.	Tolerance	VIF			
1 (Constant)	4,584	,039		118,240	,000					
Dummy variable for position 1 = top manager	,526	,203	,079	2,589	,010	,977	1,024			
Dummy variable for position 2 = middle manager	,174	,099	,056	1,763	,078	,891	1,122			
Dummy variable for position 4 = administrative	,035	,069	,017	,514	,607	,785	1,273			
Dummy variable for position 5 = technical	-,127	,056	-,078	-2,263	,024	,772	1,295			
Dummy variable for position 6 = manual	,030	,138	,007	,219	,827	,950	1,052			
Zscore: Age_in_years	-,006	,025	-,008	-,248	,804	,950	1,053			
Zscore: Tenure_Years	,003	,018	,004	,139	,889	,986	1,014			
Zscore: Gender	,045	,024	,057	1,840	,066	,931	1,074			
2 (Constant)	4,611	,033		138,661	,000					
Dummy variable for position 1 = top manager	,421	,174	,063	2,417	,016	,974	1,026			
Dummy variable for position 2 = middle manager	,150	,084	,049	1,781	,075	,890	1,123			
Dummy variable for position 4 = administrative	-,024	,059	-,012	-,400	,689	,782	1,280			
Dummy variable for position 5 = technical	-,085	,048	-,052	-1,764	,078	,771	1,298			
Dummy variable for position 6 = manual	,231	,119	,052	1,947	,052	,942	1,061			
Zscore: Age_in_years	,036	,021	,045	1,688	,092	,937	1,067			
Zscore: Tenure_Years	,019	,016	,032	1,232	,218	,979	1,021			
Zscore: Gender	,019	,021	,024	,889	,374	,926	1,080			
Zscore: Affective OrgCommitment first 3 items	,081	,020	,105	4,019	,000	,968	1,033			
Zscore: Innovative Organizational Climate	,383	,020	,498	18,913	,000	,957	1,045			
3 (Constant)	4,612	,033		138,635	,000					
Dummy variable for position 1 = top manager	,415	,174	,062	2,380	,017	,974	1,027			
Dummy variable for position 2 = middle manager	,147	,084	,048	1,746	,081	,890	1,124			
Dummy variable for position 4 = administrative	-,032	,059	-,016	-,534	,593	,772	1,295			
Dummy variable for position 5 = technical	-,092	,049	-,056	-1,902	,057	,759	1,317			
Dummy variable for position 6 = manual	,219	,119	,049	1,835	,067	,935	1,069			
Zscore: Age_in_years	,035	,021	,044	1,636	,102	,936	1,069			
Zscore: Tenure_Years	,022	,016	,036	1,363	,173	,967	1,034			
Zscore: Gender	,017	,021	,022	,809	,419	,922	1,085			
Zscore: Affective OrgCommitment first 3 items	,075	,021	,098	3,646	,000	,921	1,086			
Zscore: Innovative Organizational Climate	,385	,020	,501	18,956	,000	,951	1,052			
COMxINNOVATIVE	,024	,019	,033	1,237	,216	,916	1,091			

						Collin	earity Sta	tistics
					Partial			Minimum
Model		Beta In	t	Sig.	Correlation	Tolerance	VIF	Tolerance
1	Zscore: Affective							
	OrgCommitment first	,160 ^b	5,343	,000	,160	,980	1,020	,772
	3 items recoded							
	Zscore: Innovative							
	Organizational	,510 ^b	19,346	,000	,507	,969	1,032	,771
	Climate 4 items							
	COMXINNOVATIVE	,027 ^b	,893	,372	,027	,967	1,035	,762
2	COMXINNOVATIVE	,033 ^c	1,237	,216	,038	,916	1,091	,759

Excluded Variables^a

b. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical

c. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 1 = top manager, Zscore: Tenure_Years, Dummy variable for position 2 = middle manager, Zscore: Age_in_years, Dummy variable for position 4 = administrative, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded, Zscore: Innovative Organizational Climate 4 items

