

# The impact of competence-development opportunities on organizational commitment and the mediating role of job satisfaction

## Abstract

This study examined the relationship between perceived competence development opportunities and organizational commitment and the possible mediating role of job satisfaction. Quantitative survey data were collected from a large forest company (N = 411) and a large ICT company (N = 304) in Finland. The results demonstrated that perceived competence development opportunities were positively associated with organizational commitment and this relationship was also mediated with job satisfaction in both samples.

The results suggest that opportunities for developing one's competences should be seen as a way to influence employees' job satisfaction as well as to increase attachment to the organization.

## Introduction

Today, organizations face increasing competition for customers, innovations and competent employees (Vanhala & Stavrou, 2013). For many organizations, the skills and abilities of employees form the main source of competitive advantage. This is especially evident in knowledge-intensive sectors, such as ICT, but also in traditional industries, such as the forest industry. For example, in Finland, both ICT and forest sectors have undergone major changes in the forms of restructuring and downsizing in order to respond to current challenges in recent years (Country Report Finland, 2015).

The increasing importance of competent workforce requires human resource management (HRM) practices which are strategic and value-added by nature. In the field of HRM, competence development practices are seen as a central part of so-called 'high-performance', 'high-commitment' or 'high-involvement' HRM practices, which aim to enhance employees' organizational commitment (Meyer and Allen, 1991; Conway, 2004; Kooij et al., 2010; Sonnenberg et al., 2011; Marescaux et al., 2013; Ulrich and Dulebohn, 2015) and organizational performance (Vanhala & Stavrou, 2013).

Opportunities for competence development can be also seen to constitute the core content of current psychological contracts between employees and organizations (Robinson and Rousseau 1994; Rousseau 1995, Sturges et al., 2005). Because organizations can no longer provide secure career paths inside organizational boundaries, employees' personal value in the labor market is more and more based on competences (Cheetham and Chivers, 1998; Prahalad and Hamel, 1990;

Siikaniemi, 2009; Collins, 2010) making the opportunities for competence development important in order to maintain and enhance one's own employability (Baruch, 2004).

Numerous previous HRM studies have demonstrated a positive relationship between perceived competence development opportunities and work-related attitudes, such as organizational commitment (Bartlett, 2001; Conway, 2004) and job satisfaction (Mikkelsen et al., 1999). However, only few HRM studies have focused on the causal order of work-related attitudes as antecedents of perceived competence development opportunities. For example, Armstrong-Stassen and Stassen (2013) analyzed the mediating role of target-specific satisfaction in the relationship between perceived development opportunities and employees' intention to remain in the organization. Marescaux & al. (2013) tested in their study whether basic need satisfaction mediates the relationship between HRM practices and HRM outcomes such as organizational commitment.

In this study, we take an employee-level perspective and examine the possible mediating role of job satisfaction in the relationship between perceived competence development opportunities and organizational commitment among employees from one ICT and one forest company. Both job satisfaction and organizational commitment can be considered as important HRM-outcomes, which are expected to have an influence on organizations' performance (Vanhala & Stavrou, 2013), but also on employee-relevant issues, such as health and well-being (Meyer et al., 2008).

The rationale for focusing on ICT and forest employees is that these sectors represent major industrial sectors in Finland. In addition, in order to show generalizability of our results we selected two different kind of industries with different kind of employee profiles. Employees in the ICT company are white-collar workers with expert duties, whereas employees of the forest company are blue-collar workers with more traditional production-oriented tasks.

The research question is the following: What is the role of job satisfaction in the relationship between perceived competence development opportunities and organizational commitment?

We start by defining the key concepts used in this study and review the literature concerning the relationship between perceived competence development opportunities and work-related attitudes. This will be followed by methodology and the results. The final section presents conclusions, practical implications, limitations as well as future directions for research.