	-				Variance Proportions										
					Dummy	Dummy		Dummy	Dummy				Zscore:	Zscore:	
					variable	variable		variable	variable				Affective	Innovative	
					for	for	Dummy	for	for				OrgComm	Organizati	COMx
					position 1	position 2	variable for	position 5	position	Zscore:	Zscore:		itment first	onal	INNO
		Eigenv	Condition		= top	= middle	position 4 =	=	6 =	Age_in_	Tenure_	Zscore:	3 items	Climate 4	VATIV
Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	years	Years	Gender	recoded	items	Е
1	1	1,812	1,000	,10	,01	,02	,04	,08	,01	,01	,00	,00			
	2	1,309	1,176	,00	,00	,01	,15	,04	,00	,14	,02	,24			
	3	1,137	1,262	,00	,00	,33	,04	,00	,01	,23	,05	,11			
	4	1,025	1,329	,00	,06	,07	,00	,06	,15	,00	,53	,00			
	5	1,000	1,346	,00	,74	,00	,00	,00	,21	,00	,00	,00			
	6	,990	1,353	,00	,14	,03	,02	,00	,51	,00	,23	,00			
	7	,796	1,509	,00	,00	,32	,02	,01	,00	,50	,08	,19			
	8	,729	1,577	,00	,00	,00	,25	,14	,00	,12	,09	,45			
	9	,203	2,987	,90	,05	,21	,46	,67	,11	,00	,00	,00			
2	1	1,833	1,000	,09	,00	,02	,03	,08	,02	,01	,00	,00	,01	,00	
	2	1,353	1,164	,00,	,00	,01	,12	,02	,00	,14	,04	,19	,05	,02	
	3	1,200	1,236	,00,	,03	,01	,05	,00	,06	,08	,07	,01	,14	,32	
	4	1,134	1,271	,00,	,01	,30	,03	,00,	,06	,11	,01	,15	,08	,02	
	5	1,035	1,330	,00,	,00	,11	,00	,07	,16	,01	,44	,00	,04	,01	
	6	1,001	1,353	,00,	,79	,01	,02	,00,	,08	,00,	,01	,00,	,01	,01	
	1	,929	1,404	,00,	,09	,00,	,00,	,00,	,48	,02	,14	,01	,20	,07	
	8	,823	1,492	,00,	,01	,01	,02	,02	,00,	,00	,24	,00,	,48	,36	
	9 10	,792	1,521	,00,	,00,	,31	,05	,00	,01	,43	,03	,27	,00	,02	
	10	,697	1,622	,00,	,00	,01	,20	,13	,02	,20	,03	,36	,00	,17	
	11	,203	3,007	,90	,05	,21	,46	,66	,11	,00	,00	,00	,00	,00	

Collinearity Diagnostics^a

	-				Variance Proportions										
					Dummy	Dummy		Dummy	Dummy				Zscore:	Zscore:	
					variable	variable		variable	variable				Affective	Innovative	
					for	for	Dummy	for	for				OrgCommit	Organizati	COMx
					position 1	position 2	variable for	position 5	position	Zscore:	Zscore:		ment first 3	onal	INNO
		Eigenv	Condition		= top	= middle	position 4 =	=	6 =	Age_in_	Tenure_	Zscore:	items	Climate 4	VATIV
Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	years	Years	Gender	recoded	items	Е
3	1	1,869	1,000	,09	,00	,02	,04	,07	,01	,01	,00	,00	,00	,00	,02
	2	1,369	1,168	,00	,00	,01	,11	,03	,00	,13	,02	,16	,10	,01	,03
	3	1,237	1,229	,00	,02	,00	,00	,00	,03	,05	,10	,02	,19	,22	,11
	4	1,150	1,275	,00	,00	,21	,09	,00	,00	,14	,02	,18	,03	,02	,05
	5	1,073	1,320	,01	,00	,08	,01	,00	,28	,00	,06	,00	,00	,15	,24
	6	1,033	1,345	,00	,00	,17	,01	,07	,06	,01	,38	,00	,07	,04	,02
	7	,997	1,369	,00	,87	,00	,01	,01	,04	,00	,00	,00	,00	,00	,02
	8	,918	1,426	,00	,03	,01	,00	,01	,42	,02	,23	,00	,06	,19	,02
	9	,796	1,532	,00	,00	,23	,06	,00	,00	,38	,00	,23	,08	,11	,00
	10	,698	1,636	,00	,00	,02	,19	,14	,03	,24	,07	,29	,02	,10	,02
	11	,660	1,683	,01	,00	,03	,01	,00	,01	,01	,12	,11	,44	,17	,46
	12	,200	3,055	,89	,05	,21	,47	,67	,11	,00	,00	,00	,00	,00	,02

Collinearity Diagnostics^a

Appendix 17

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Variables Entered/Removed^a

Notinnovative				
_Innovative	Model	Variables Entered	Variables Removed	Method
,00	1	Zscore: Gender, Zscore: Age_in_years,		Enter
		Dummy variable for position 1 = top manager,		
		Dummy variable for position 6 = manual,		
		Dummy variable for position 2 = middle		
		manager, Dummy variable for position 5 =		
		technical, Dummy variable for position 4 =		
		administrative, Zscore: Tenure_Years ^b		
	2	Zscore: Affective OrgCommitment first 3		Enter
		items recoded ^b		

a. Dependent Variable: IB 5 items alpha .853

b. All requested variables entered.

Model Summary^c

NotInnov						Change Statistics					
ative_Inn				Adjusted	Std. Error of	R Square				Sig. F	
ovative	Model	R	R Square	R Square	the Estimate	Change	F Change	df1	df2	Change	
,00	1	,229ª	,052	,030	,91047	,052	2,325	8	336	,019	
	2	,323 ^b	,104	,080	,88659	,052	19,346	1	335	,000	

a. Predictors: (Constant), Zscore: Gender, Zscore: Age_in_years, Dummy variable for position 1 = top manager, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Dummy variable for position 5 = technical, Dummy variable for position 4 = administrative, Zscore: Tenure_Years

b. Predictors: (Constant), Zscore: Gender, Zscore: Age_in_years, Dummy variable for position 1 = top manager, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Dummy variable for position 5 = technical, Dummy variable for position 4 = administrative, Zscore: Tenure_Years, Zscore: Affective OrgCommitment first 3 items recoded

NotInnovative			Sum of				
_Innovative	Model		Squares	df	Mean Square	F	Sig.
,00	1	Regression	15,418	8	1,927	2,325	,019 ^b
		Residual	278,531	336	,829		
		Total	293,949	344			
	2	Regression	30,625	9	3,403	4,329	,000 ^c
		Residual	263,324	335	,786		
		Total	293,949	344			

ANOVA^a

a. Dependent Variable: IB 5 items alpha .853

b. Predictors: (Constant), Zscore: Gender, Zscore: Age_in_years, Dummy variable for position 1 = top manager, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Dummy variable for position 5 = technical, Dummy variable for position 4 = administrative, Zscore: Tenure_Years

c. Predictors: (Constant), Zscore: Gender, Zscore: Age_in_years, Dummy variable for position 1 = top manager, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Dummy variable for position 5 = technical, Dummy variable for position 4 = administrative, Zscore: Tenure_Years, Zscore: Affective OrgCommitment first 3 items recoded