# **Theoretical framework**

## **Defining key concepts**

Competence as a concept can refer to the possession of certain attributes necessary for one's performance, but also to the ability to use the skills and knowledge effectively (Prahalad and Hamel, 1990; Cheetham & Chivers, 2005; Collins, 2010). Core competence does not diminish with use. Unlike physical assets, which do deteriorate over time, competencies are enhanced as they are applied and shared. However, competencies need to be nurtured and protected: knowledge fades if it is not used (Prahalad and Hamel, 1990).

Increased competencies enable employees to perform well in their current position, but also to have more opportunities for career advancement inside and outside the organization in the future

(Collins, 2010). Competences can also be understood as collaborative, meaning that competence is produced and developed in different kinds of networks in order to foster problem solving and new innovations (Siikaniemi, 2009, 405).

In this study, we focus on employees' perceptions about their opportunities to develop their competences through training, informal learning, and career advancement. Due to the changing business environment, most organizations' competence development practices are not limited to formal training, rather they cover opportunities for informal and collaborative learning (Collins, 2010). In addition, career advancement are nowadays understood broadly including both vertical and horizontal movements inside and outside organizational boundaries (Mirvis and Hall, 1994; Sturges et al., 2005). There exist also dialectics between career progression and competence development. New competences often open new career possibilities, and new career positions encourage a person to develop his/her competences (Heilmann, 2011).

Organizational commitment and job satisfaction are both work-related attitudes, which have been seen as important HRM-outcomes, because they have been linked to a number of work-related behaviors, such as higher productivity, lower absenteeism (Conway, 2004; Swales, 2002) and lower turnover intentions (Boswel et al., 2008). As a concept, organizational commitment can be seen to include the following components:

**1)** belief in and acceptance of the organization's goals and values, **2)** a willingness to exert considerable effort on its behalf, and **3)** a desire to maintain organizational membership (Porter et al., 1976).

An alternative definition presented by Cook and Wall (1980) includes: **1)** identification, **2)** involvement, and **3)** loyalty. Both of these definitions represent a uni-dimensional view of organizational commitment (Meyer & al. 2008).

These definitions can also be seen to resemble the affective organizational commitment, which forms one part of a three-component model presented by Meyer and Allen (1991). The two other components are normative and calculative organizational commitment. Employees who are normatively committed to the organization, feel that they have a moral obligation to stay in the organization. Employees with continuance commitment are more calculative and they weight the costs associated with leaving the organization. The common characteristic of these conceptualizations is that they all understand organizational commitment as attitudinal and "a measurable psychological state". (Meyer et al., 2008, 36, 38.). In this study, we use a reduced version of the British Organizational Commitment Scale (Cook & Wall, 1980) in order to investigate the antecedents of employees' organizational commitment.

Locke's (1690, 1304) definition of job satisfaction captures the essence of the concept: "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (see Saari & Judge, 2004). Empirically, there are two main approaches for studying job satisfaction: either examining job satisfaction as a whole (global approach) or focusing on specific areas of job satisfaction (facet approach) (Coomber & Barribal, 2007). In this paper, we study employees' career and pay satisfaction, because we expect that competence development opportunities may have positive effects on employees' career satisfaction, by signaling to employees that the organization is willing to invest in a long-term relationship with them (Marescaux et al., 2013).

# Individual level perspective on HRM-outcomes

There are already a number of HRM studies which have demonstrated a positive link between perceived development opportunities and work-related attitudes. For example, both training (Barlett, 2001) and career development opportunities (Bambacas & Bordia, 2009; Bashir & Ramay, 2008; Paul & Anantharaman, 2004) have been shown to be positively associated with employees' commitment to the organization. Whereas, King et al. (2005) have demonstrated that assisting employees in their career development is valuable to an employer because it encourages staff with high potential to stay. According to Bambacas and Bordia (2009), the career development opportunities contributed to employees' emotional attachment towards the organization.