NotInn ovative			Unstand Coeffi	lardized cients	Standardized Coefficients			Collinea Statist	arity ics
_Innov				Std.					
ative	Mo	odel	В	Error	Beta	t	Sig.	Tolerance	VIF
,00	1	(Constant)	4,303	,084		51,260	,000		
		Dummy variable for position 1 = top manager	,679	,353	,104	1,924	,055	,972	1,029
		Dummy variable for position 2 = middle manager	,225	,154	,084	1,456	,146	,841	1,189
		Dummy variable for position 4 = administrative	-,159	,155	-,061	-1,027	,305	,807	1,239
		Dummy variable for position 5 = technical	,125	,142	,051	,882	,379	,830	1,205
		Dummy variable for position 6 = manual	-,153	,185	-,046	-,826	,409	,915	1,092
		Zscore: Age_in_years	-,010	,054	-,012	-,183	,855	,697	1,434
		Zscore: Tenure_Years	-,170	,450	-,024	-,379	,705	,721	1,387
	2	Zscore: Gender	,111	,053	,118	2,092	,037	,879	1,138
	2	(Constant)	4,267	,082		51,932	,000		
		Dummy variable for position 1 = top manager	,807	,345	,123	2,341	,020	,965	1,036
		Dummy variable for position 2 = middle manager	,292	,151	,110	1,934	,054	,832	1,202
		Dummy variable for position 4 = administrative	-,121	,151	-,046	-,802	,423	,804	1,243
		Dummy variable for position 5 = technical	,036	,140	,015	,257	,797	,812	1,231
		Dummy variable for position 6 = manual	-,228	,181	-,069	-1,262	,208	,907	1,102
		Zscore: Age_in_years	,007	,053	,009	,138	,891	,693	1,442
		Zscore: Tenure_Years	,058	,441	,008	,133	,895	,711	1,407
		Zscore: Gender	,082	,052	,087	1,570	,117	,865	1,157
		Zscore: Affective OrgCommitment first 3 items recoded	-,214	,049	-,244	-4,398	,000	,871	1,148

Coefficients^a

NotInnovat							Collir	nearity Stat	istics
ive_Innova						Partial			Minimum
tive	Model		Beta In	t	Sig.	Correlation	Tolerance	VIF	Tolerance
,00	1	Zscore: Affective	-,244 ^b	-4,398	,000	-,234	,871	1,148	,693
		OrgCommitment							
		first 3 items							
		recoded							

Excluded Variables^a

a. Dependent Variable: IB 5 items alpha .853

b. Predictors in the Model: (Constant), Zscore: Gender, Zscore: Age_in_years, Dummy variable for position 1 = top manager, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Dummy variable for position 5 = technical, Dummy variable for position 4 = administrative, Zscore: Tenure_Years

					Variance Proportions									
						Dummy	Dummy		Dummy	Dummy				Zscore:
						variable	variable		variable	variable				Affective
						for	for	Dummy	for	for				OrgCommit
						position 1	position 2	variable for	position 5	position	Zscore:	Zscore:		ment first 3
NotInnovative			Eigenv	Condition		= top	= middle	position 4 =	=	6 =	Age_in_	Tenure_	Zscore:	items
_Innovative	Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	years	Years	Gender	recoded
,00	1	1	2,064	1,000	,07	,01	,03	,02	,04	,02	,01	,05	,01	
		2	1,431	1,201	,00	,00	,03	,06	,00	,02	,23	,09	,03	
		3	1,324	1,249	,00	,00	,03	,13	,06	,02	,03	,02	,28	
		4	1,001	1,436	,00	,66	,05	,01	,15	,00	,00	,00	,00	
		5	1,000	1,437	,00	,22	,22	,04	,13	,19	,00	,00	,00	
		6	,932	1,488	,00	,03	,17	,01	,01	,52	,05	,04	,00	
		7	,650	1,782	,00	,01	,04	,30	,17	,00	,00	,00	,68	
		8	,389	2,304	,00	,03	,18	,16	,12	,05	,62	,50	,00	
		9	,209	3,140	,93	,04	,25	,26	,31	,17	,08	,29	,00	
	2	1	2,206	1,000	,05	,00	,02	,01	,04	,02	,00	,05	,01	,04
		2	1,557	1,190	,01	,00	,05	,08	,00	,00	,16	,03	,04	,07
		3	1,329	1,289	,00	,00	,04	,10	,05	,03	,06	,04	,23	,00
		4	1,058	1,444	,00	,35	,12	,04	,10	,00	,02	,03	,01	,08
		5	1,000	1,485	,00	,39	,17	,03	,08	,17	,00	,00	,00	,00
		6	,940	1,532	,00	,12	,09	,02	,00	,49	,06	,05	,00	,01
		7	,666	1,820	,01	,03	,01	,07	,28	,05	,02	,01	,03	,65
		8	,646	1,848	,00	,03	,08	,23	,04	,02	,00	,00	,68	,15
		9	,388	2,383	,00	,04	,18	,16	,11	,05	,60	,51	,00	,00
		10	,209	3,249	,93	,04	,26	,26	,29	,16	,08	,28	,00	,00

Collinearity Diagnostics^a

Appendix 18

NotInnovative			Variables	
_Innovative	Model	Variables Entered	Removed	Method
1,00	1	Zscore: Gender, Dummy variable for position 6 =		Enter
		manual, Dummy variable for position 2 = middle		
		manager, Zscore: Tenure_Years, Dummy		
		variable for position 4 = administrative, Dummy		
		variable for position 1 = top manager, Zscore:		
		Age_in_years, Dummy variable for position 5 =		
		technical ^b		
	2	Zscore: Affective OrgCommitment first 3 items		Enter
		recoded ^b		

Variables Entered/Removed^a

a. Dependent Variable: IB 5 items alpha .853

b. All requested variables entered.

Model Summary^c

NotInn						Change Statistics						
ovative												
_Innov				Adjusted	Std. Error of	R Square	F			Sig. F		
ative	Model	R	R Square	R Square	the Estimate	Change	Change	df1	df2	Change		
1,00	1	,341ª	,117	,087	,79254	,117	3,893	8	236	,000		
	2	,343 ^b	,118	,084	,79379	,001	,258	1	235	,612		

a. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Zscore: Tenure_Years, Dummy variable for position 4 = administrative, Dummy variable for position 1 = top manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Zscore: Tenure_Years, Dummy variable for position 4 = administrative, Dummy variable for position 1 = top manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded

ANOVA^a

NotInnovative			Sum of				
_Innovative	Model		Squares	df	Mean Square	F	Sig.
1,00	1	Regression	19,563	8	2,445	3,893	,000 ^b
		Residual	148,236	236	,628		
		Total	167,800	244			
	2	Regression	19,726	9	2,192	3,478	,000 ^c
		Residual	148,074	235	,630		
		Total	167,800	244			

a. Dependent Variable: IB 5 items alpha .853

b. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Zscore: Tenure_Years, Dummy variable for position 4 = administrative, Dummy variable for position 1 = top manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

c. Predictors: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Zscore: Tenure_Years, Dummy variable for position 4 = administrative, Dummy variable for position 1 = top manager, Zscore: Age_in_years, Dummy variable for position 5 = technical, Zscore: Affective OrgCommitment first 3 items recoded

			Unstand	ardized	Standardized			Collinear	
NotInnov			Coefficients		Coefficients			Statisti	CS
ative_Inn				Std.					
ovative	Mo	odel	В	Error	Beta	t	Sig.	Tolerance	VIF
1,00	1	(Constant)	4,770	,086		55,308	,000		
		Dummy variable for position	,244	,295	,052	,830	,408	,935	1,070
		1 = top manager							
		Dummy variable for position	-,238	,185	-,084	-1,282	,201	,877	1,140
		2 = middle manager							
		Dummy variable for position	-,118	,170	-,046	-,693	,489	,848	1,179
		4 = administrative							
		Dummy variable for position	-,551	,126	-,317	-4,368	,000	,711	1,406
		5 = technical							
		Dummy variable for position	-,380	,368	-,065	-1,033	,303	,948	1,055
		6 = manual							
		Zscore: Age_in_years	,038	,078	,032	,484	,629	,842	1,188
Zscore: Tenure_Years			,006	,019	,020	,313	,755	,942	1,062
		Zscore: Gender	-,063	,062	-,066	-1,026	,306	,907	1,103
2		(Constant)	4,768	,086		55,141	,000		
		Dummy variable for position	,238	,295	,051	,804	,422	,933	1,072
		1 = top manager							
		Dummy variable for position	-,232	,186	-,082	-1,249	,213	,875	1,143
		2 = middle manager							
		Dummy variable for position	-,124	,171	-,048	-,723	,470	,845	1,184
		4 = administrative							
		Dummy variable for position	-,538	,129	-,310	-4,183	,000	,685	1,460
		5 = technical							
		Dummy variable for position	-,387	,369	-,066	-1,050	,295	,947	1,056
		6 = manual							
		Zscore: Age_in_years	,043	,079	,037	,544	,587	,828	1,207
		Zscore: Tenure_Years	,005	,020	,015	,241	,809	,925	1,081
		Zscore: Gender	-,063	,062	-,066	-1,024	,307	,907	1,103
		Zscore: Affective	,030	,060	,032	,508	,612	,918	1,090
OrgCommitment first 3									
		items recoded							