In this study, we follow individual-level HRM-performance research and analyze the associations between perceived competence development opportunities and work-related attitudes, job satisfaction and organizational commitment, in the context of social exchange theory (Kooij et al., 2010; Conway, 2004) and psychological contracts (Robinson and Rousseau 1994; Rousseau 1995; Baruch, 2004). Social exchange theory focuses on the reciprocal nature between an employee and his or her organization, whereas psychological contract refers to the mutual, non-written agreement between an employee and his or her employer concerning the obligations and expectations towards each other (Coyle-Shapiro & Parzefall, 2008.).

Significant moments in the employment relationship shape the psychological contracts, whereas HRM practices can influence employees' evaluations about psychological contracts. Furthermore, HRM practices aimed to increase employees' commitment can be seen as an important way to prevent the violation of psychological contracts between employees and organizations (Sonnenberg et al., 2011.).

However, in recent years, it has been argued that psychological contracts are changing (Herriot and Pemberton, 1995), because many organizations can no longer offer permanent employment. They can only offer competence development opportunities to maintain the employability of employees. In other words, the new psychological contract perspective stresses 'boundaryless career' instead of climbing up corporate ladders (Mirvis and Hall, 1994; Baruch, 2004).

Furthermore, employees need to take more responsibility to manage their own career. For example, Heilmann (2004) found in her study that both ICT and paper managers were responsible for updating their own competence. Examples of these new careers can be in the ICT sector (Heilmann, 2006; 2007) where IT professionals often leave their organization for career advancement (Cho & Huang, 2012). In other words, it could be expected that employees who perceive themselves as competent in their work can be less committed to their current employer organization (Marescaux et al., 2013).

## The role of job satisfaction in the

# relationship between perceived development opportunities and organizational commitment

Although job satisfaction and organizational commitment are distinct concepts, they are also closely related (Colakoglu et al., 2010; Currivan, 1999; Porter et al., 1974), causing a 'chicken and egg' problem. For example, some turnover studies have suggested that job satisfaction precedes organizational commitment (Currivan, 1999; Mathieu & Zajac, 1990; Price & Mueller, 1981). This has been explained by the idea that job satisfaction is a more quickly evolving feeling than organizational commitment (Porter et al., 1974). In other words, it is easier for employees to determine their level of job satisfaction than their organizational commitment, because job satisfaction is based on specific aspects of one's work environment (Colakoglu et al., 2010). For example, Crow et al. (2012) found that perceptions of organizational justice among 265 South Korean police officers had an indirect influence on organizational commitment through job satisfaction. On the other hand, Colakoglu et al. (2010) studied 198 hotel employees in five Turkish hotels and they found that job satisfaction had a partially mediating role between perceived organizational support and organizational commitment.

However, HRM researchers have rarely paid attention to the causal order of job satisfaction and organizational commitment. Competence development opportunities offered by an organization can influence how employees perceive how their developmental needs are being supported by the organization (Kuvaas, 2008; see Marescaux et al., 2013), but they can also have a positive effect on employees' organizational commitment. Therefore, we hypothesize, in line with the study of Marescaux & al. (2013) that job satisfaction mediates the relationship between perceived competence development opportunities and organizational commitment. In other words, we assume that an organization offering competence development opportunities sends signals about its commitment to its employees (Whitener, 2001).

As a result, employees are satisfied with their jobs and ultimately reciprocate their own commitment to the organization. In addition, we test whether or not this assumption is valid in two different organizations and job contexts (a forest company and an ICT company). The hypotheses are as follows:

**Hypothesis 1:** Employees' perceptions of their competence development opportunities are positively associated with their commitment to the organization.

**Hypothesis 2:** Job satisfaction positively mediates the relationship between perceived competence development opportunities and organizational commitment.

The overall model formulated in Hypotheses 1 and 2 implies that perceived competence development opportunities have a direct effect on organizational commitment, but that they are also mediated by job satisfaction. Furthermore, we examine, whether there are differences between the studied companies.