Coefficients^a

						Co	atistics		
NotInnovative					Partial			Minimum	
_Innovative	Model	Beta	n t	Sig.	Correlation	Tolerance VIF		Tolerance	
1,00	1 Zscore: At	ffective ,03	,508, ^b	,612	,033	,918	1,090	,685	
	OrgComm	itment							
	first 3 item	S							
	recoded								

Excluded Variables^a

a. Dependent Variable: IB 5 items alpha .853

b. Predictors in the Model: (Constant), Zscore: Gender, Dummy variable for position 6 = manual, Dummy variable for position 2 = middle manager, Zscore: Tenure_Years, Dummy variable for position 4 = administrative, Dummy variable for position 1 = top manager, Zscore: Age_in_years, Dummy variable for position 5 = technical

					Variance Proportions												
									Dummy	Dummy				Zscore:			
						Dummy	Dummy		variable	variable				Affective			
						variable for	variable for	Dummy	for	for				OrgComm			
						position 1 =	position 2 =	variable for	position	position	Zscore:	Zscore:		itment first			
NotInnovative			Eigenv	Condition		top	middle	position 4 =	5 =	6 =	Age_in_	Tenure_	Zscore:	3 items			
_Innovative	Model	Dimension	alue	Index	(Constant)	manager	manager	administrative	technical	manual	years	Years	Gender	recoded			
1,00	1	1	2,584	1,000	,04	,00	,01	,01	,04	,01	,05	,00	,05				
		2	1,089	1,540	,01	,32	,10	,12	,06	,00	,00	,03	,06				
		3	1,077	1,549	,01	,03	,13	,05	,02	,09	,02	,43	,00				
		4	1,040	1,576	,00	,19	,40	,01	,01	,01	,01	,13	,04				
		5	1,000	1,607	,00	,04	,02	,25	,00	,56	,00	,00	,00				
		6	,976	1,627	,00	,20	,01	,18	,02	,22	,00	,24	,01				
		7	,622	2,038	,00	,09	,02	,03	,04	,01	,18	,03	,74				
		8	,397	2,551	,09	,00	,03	,04	,27	,05	,73	,14	,10				
		9	,216	3,462	,85	,12	,29	,32	,54	,06	,00	,00	,01				
	2	1	2,584	1,000	,04	,00	,01	,01	,04	,01	,05	,00	,05	,00			
		2	1,264	1,430	,00	,07	,00	,12	,03	,04	,00	,01	,03	,33			
		3	1,078	1,548	,01	,11	,25	,01	,00	,08	,02	,25	,02	,00			
					4	1,062	1,560	,00	,01	,25	,02	,05	,00	,00	,41	,00	,01
		5	1,008	1,601	,00	,58	,10	,06	,01	,00	,01	,06	,01	,02			
		6	1,000	1,608	,00	,00	,04	,18	,00	,65	,00	,01	,00	,00			
		7	,791	1,807	,00	,00	,01	,23	,00	,12	,00	,05	,11	,54			
		8	,619	2,042	,00	,10	,03	,04	,04	,01	,19	,03	,68	,01			
		9	,381	2,604	,10	,01	,03	,02	,26	,03	,72	,16	,09	,07			
		10	,214	3,479	,84	,11	,29	,30	,57	,06	,00	,00	,01	,01			

Collinearity Diagnostics^a