# Methodology

## Data collection and sampling

The data were collected in 2008. In order to evaluate the generalizability of our findings to different organizational and job contexts, we tested our hypotheses in two different settings. The first sample concerned blue-collar workers working in eight units in two mills for a large forest company in Finland. The companies' representatives distributed 700 questionnaires, with a covering letter, among 1,400 employees of which 411 employees returned the questionnaire (representing a 59% response rate). The second sample was collected from white-collar workers working for a large ICT company 17 units within three R&D centers in Finland. A letter including a link to the questionnaire was sent to 1,384 potential respondents via e-mail. A total of 304 ICT-workers completed questionnaires, representing a 22% response rate. The background characteristics of the respondents in both samples are presented in Table 1.

### [TABLE 1](#)

## Measures

The same measures were used in both samples. The items in the questionnaire were adapted from earlier studies. The companies' representatives were consulted in order to make the questionnaires more understandable to the employees of the specific companies (see Appendix 1 and 2 in the end of the article).

*Independent variable:* Items measuring perceived competence development opportunities were adapted from Delery and Doty (1996) and they covered encouragement for training, learning and development in the organization as well as opportunities to develop one's skills for the career advancement.

*Dependent variable:* Organizational commitment was measured by items taken from Cook and Wall (1980) covering identification (one item), involvement (one item) and loyalty (two items).

*Mediating variable:* Job satisfaction was measured in terms of the employee satisfaction with pay, career progression, and future opportunities within the organization, assessed by three items from Cook et al. (1981).

*Control variables:* It is possible that certain characteristics of the respondents influenced the relationships studied. For example, earlier studies have demonstrated that the length of organizational tenure is positively related to organizational commitment (Mathieu & Zajac, 1990; Tsui et al., 1997), and that education is negatively related to organizational commitment (Mathieu & Zajac, 1990). Therefore, we used job tenure, education and the respondent's position as control variables in our models.

# Methods

The first step in analyzing the data was to validate the measurement model, incorporating perceived competence development opportunities, job satisfaction and organizational commitment by means of confirmatory factor analysis (CFA). Next, we used structural equation modeling (SEM) to test each hypothesis. In the first study, we processed a total of 411 cases, and in the second study 304 cases through LISREL 8.50, and used PRELIS 2.50 to compute the covariance matrix. We used maximum likelihood as our estimation method.

## Assessment of bias

Given the data collection methods used, it was not possible to assess non-response bias in sample 1. The data in this study relied on self-reporting measures, and therefore common method variance might have biased the findings. We used Harman's one-factor test (see Podsakoff et al., 2003) to assess the risk of such bias. We conducted a principal component analysis that incorporated all the items from all of the constructs in order to determine the number of factors needed to account for the variance in all of the items. The largest factor accounted for 42.5 per cent of the variance, which suggests that common method bias was not a concern.

In sample 2 we conducted an analysis of variance (ANOVA) to confirm the absence of non-response bias. We assumed that those who were among the last to respond most closely resembled the non-respondents. (cf. Armstrong & Overton, 1977). We compared the early and late respondents on all constructs, and found no significant differences between them. We therefore concluded that non-response bias was not a problem in this study. Harman's one-factor test was used in order to assess common method variance bias. We conducted a principal component analysis, and the largest factor accounted for 37.4 per cent of the variance, indicating that this was not a concern in sample 2.

## Measurement model, reliability and correlations

The CFA results of both samples indicated that the loadings of all the items were high and statistically significant (see Appendices 1 and 2). This means that they were all related to their specified constructs, thereby verifying the posited relationships among both the indicators and constructs. In terms of construct reliability and Cronbach's alpha, all the constructs exceeded the acceptable level of 0.70, with the exception of commitment (alpha 0.69). In sample 2, all the Cronbach's alpha values exceeded the acceptable level of 0.70, with the exception of organizational commitment (CR=0.56 and alpha 0.54).

In both samples, we evaluated discriminant validity in accordance with Anderson and Gerbing's (1988) method, comparing two models for each possible pair of constructs. In the first model we allowed the constructs to correlate freely, and in the second we fixed them as equal to one. All the chi-square difference tests were significant, indicating that all the construct pairs correlated at less than one, and that there was evidence of discriminant validity.

Table 2 presents the correlation matrix, the mean scores, the standard deviations and the Cronbach's alpha values for all the main variables in sample 1. There were statistically significant positive correlations between all variables.

#### **TABLE 2**

Table 3 presents the correlation matrix, the mean scores, standard deviations and Cronbach's alpha values for all the main variables in sample 2. As in Sample 1, there were statistically significant positive correlations between them all. Compared to the first sample, the mean values for perceived competence development opportunities and organizational commitment were slightly higher.

#### **TABLE 3**

## **Results**

We used structural equation modeling (SEM) to test our hypotheses. The results of the chi-square test were not significant, although this test has been found to be sensitive to sample size, and other tests can be used to assess the goodness of fit (see e.g., Hair et al. 2006). It is apparent from the indices in Table 4 below that the models produced an adequate fit.

We then estimated the path models reflecting the posited relationship between competence development, job satisfaction and commitment. Table 4 provides the results of the path analysis in Sample 1.

We applied the method described by Hair et al. (2006) to test mediation by means of SEM. First, as our base model, we tested for full mediation (i.e., that perceived competence development opportunities predicted job satisfaction, and job satisfaction predicted organizational commitment). We then assessed whether perceived competence development opportunities predicted organizational commitment (i.e., the direct effect), and finally we tested the partial mediation model (i.e., whether the relationship between perceived competence development opportunities and organizational commitment remained significant when job satisfaction was included). If the relationship does remain significant, then partial mediation is supported.

Table 4 provides the path coefficients and fit indices. The base model shows that the direct paths from perceived competence development opportunities to the mediator, and from the mediator to organizational commitment, are significant and in the expected directions, and that the indices show a good fit. The direct effect model reveals a significant association between perceived competence development opportunities and organizational commitment, which also implies a good fit.

#### **TABLE 4**

It is clear from the partial mediation model that the paths from perceived competence development opportunities to job satisfaction, and from this mediator to organizational commitment, are significant. The model statistics also reveal good fit indices. The path from perceived competence development opportunities to organizational commitment is significant in this model only after the inclusion of job satisfaction, however. Overall, this analysis supports Hypothesis 1 and partially



supports Hypothesis 2; in other words, job satisfaction is a partial mediator between perceived competence development opportunities and organizational commitment.

In sample 2 we used SEM to test our hypotheses, and again the fit indices for the models were adequate. See Table 5 for the path coefficients and the fit indices. The base model shows that the direct paths from perceived competence development opportunities to the mediator (i.e. job satisfaction), and from the mediator to organizational commitment are significant and in the expected directions, and that the indices show a good fit. The direct effect model shows a significant association between perceived competence development opportunities and organizational commitment, which also implies a good fit.

#### **TABLE 5**

It is clear from the partial mediation model that the paths from perceived competence development opportunities to job satisfaction, and from job satisfaction to organizational commitment, are significant, whereas the direct path from perceived competence development opportunities to organizational commitment is not. This analysis therefore supports Hypotheses 1 and 2: job satisfaction mediates the relationship between perceived competence development opportunities and organizational commitment.

## **Discussion and conclusions**

Competent workforce plays an increasingly important role for the success of many companies. Therefore, it is not surprising that HRM-performance studies dominate in the current HRM literature (Guest, 2011). However, the value of HRM practices can be measured differently (Vanhalo & Stavrou, 2013). In this study, we focused on work-related attitudes as HRM-outcomes and we tested two hypotheses. The first hypothesis concerned a positive association between employees' perceptions of competence development opportunities and organizational commitment and it was confirmed in both samples. This result is in line with a number of previous studies (Bartlett, 2001; Conway, 2004; Cook and Wall, 1980) and it gives support for the psychological contract theory (Robinson and Rousseau 1994; Rousseau 1995; Baruch, 2004). In other words, high-commitment HRM practices increase employees' satisfactions towards their organization and strengthen the psychological contracts between employees and organizations (Sonnenberg et al. 2011).

The second hypothesis concerned the possible mediating role of job satisfaction in the relationship between perceived competence development opportunities and employees' commitment to an organization, which has been rarely studied. Our data from one forest (411 employees) and one ICT (304 employees) company in Finland generally validated this mediating model. In other words, the results supported the second hypothesis, which stated that job satisfaction positively mediates the relationship between perceived competence development opportunities and organizational commitment. This was fully supported in the sample of ICT employees and partially supported in the sample of forest employees. In other words, in addition to the mediator effect there was a simultaneous direct linkage between perceived competence development opportunities and organizational commitment. Our study contributes to the existing HRM literature by demonstrating that the relationships between competence development, job satisfaction and organizational commitment, may not be as straightforward as is usually implied in the literature. Table 6 summarizes our findings.

## **TABLE 6: Summary**

The fact that Hypothesis 2 was only partially supported in the Sample 1, can be attributed to the differences between the studied companies. The mean values for perceived professional competence development opportunities were lower in the forest company than in the ICT company. This can indicate that opportunities for competence development and career progress are perceived as more limited or less important in the forest company than in the ICT company. Secondly, it could be expected that companies in the ICT sector are more typical of 'the new psychological contract' than in more traditional manufacturing companies (Heilmann, 2006), and so in ICT companies employees may place more value on competence development opportunities which help them to develop their employability.

The studied forest company represents an industrial sector where job security and monetary benefits have traditionally had a significant role. Also the tasks in the forest company have remained basically the same during the last decades. In addition, tasks in the whole industry are pretty much the same. If you know how to do your work in one company, you are professional in that task also if you have a new employer. Thus, it can be that the employees don't perceive that they need development opportunities at all. Therefore, blue-collar employees in the forest company may place less value on development opportunities than ICT employees.

# **Implications for practice**

From the current HRM practices, a strategic and value adding role are required (Ulrich & Dulebohn, 2015). However, in practice, the value of HRM practices is not always easy to measure. Furthermore, recent HRM scholars have stressed the importance to understand how employees perceive HRM practices provided by the organization (Guest, 2011).

The result of this study demonstrated that when employees evaluate their opportunities to develop their competences as good, it is positively associated with organizational commitment and job satisfaction. In other words, providing competence development opportunities for employees, is a potential way for organizations to strengthen the psychological contracts between employees and organizations and mitigate the risk for psychological contract violations (Sonnenberger et al., 2011).

This study also provided evidence that employees' evaluations about their competence development opportunities can enhance their organizational commitment through increased job satisfaction. This is important, because professionals, like the ones found in the ICT sector, often search for career advancement beyond organizational borders (Cho and Huang, 2012). In other words, the results imply that employees' job satisfaction reinforces organizational commitment.

# **Limitations and further research**

There are some limitations that need to be taken into account when interpreting these results. Firstly, the data were collected from two Finnish companies which represented different industries. Therefore, data from other industries and other countries are needed in order to generalize the results. Secondly, the data was collected eight years ago. During the last years, Finnish ICT and

forest sector have undergone major structural changes (Country Report Finland 2015). Therefore, it can be expected that psychological contracts in Finnish ICT and forest companies are in transition.

In the future, it is likely that the significance of competence development opportunities will increase, while job security is decreasing. Thirdly, due to the cross-sectional nature of the study, causality cannot be confirmed. Based on the theoretical framework, we assumed that perceived competence development opportunities have a positive influence on job satisfaction and organizational commitment. However, it is also possible that satisfied and committed employees make more extensive use of development opportunities than unsatisfied and less committed employees (Kuvaas, 2008). Fourth, the scales used in this study were relative short. A longitudinal study setting with more comprehensive scales are needed in the future. Recently, organizational commitment studies have directed their attention to different commitment profiles and stressed that employees' commitment can have multiple foci (for example, supervisor, team, career, client) (Meyer & al. 2013), which provides a potential direction for further studies.

## [Appendix 1](#)

## [Appendix 2](#)

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